



ADVANCES IN PSYCHIATRY



# Advances in Psychiatry

Editors: *George N. Christodoulou* (Athens)  
*Miguel Jorge* (São Paulo)  
*Juan E. Mezzich* (New York)



**ADVANCES IN PSYCHIATRY**

*G.N. Christodoulou, M. Jorge, J.E. Mezzich*

Copyright © 2009 George Christodoulou

BETA Medical Publishers Ltd

3 Adrianou & Katehaki street, GR-115 25 (N. Psychico), Athens, Greece

Tel. (+30) 210-67 14 371 – (+30) 210-67 14 340, Fax: (+30) 210-67 15 015

E-mail: BetaMedArts@hol.gr

E-shop: [www.betamedarts.gr](http://www.betamedarts.gr)

EN ISO 9001:2000

Cover page: Electra Christodoulou

ISBN: 978-960-452-082-4

---

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission in writing from the editor.

## CONTENTS

<b>Introduction</b> .....	ix
<b>Contributors</b> .....	xi
<b><i>History of Psychiatry</i></b>	
<b>History of psychiatry. Recent advances</b> .....	3
<i>P. Hoff</i>	
<b><i>Epidemiology</i></b>	
<b>Recent developments in psychiatric epidemiology and mental health</b> .....	9
<i>J.C. Anthony, M. Radovanovic, Pr. Mainampally</i>	
<b><i>Psychopathological Conditions</i></b>	
<b>New developments and treatment issues in schizophrenia</b> .....	17
<i>W. Gaebel, J. Zielasek</i>	
<b>Neurobiology of schizophrenia and addictions. New vistas</b> .....	25
<i>M.T. Abou-Saleh</i>	
<b>New contributions of psychiatric research in the field of intellectual disability</b> .....	37
<i>M. Bertelli, A. Hassiotis, Sh. Deb, L. Salvador-Carulla</i>	
<b>Meteoropathy. A new disease</b> .....	45
<i>L. Janiri, G. Spinetti, M. Mazza, M. Di Nicola</i>	
<b><i>Psychotherapy</i></b>	
<b>Psychoanalysis in psychiatry. An open reflection on the future</b> .....	55
<i>Fl. Quartier, S.D. Kipman, M. Botbol, A. Gurdal-Küey, Cr. Onofrio</i>	
<b>Cognitive and behavioral therapy in depressed athletes</b> .....	61
<i>D.A. Baron, S.H. Baron, Th. Foley</i>	
<b>Critical learning periods for self-esteem. Mechanisms of psychotherapy and implications for the choice between individual and group treatment</b> .....	75
<i>D.R. Wilson, J.S. Price, A. Preti</i>	
<b>Family interventions for patients with mood and eating disorders. An update</b> .....	83
<i>G.I. Keitner, F. Túry</i>	

***Psychopharmacology***

**Report on two section statements of the WPA section  
Pharmacopsychiatry** ..... 95

*H.J. Möller*

***Psycho-Oncology***

**New frontiers and challenges of psychiatry in oncology  
and palliative care**..... 107

*L. Grassi, M. Riba*

***Special Population Sectors***

**Assessment of social and emotional wellbeing  
in indigenous people** ..... 119

*A. Janca, J. Ventouras, V. Burbank, J. Laugharne*

**Research advances in the relationship between immigration  
and psychiatric disorders**..... 127

*R. Kohn, R.M. Wintrob*

**Advances in old age psychiatry** ..... 135

*C.A. de Mendonca Lima, V. Camus, N. Tataru, E. Chiu*

***Prevention***

**Positive health aspects as preventive factors against  
chronification in persons with severe mental illness** ..... 149

*M. Schmolke*

***Psychiatric Education***

**Psychiatric training of the primary care physician** ..... 159

*R. Fahrer*

***Mental Health Economics***

**Advances in mental health economics research**..... 165

*S.H. Zuvekas, E. Rytik*

***Forensic Psychiatry***

**Practice Guidelines in Forensic Psychiatry** ..... 177

*J. Arboleda-Flórez, A. Jager, N. Konrad, J. Taborda, N. Tataru*

CONTENTS

***Ethics and Values***

**Values based-practice and involuntary treatment.  
A new training programme in the UK** ..... 187  
*K.W.M. (Bill) Fulford, M. King, S. Dewey*

***Religion and Spirituality***

**Religion, spirituality and psychiatry. Reflections  
and directions for thorough action** ..... 201  
*P.J. Verhagen*

***Stigma***

**Stigma and discrimination** ..... 215  
*H. Stuart*

**How to overcome psychiatric stigma through art** ..... 223  
*H.O. Thomashoff, A. Kopytin, E. Sukhanova*

***Disasters***

**Post-Katrina New Orleans. Sustaining multi-disciplinary approaches  
to primary care through policy reform** ..... 237  
*K. DeSalvo, E. Sorel*

**Torture and extreme social violence. A simple issue?  
Questions in research and ethics?** ..... 249  
*Th. Wenzel, L. Hardi, F. Friedrich, F. Allodi*

***Areas of Specific Interest***

**Objectivity in psychiatry** ..... 257  
*G. Stanghellini, M. Broome, A. Ambrosini, K.W.M. (Bill) Fulford*

**An image-bank of mental illnesses. The psychiatrist enters the scene** ..... 261  
*P.M. Furlan, Fr. Oliva, R.L. Picci*

**Advances in urban mental health**..... 271  
*G. Caracci, M. Bassi*

**Advances in occupational psychiatry**..... 279  
*S. Shima, D. Caetano, L. Guimarães, Y. Huang, M.S. Kopp,  
A. Lau, T. Shimomitsu, N. Kuroki, T. Takano, Y. Yoshimura,  
S. Ohba, E. Shimabukuro, Cr. Lin*

**Index**..... 285



## INTRODUCTION

This volume represents the third in the series “Advances in Psychiatry”, an initiative of the scientific sections of the World Psychiatric Association. It is composed of update reports on the progress achieved in the scientific area covered by each participating WPA scientific section. The previous two volumes have been very well received not only by the WPA components but also, more broadly, by our colleagues and other mental health professionals internationally. There is a reason for this good reception. In our days it is difficult to follow the very fast pace of evidence-based input. The busy clinician or researcher does not have the time to keep pace with recent developments. It is therefore necessary to have access to condensed information by reliable and knowledgeable experts in the field. And who can be more suitable for such a task than the scientific sections of a world psychiatric organization?

The previous two volumes have been edited by the then WPA Secretary for Sections Prof. George Christodoulou. In this volume, in addition to George Christodoulou, Prof. Miguel Jorge, the present WPA Secretary for Sections and Prof. Juan Mezzich, the Immediate Past President of the WPA have collaborated.

The Editors of this volume would like to warmly thank the Chairs or representatives of the 29 WPA scientific sections who have produced updates and whose contributions are included in this volume. Their contribution is perceived as an offer to the international scientific community. We would like to comment all of them for their excellent collaboration, patience and dedication. We would also like to thank the Administrative staff of the Hellenic Psychiatric Association and especially Ms Helen Gretsas, the chief administrator, Ms Electra Christodoulou, the daughter of one of us and friend of the other two, for the beautiful cover of this volume and Pharmaserve Lilly and especially Mr Dionysios Filiotis and Mr Yiannis Voudigaris for an unrestricted grant that has made the preparation of this book possible. Lastly, we want to thank Beta Medical Publishers in Athens and especially Ms Natasa Vasilakou for their excellent collaboration and care.

In one of our previous volumes the then WPA President expressed the hope that this series of volumes would eventually become a tradition in the WPA. This, indeed, seems to have become the case and the editors of this volume are very proud of having contributed to this noble scope.

George Christodoulou  
Miguel Jorge  
Juan-Enrique Mezzich

---

*The views expressed in this book are those of the authors and do not necessarily reflect WPA policy.*



## CONTRIBUTORS

**M.T. Abou-Saleh**

*Section on Biological Psychiatry*

**F. Allodi**

*Section on Psychological Consequences  
of Torture and Persecution*

**A. Ambrosini**

*Section of Psychiatry and the Humanities*

**J.C. Anthony**

*Section on Epidemiology  
and Public Health*

**J. Arboleda-Flórez**

*Section of Forensic Psychiatry*

**D.A. Baron**

*Section of Exercise, Psychiatry and Sport*

**S.H. Baron**

*Section of Exercise, Psychiatry and Sport*

**M. Bassi**

*Section on Urban Mental Health*

**M. Bertelli**

*Section of Psychiatry of Intellectual  
Disability*

**M. Broome**

*Section of Psychiatry and the Humanities*

**M. Botbol**

*Section of Psychoanalysis in Psychiatry*

**V. Burbank**

*Section on Measurement Instruments  
in Psychiatric Care*

**D. Caetano**

*Section of Occupational Psychiatry*

**V. Camus**

*Section of Old Age Psychiatry*

**G. Caracci**

*Section on Urban Mental Health*

**E. Chiu**

*Section of Old Age Psychiatry*

**Sh. Deb**

*Section of Psychiatry of Intellectual  
Disability*

**S. Dewey**

*Section of Philosophy and Humanities  
in Psychiatry*

**R. Fahrner**

*Section of Medicine, Psychiatry  
and Primary Care*

**Th. Foley**

*Section of Exercise, Psychiatry and Sport*

**F. Friedrich**

*Section on Psychological Consequences  
of Torture and Persecution*

**K.W.M. (Bill) Fulford**

*Section of Philosophy and Humanities  
in Psychiatry*

*Section of Psychiatry and the Humanities*

**P.M. Furlan**

*Section of Informatics  
and Telecommunication*

**W. Gaebel**

*Section on Schizophrenia*

**L. Grassi**

*Section on Psycho-Oncology  
and Palliative Care*

**L. Guimarães**

*Section of Occupational Psychiatry*

**A. Gurdal-Küey**

*Section of Psychoanalysis in Psychiatry*

**A. Hassiotis**

*Section of Psychiatry of Intellectual  
Disability*

**L. Hardi**

*Section on Psychological Consequences  
of Torture and Persecution*

**P. Hoff**

*Section on History of Psychiatry*

**Y. Huang**

*Section of Occupational Psychiatry*

**A. Jager**

*Section of Forensic Psychiatry*

**L. Janiri**

*Section of Ecology, Psychiatry  
and Mental Health*

**A. Janca**

*Section on Measurement Instruments  
in Psychiatric Care*

**G.I. Keitner**

*Section on Family Research  
and Intervention*

**M. King**

*Section of Philosophy and Humanities  
in Psychiatry*

**D.S. Kipman**

*Section of Psychoanalysis in Psychiatry*

**R. Kohn**

*Section of Transcultural Psychiatry*

**N. Konrad**

*Section of Forensic Psychiatry*

**A. Kopytin**

*Section on Art and Psychiatry*

**M.S. Kopp**

*Section of Occupational Psychiatry*

**N. Kuroki**

*Section of Occupational Psychiatry*

**A. Lau**

*Section of Occupational Psychiatry*

**J. Laugharne**

*Section on Measurement Instruments  
in Psychiatric Care*

**Cr. Lin**

*Section of Occupational Psychiatry*

**P. Mainampally**

*Section on Epidemiology  
and Public Health*

**C.A. de Mendonca Lima**

*Section of Old Age Psychiatry*

**M. Mazza**

*Section of Ecology, Psychiatry  
and Mental Health*

**H.J. Möller**

*Section of Pharmacopsychiatry*

**M. Di Nicola**

*Section of Ecology, Psychiatry  
and Mental Health*

**S. Ohba**

*Section of Occupational Psychiatry*

**Fr. Oliva**

*Section of Informatics  
and Telecommunication*

**Cr. Onofrio**

*Section of Psychoanalysis in Psychiatry*

**R.L. Picci**

*Section of Informatics  
and Telecommunication*

**A. Preti**

*Section of Psychotherapy*

**J.S. Price**

*Section of Psychotherapy*

**Fl. Quartier**

*Section of Psychoanalysis in Psychiatry*

**M. Radovanovic**

*Section on Epidemiology  
and Public Health*

CONTRIBUTORS

**M. Riba**

*Section on Psycho-Oncology  
and Palliative Care*

**E. Rytik**

*Section on Mental Health Economics*

**L. Salvador-Carulla**

*Section of Psychiatry of Intellectual  
Disability*

**K. DeSalvo**

*Section on Conflict Management  
and Resolution*

**M. Schmolke**

*Section of Preventive Psychiatry*

**S. Shima**

*Section of Occupational Psychiatry*

**E. Shimabukuro**

*Section of Occupational Psychiatry*

**T. Shimomitsu**

*Section of Occupational Psychiatry*

**G. Spinetti**

*Section of Ecology, Psychiatry  
and Mental Health*

**G. Stanghellini**

*Section of Psychiatry and the Humanities*

**H. Stuart**

*Section on Stigma and Mental Disorders*

**E. Sorel**

*Section on Conflict Management  
and Resolution*

**E. Sukhanova**

*Section on Art and Psychiatry*

**J. Taborda**

*Section of Forensic Psychiatry*

**T. Takano**

*Section of Occupational Psychiatry*

**N. Tataru**

*Section of Forensic Psychiatry  
Section of Old Age Psychiatry*

**H.O. Thomashoff**

*Section on Art and Psychiatry*

**F. Túry**

*Section on Family Research  
and Intervention*

**J. Ventouras**

*Section on Measurement Instruments  
in Psychiatric Care*

**P.J. Verhagen**

*Section on Religion, Spirituality  
and Psychiatry*

**D.R. Wilson**

*Section of Psychotherapy*

**Th. Wenzel**

*Section on Psychological Consequences  
of Torture and Persecution*

**R.M. Wintrob**

*Section of Transcultural Psychiatry*

**Y. Yoshimura**

*Section of Occupational Psychiatry*

**J. Zielasek**

*Section on Schizophrenia*

**S.H. Zuvekas**

*Section on Mental Health Economics*



# **History of Psychiatry**



# History of Psychiatry

## Recent Advances

---

**Paul Hoff**

Section on History of Psychiatry, World Psychiatric Association

In volume II of “Advances in Psychiatry” I argued that, in comparison to other fields of psychiatric research, history of psychiatry, on the one hand, is more heterogeneous and, on the other hand, has still generally not been accepted as practically relevant (Hoff 2005). However, in the last years, the positive tendency to broaden and intensify history of psychiatry’s impact continued: One might even be so optimistic as to say that the disadvantage of being so heterogeneous and complex, could be turned into an advantage since –in the best case– authors of different scientific perspectives could contribute to a deeper interdisciplinary understanding of psychiatry in all its individual, social and political dimensions. In this brief overview I will mention some of these recent developments.

The complexity of the processes leading to the conceptual shaping of the psychiatric world and the founding of mental hospitals in the 18th and, predominantly, 19th centuries is explicitly acknowledged and studied intensively. Many authors

emphasize that new methodological approaches or new combinations of methods are needed to address this complexity adequately (Bivins 2007, Engstrom & Weber 2007). Emil Kraepelin has, once again, drawn a lot of attention on himself and his nosological concept of natural disease entities and the dichotomy between “dementia praecox” (schizophrenia) and manic-depressive illness. This is a result of his outstanding influence on the debate on psychiatric nosology and diagnosis right until today. And the controversy whether or not his dichotomy is still justified again demonstrates the practical relevance of the historical perspective (Bentall 2006). The discussion on the boundaries of bipolar disorder implies historical arguments, too (Akiskal 2006, Shorter 2007).

Nosological topics are continuously present in historical publications, e.g. the thoughtful analysis on Kahlbaum’s approach by Berrios (2007) or the present author’s paper on the concept of delusion with special emphasis on its forensic con-

sequences (Hoff 2006). In 2008, we celebrated the 100th anniversary of Eugen Bleuler's talk at the Annual Meeting of the German Society of Psychiatry in Berlin, precisely on April 24th, 1908, where he first introduced the term "schizophrenia" to the psychiatric community as a more appropriate alternative to "dementia praecox". Two years before, Christian Scharfetter (2006) gave a thorough and personal overview and interpretation of Eugen Bleuler's life and work.

"Medicalization of psychiatry" is another area of debate, but the positions sound familiar: Thomas Szasz's (2007) repeated critique, addressing mainly the aspect of coercion, but also nosological issues, contrasts to Shorter and Healy's (2007) positive historical analysis of therapeutic benefits of ECT. And this leads to the field of diagnosis where the optimistic commentaries in earlier years on the advantages of operationalized diagnoses like in ICD 10 or DSM IV are not seldom replaced by sceptical, sometimes even radically critical views: Andreasen (2007) draws a line from DSM to what she calls the "death of phenomenology" in the sense of a differentiated descriptive psychopathology. As a result of such scepticism, others call for a more subtle theoretical debate in the development of DSM V (Kendler et al 2007). The term "phenomenology" is still used in many different ways in the literature which creates constant misunderstandings. As opposed to Andreasen, Mishara (2007) refers to the Husserlian and existential perspective in his critique of what he calls "neophenomenology". This debate, too, is ongoing (Sass & Parnas 2007,

Thomson 2007), and will strongly depend on the proper understanding of historical concepts.

The two central questions of psychiatric nosology –where to draw the lines between mental health and illness on the one hand and between different types of mental illness on the other hand– have been debated since psychiatry emerged as a scientific medical field in the late 18th century. Today, authors criticize the tendency to increase the number of psychiatric disorders within the diagnostic manuals, thus turning "normal" phenomena like anxiousness or mild depressive states into disorders or even illnesses (Horwitz & Wakefield 2007).

It is, no doubt, a good sign for such comparatively small scientific fields as history and philosophy of psychiatry that in recent years several remarkable textbooks were published, demonstrating the activity and broadness of the topic (Bennett & Hacker 2003, Bennett et al 2007, Kendler & Parnas 2007, Wallace & Gach 2007). And yet another very active field, linking theoretical, historical and practical aspects, has to be mentioned: ethics in psychiatry. Especially the future role of neurobiological factors is debated widely and controversially, one result being the emergence of the new field of neuroethics (Dunn et al 2006, Murphy & Illes 2007). However, naturalisation of ethical issues in all its facets is not a new approach: Many leading figures in 19th and early 20th century psychiatry went into the very same direction, e.g. Eugen Bleuler and Emil Kraepelin, although more or less theoretically or even frankly spec-

ulating, since solid neurobiological data were not available.

What is the relationship between the person and his or her (neuro-)biological status? This core question for quite a number of scientific fields including, of course, psychiatry, has also been explicitly addressed by the World Psychiatric Association (WPA) in recent years: The Institutional Program for Psychiatry of the Person (IPPP) tries to define and establish person-centered approaches in

psychiatry, in general, and in psychiatric diagnosis, in particular (Mezzich 2006). And for this demanding project, too, we strongly depend on the historical perspective.

In conclusion, in recent years we did see a substantial number of interesting and promising advances in history of psychiatry - a field of research, however, that cannot (and should not) be neatly separated from philosophical, ethical and psychopathological issues.

## References

- Akiskal H (2006). Special issue on circular insanity and beyond: historic contributions of French psychiatry to contemporary concepts of and research on bipolar disorder. *J Affect Disord* 96:141–143
- Andreasen NC (2007). DSM and the death of phenomenology in America: an example of unintended consequences. *Schizophr Bull* 33:108–112
- Bennett M, Dennett D, Hacker P, Searle J (2007). *Neuroscience and philosophy: brain, mind and language*. New York, Columbia University Press
- Bennett M, Hacker P (2003). *Philosophical foundations of neuroscience*. Oxford, Blackwell
- Bentall R (2006). Madness explained: why we must reject the Kraepelinian paradigm and replace it with a complaint-oriented approach to understanding mental illness. *Med Hypotheses* 66:220–233
- Berrios GE (2007). “The clinico-diagnostic perspective in psychopathology” by K. Kahlbaum. *History of Psychiatry* 18:231–245
- Bivins RE (2007). *Medicine, madness and social history: essays in honour of Roy Porter*. Basingstoke, Palgrave Macmillan
- Engstrom EJ, Weber MM (2007). Making Kraepelin history: a great instauration? *History of Psychiatry* 18:267–273
- Dunn LB, Candilis PJ, Roberts LW (2006). Emerging empirical evidence on the ethics of schizophrenia research. *Schizophr Bull* 32:47–68
- Hoff P (2005). Recent advances in research on the history of psychiatry. Chances and limitations of the global perspective. In: Christodoulou GN (ed) *Advances in Psychiatry*. Vol. II. WPA, Paris, 2005:13–18
- Hoff P (2006). Delusion in general and forensic psychiatry: historical and contemporary aspects. *Behav Sci Law* 24:241–255
- Horwitz AV, Wakefield JC (2007). *The loss of sadness: how psychiatry transformed normal sorrow into depressive disorder*. Oxford, Oxford University Press

- Kendler KS, Parnas J (eds) (2008). *Philosophical issues in psychiatry: explanation, nosology and phenomenology*. Baltimore, Johns Hopkins University Press
- Kendler KS, Appelbaum PS, Bell CC, Fulford KW, Ghaemi SN, Schaffner KF et al (2008). Issues for DSM-V: DSM-V should include a conceptual issues work group. *Am J Psychiatry* 165:174–175
- Mezzich JE (2006). Institutional consolidation and global impact: towards a psychiatry for the person. *World Psychiatry* 5:65–66
- Mishara A (2007). Missing links in phenomenological clinical neuroscience: Why we still are not there yet. *Current Opinion in Psychiatry* 20: 559–569
- Murphy ER, Illes J (2007). Neuroethics and psychiatry: new collaborations and emerging challenges. *Psychiatric Annals* 37:798–804
- Sass L, Parnas J (2007). Explaining schizophrenia: the relevance of phenomenology. In: Chung MC, Fulford KWM, Graham G (eds) *Reconceiving schizophrenia*. Oxford, Oxford University Press (pp 63–95)
- Scharfetter Chr (2006). Eugen Bleuler 1857–1939. *Polyphrenie und Schizophrenie*. vdf Hochschulverlag, Zurich
- Shorter E (2007). The doctrine of the two depressions in historical perspective. *Acta Psychiatr Scand* 433(Suppl):5–13
- Shorter E, Healy D (2007). *Shock therapy: a history of electroconvulsive treatment in mental illness*. New Brunswick, Rutgers University Press
- Szasz T (2007). *Coercion as cure: a critical history of psychiatry*. New Brunswick, Transaction Publishers
- Thompson E (2007). *Mind in life: biology, phenomenology and the sciences of mind*. Cambridge, Harvard University Press
- Wallace ER, Gach J (eds) (2007). *History of psychiatry and medical psychology: with an epilogue on mind-body and psychiatry*. New York, Springer
- 

**Paul Hoff**, MD, PhD, Professor of Psychiatry, University of Zurich, Dept. of General and Social Psychiatry. Lenggrasse 31, P.O. Box 1931. CH 8032 Zurich. Switzerland  
**E-mail:** paul.hoff@puk.zh.ch

# **Epidemiology**



# Recent Developments in Psychiatric Epidemiology and Mental Health

---

**James C. Anthony, Mirjana Radovanovic, Prashanti Mainampally**  
Section on Epidemiology and Public Health, World Psychiatric Association

## Introduction

Reflecting upon recent substantive developments coming out of psychiatric epidemiology and public health, we organized exemplary advances in terms of five main rubrics: (1) Quantity, (2) Location, (3) Causes, (4) Mechanisms, and (5) Prevention and Control, with methodological advances attached to each rubric. Citation impact analysis helped guide selection of examples; this approach neglects some developments. When neglected work comes to light, it will be noted in a future volume of “Advances in Psychiatry.”

## Quantity

Under this rubric, epidemiologists seek to quantify how many individuals are affected or are becoming affected by disturbances of ill-health. Twenty-five years ago, Kramer predicted no turning back the tide of a 20th century global pandemic of chronic diseases, which includes chronic neuropsychiatric disturbances

(Kramer 1983). From Ernest Gruenberg’s perspective, this global pandemic may be counted as one of public health’s “failures of success,” by which he meant an unintended bad after-effect of a prior good effect (Gruenberg 1977). In this instance, improved public water sanitation thwarted infant-killing infections; longevity increased, and more of us have been surviving into the decades of life when the chronic conditions take hold (Gruenberg 1977).

Following up, Christopher Murray, Alan Lopez, and the Global Disease Burden Project team (GDB) have highlighted the still-growing importance of four groups of neuropsychiatric conditions now entering the top GDB ranks, as measured via Disability-Adjusted Life Years (DALYs): (1) unipolar depression and related affective conditions, (2) neurodegenerative conditions such as Alzheimer’s type dementias and vascular dementias, (3) alcohol dependence as well as alcohol-attributable morbidity and mortality (e.g., car crashes, homi-

cides), and (4) drug dependence as well as intentional poisonings and other drug-attributable morbidity and mortality (<http://www.who.int/healthinfo/bodabout/en/index.html>)

The DALYs, as indices of global disease burden, count up the number of healthy years lost to premature death and to health-related disablement, and can be used as a gauge of our failure to achieve an ideal condition of no premature deaths and no disablement. Based upon recent GDB analyses completed by Loncar and Mathers (2006), in 2002, the world population experience included a total of just under 1,500,000,000 DALYs. Their analysis of the causes of DALYs placed major depression and related affective disturbances in the 2nd rank world-wide, just below HIV/AIDS-related conditions and just above road traffic crashes (a large proportion of which are attributable to driving under the influence of ethanol). As now evaluated, these three conditions account for 5.7%, 12.1%, and 4.2% of the total DALYs, respectively. Cerebrovascular disease is ranked sixth (3.9% DALYs), just after perinatal conditions (4.0% DALYs).

Neuropsychiatric conditions, as a group (including unipolar depression), now account for a total of 192,480,000 DALYs, roughly 12 percent of the total DALYs, but this count does not include intoxication-related crashes, self-poisonings, or sequelae of violence (Mathers & Loncar 2006). In addition, to the extent that tobacco smoking is regarded as a neuropsychiatric and behavioral disturbance, driven by an underlying substrate of tobacco or nicotine dependence, one might move the neuropsychiatric conditions to top

of the list of causes of the current global burdens of disease –because of the overwhelming tobacco-attributable burdens, which would be eliminated under ideal conditions– e.g., via effective treatment of tobacco dependence syndromes.

In recognition of a need for refinement, the GDB Project continues its work. New DALYs estimates should lead to a re-appraisal of the relative contribution and ranking of neuropsychiatric conditions, before the next “Advances” volume appears. These refinements will incorporate the newest estimates from the World Mental Health surveys and other important investigations that build from early methodological contributions by members of this WPA Section (e.g., see Wing et al 1990, Jenkins et al 1997 Korten & Henderson 2000, Ferri et al 2005, Grant 2006, Kessler et al 2007, Ormel et al 2008).

## Location

Under this rubric of epidemiology, we seek to identify subgroups of population experience within which people are more or less likely to become cases of neuropsychiatric conditions of greater or lesser importance. Here, “importance” might be gauged by the numbers of individuals who are affected at any point in time (i.e., “point prevalence” estimates), by onsets of new cases (e.g., “incidence” or “risk”), or by a composite index (e.g., DALYs).

During the past several years, the most highly cited publications under this rubric of epidemiology are from the just-mentioned World Mental Health surveys (WMHS), conducted in more than 20

countries with representative samples of non-institutionalized adults (e.g., see recent work by Kessler et al 2007, Ormel et al 2008). Surveys of this type complement the GDB findings and identify important variations in subgroups defined by country-level economic development. Among the countries studied to date, within the less-developed countries of the world, an estimated 76–85% of seriously affected mental disorder cases had a high level of unmet need for treatment services. By comparison, only 35–50% had unmet need in the more developed countries (WMHS Consortium 2004).

Economic development enters the GDB picture under the rubric of “location”, where passage of time, year by year, permits a subgrouping of human experience. Consider epidemiological estimates on tobacco-caused deaths. Globally, each year from 2000 and 2005, tobacco smoking caused an estimated five million deaths, many due to untreated tobacco dependence syndromes. It is in the low-middle income countries that most of these deaths are occurring; the high-income countries account for fewer than 2 million tobacco-caused deaths each year. By 2030, the global projection is for 8 million tobacco-caused deaths; most of the increase will be experienced by populations in the low-middle income countries (Mathers & Loncar 2006). Passage of time also helps index risk of mental disorders experienced by successive birth cohorts, and there is some epidemiological evidence of increasing risks among the more recently born birth cohorts in many countries of the world (e.g., see Kessler et al 2007).

## Causes

Under epidemiology’s rubric of “causes”, the most provocative recent advances have come at epidemiology’s intersection with genetics and genomics research. Early progress was made via family history research, twin studies, and single candidate gene or haplotype explorations, with special added value when genetic epidemiology has shed light upon the environmental causes of neuropsychiatric disturbances and upon the many possibilities for gene-environment interaction. In recent years, the rapidly evolving technologies of candidate gene and genome wide association research have been yoked with epidemiological sampling and long-term follow-up research on the human experience (e.g., see Lewis et al 2003). One domain of highly cited work involves associations linking risk of depression back to genetic substrates for the central serotonergic system. These associations might represent a more generic susceptibility trait rather than a depression-specific trait, and might have causal importance in relation to modulation of adverse life events (e.g., see Caspi et al 2003, Eaton et al 2008). Forward progress and clear interpretation of the rapidly mounting evidence at this intersection will require re-alignment of research paradigms and methods under this rubric, with greater attention to the varying levels of biological and psychological complexity (Kendler 2005). In time, these realignments will meet up with psychiatric epidemiology’s more traditional intersections with social science theory about the causes of mental disorders in general and migration in particular (e.g., see Link & Phelan 1995).

## Mechanisms

Psychiatric epidemiologists have made noteworthy contributions to our understanding of the natural history and clinical course of neuropsychiatric and behavioral disturbances, as well as other longitudinal linkages of states and processes that lead toward onset of these disturbances, subsequent comorbidities or disabilities, and response to treatment (e.g., see Hafner et al 1993, Kessler et al 2005, Cooke et al 2007, Ormel et al 2008). Due to space limitations, we cannot review all recent advances under this rubric, but we highlight a re-appraisal of research approaches used to study “recovery” from episodes of psychiatric conditions as an important new direction for epidemiological research under this rubric (Lieberman et al 2008).

## Prevention & Control

During the 20th century, the most influential monograph on prevention and control of mental disorders was published by the American Public Health Association in 1962 (APHA 1962). It represents a comprehensive review of specific practical remedies and preventative maneuvers to be organized when public health officers face the challenge of mental disorders in the community, including non-compliance with prescribed treatments. This monograph requires updating; the authors hope that the members of this WPA Section will work collectively to produce an update in time for the 50th anniversary of the monograph’s original publication, which will be celebrated in 2012. Recent contributions in that direction include the work of Cooper (2003), Jenkins et al (2007), Trivedi et al (2007), and Thornicroft et al (2008).

## References

- American Public Health Association (1962). *Mental Disorders: A Guide to Prevention and Control*. Washington, DC, APHA
- Eaton WW, Shao H, Nestadt G, Lee BH, Bienvenu OJ, Zandi P (2008). Population-based study of first onset and chronicity in major depressive disorder. *Arch Gen Psychiatry* 65:513–520
- Ferri CP, Prince M, Brayne C, et al (2005). Global prevalence of dementia: a Delphi consensus study. *Lancet* 366:2112–2117
- Grant BF (2006). About 26% of people in the US have an anxiety, mood, impulse control, or substance disorder. *Evid Based Ment Health* 9:27
- Gruenberg EM (1977). The failures of success. Recently reprinted in *The Milbank Quarterly* 83: 779–800 (doi:10.1111/j.1468–0009.2005.00400.x)
- Häfner H, Maurer K, Löffler W et al (1993). The influence of age and sex on the onset and early course of schizophrenia. *Br J Psychiatry* 162:80–86
- Jenkins R, Lewis G, Bebbington P, Brugha T, Farrell M, Gill B, Meltzer H (2007). The national psychiatric morbidity surveys of Great Britain – Initial findings from the household survey. *Psychol Med* 27:775–789
- Jenkins R, Lancashire S, McDaid D et al (2007). Mental health reform in the Russian Federation: an integrated approach to achieve social inclusion and recovery. *Bull World Health Organ* 85:858–866

- Kendler KS (2007). Psychiatric genetics: a methodologic critique. *Am J Psychiatry* 162:3–11
- Lewis CM, Levinson DF, Wise LH et al (2003). Genome scan meta-analysis of schizophrenia and bipolar disorder. Part II: Schizophrenia. *Am J Hum Genet* 73:34–48
- Link BG, Phelan J (1995). Social conditions as fundamental causes of disease. *J Health Soc Behav* (Spec No: 80–94)
- Kessler RC, Angermeyer M, Anthony JC et al (2007). Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry* 6:168–76
- Korten A, Henderson S (2000). The Australian national survey of mental health and well-being. Common psychological symptoms and disablement. *Br J Psychiatry* 177:325–330
- Kramer M (1983). The increasing prevalence of mental disorders: A pandemic threat. *Psychiatric Quarterly* 55:115–143
- Mathers CD, Loncar D (2006). Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med* 3(11): e442. DOI: 10.1371/journal.pmed.0030442
- Ormel J, Petukhova M, Chatterji S et al (2003). Disability and treatment of specific mental and physical disorders across the world. *Br J Psychiatry* 192:368–375
- Thornicroft G, Brohan E, Kassam A, Lewis-Holmes E (2008). Reducing stigma and discrimination: Candidate interventions. *Int J Ment Health Syst* 2:3
- Trivedi MH, Lin EH, Katon WJ (2007). Consensus recommendations for improving adherence, self-management, and outcomes in patients with depression. *CNS Spectr* 12(Suppl 13):1–27
- WHO World Mental Health Survey Consortium (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *JAMA* 291:2581–2590
- Wing JK, Babor T, Brugha T, Burke J, Cooper JE, Giel R et al (1990). SCAN. Schedules for Clinical Assessment in Neuropsychiatry. *Arch Gen Psychiatry* 47:589–593
- 

**James C. Anthony**, Professor and Chairman, Department of Epidemiology, College of Human Medicine, Michigan State University, B601 West Fee Hall, East Lansing MI 48824, USA  
**E-mail:** janthony@msu.edu



# **Psychopathological Conditions**



# **New Developments and Treatment Issues in Schizophrenia**

---

**Wolfgang Gaebel, Jürgen Zielasek**

Section on Schizophrenia, World Psychiatric Association

## **Introduction**

Looking back at the report on schizophrenia in the second volume of “Advances in Psychiatry” issued in 2005, it is evident that some of the perspectives announced then have made tremendous progress, like research into psychosocial interventions, the further characterisation of the role of some of the genetic risk factors, and research into cognitive dysfunctions in schizophrenia. Some hopes of 2005 have not yet been fulfilled, like the development of antipsychotic drugs with novel mechanisms of action, or the coming into clinical reality of pharmacogenomics-informed individualized treatment decisions (the latter aspect having been scholarly reviewed by Bondy and Spellmann 2007). Other fields which were barely mentioned in the last edition like the reclassification of psychotic disorders have gained in importance. Thus, it appears timely to reassess new developments and treatment issues for this edition of “Advances in Psychiatry”. For further reading, the interested reader may refer to a comprehensive review by Tandon and coworkers listing the “facts”

known about schizophrenia (Tandon et al., 2008a). For the sake of brevity, any selection of topics for our review is subjectively biased and we wish to ask those of our colleagues whose contributions could not be included for forgiveness.

## **Classification**

The classification of schizophrenias and related disorders has received much attention in the last three years due to the commencement of the revision process of the current psychiatric classification systems ICD-10 and DSM-IV. The novel classification systems ICD-11 and DSM-V are scheduled to become available by the year 2014. The development process of DSM-V has started somewhat earlier and resulted first in a monograph detailing a research agenda for DSM-V in 2002 followed by a series of international research conferences sponsored by the American Psychiatric Association, the American Psychiatric Institute of Research and Education, the National Institutes of Health and WHO from 2005

until 2007. Short summaries of the conference proceedings can be found on the internet ([www.dsmv.org](http://www.dsmv.org)). One of these research conferences held in February 2006 dealt with the question of “Deconstructing Psychosis” and focused on the future classification of schizophrenia and affective disorders. The scientific results have been published in a series of articles in *Schizophrenia Bulletin* (Tamminga & van Os 2007) and reflect the state of the art in schizophrenia diagnosis and classification. The major topics covered were genetic and neuroimaging findings, endophenotype research, questions of the dimensionality of schizophrenia symptoms, and classificatory aspects such as the necessary duration of symptoms to warrant a diagnosis of schizophrenia. It was discussed that classification systems may have to be different for research and for clinical everyday use purposes, and that the time criterion should be harmonized between ICD-11 and DSM-V. A vote at the Schizophrenia Research Conference in Colorado Springs in April 2007 resulted in a split decision when experts were asked whether the diagnostic construct of schizophrenia should be retained or removed in DSM-V. Suggestions included reclassifying schizophrenia into a “General Psychosis Disorder” group or renaming it “dopamine dysregulation disorder”. Some experts suggested to retain the diagnostic class per se, but to further subdivide it into clinical syndromes, or to amend the clinical criteria with an extra set of research criteria. In the meantime, the APA is forming the disorder-related workgroups which will review the scientific evidence for changes of the diagnostic criteria used in DSM-IV. Among those

workgroups, a “psychosis group” will be in charge of the schizophrenia chapter.

The World Health Organization has also installed workgroups for the revision process of ICD-10 including a Mental Health Topic Advisory Group chaired by S.E. Hyman (Cambridge, Mass., USA). To ascertain the scientific input of various language areas of the world, a “Global Scientific Partnership Network” chaired by N. Sartorius (Geneva) was formed by the WHO to review the international experience and evidence with the mental disorders chapter of ICD-10. It will also allow non-psychiatric experts to provide scientific evidence for the revision process of the mental disorders chapter.

At the time of writing, it is still an open question if and in how far the scientific evidence warrants a reclassification of the diagnostic group of schizophrenia. The respective workgroups will have to deal with a range of difficult questions, for example whether novel genetic, neuroimaging or psychophysiological findings are solid enough to be included in the DSM-V classification of schizophrenia. We will address some of these issues in the ensuing units.

## Genetic factors

A large number of genetic polymorphisms has been identified in a range of genes associated with the development of schizophrenia, with many studies focusing on genes with a known role in the central nervous system like catechol-O-methyltransferase (COMT), neuregulin-1, dysbindin and Disrupted in Schizophrenia-1 (*DISC-1*). For all these genes,

biological plausibility indicates but does not prove a role in the etiopathogenesis of schizophrenia. The absolute contribution of each of these genes appears small, accounting only for a minority of cases. Also, disease-related polymorphisms of such risk genes are also found in healthy controls, albeit at a lower rate. The first recently published results from genome-wide association studies have not significantly changed this picture, rather adding to the complexity of genetic associations found in schizophrenia. However, many more study results may be expected in the next months and a Psychiatric Genomewide Association Study Consortium was formed to conduct high-quality meta-analyses of schizophrenia and other psychiatric disorders, hopefully shedding light into a methodologically highly demanding, but also very promising field of research. We and others suggested that based on the genetic findings obtained so far, the dissection of syndromes of psychosis into “modular” endophenotypes with specific neurophysiological underpinnings may be warranted (Gaebel et al 2006, Owen et al 2007).

### **Environmental factors**

A variety of extrinsic factors like in utero infections, malnutrition, substance abuse (especially cannabinoids; reviewed by DeLisi 2008), childhood traumatic experiences and malnutrition seem to play a role for the manifestation of psychotic disorders –not just schizophrenia– in individuals predisposed due to only partly known genetic factors. These environmental factors also seem to underlie the

increased risk of psychotic disorders observed in migrant populations.

Recent data indicate that such concepts may also begin to shed light on the pathophysiology of childhood trauma in the pathogenesis of schizophrenia and on the time lag between the exposure to environmental hazards and the clinical manifestation of psychotic disorders. Animal studies show, for example, that intrauterine infections may have behavioural consequences only later in adult life, that there appears to be a complicated network of cytokines which mediates such effects, and that the timing of viral exposure is of central importance (Meyer et al 2008). However, further studies are needed to confirm the causal role of childhood trauma and other environmental factors in schizophrenia.

### **Neuroimaging, psychophysiology, endophenotypes and cognitive functions**

Structural brain imaging data show that degenerative-like changes occur in schizophrenia affecting the brain volume, but also more specifically white matter tracts probably leading to disturbed structural and functional connectivity between “network nodes” or “brain modules”. Variants of genes like Brain Derived Neurotrophic Factor or COMT have been linked to altered brain function as detected by functional magnetic brain imaging studies. Although these studies are still in their infancy, they may pave the way to novel approaches in schizophrenia research. Another recent trend in schizophrenia

research is to focus endophenotype research on a combination of neuroimaging and psychophysiology tests in the assessment of cognitive functions, linking neuroimaging findings to the results of electrophysiological tests and cognitive tests, even in an additional combination with genetic association studies (reviewed by Wilcox in the Schizophrenia Research Forum, Feb. 19, 2008 (<http://www.schizophreniaforum.org>)). Also, the combination of several psychophysiological tests may increase the sensitivity and specificity of such endophenotypes like P50 suppression and inhibition of leading saccades considerably (Martin et al 2007). While the combination of tests adds complexity, these tests may be helpful to stratify the population of people affected by schizophrenia according to neurocognitive, psychophysiological and neuroimaging features, thus allowing to study the pathophysiology of symptoms and genetic associations in well-defined study populations avoiding the danger of “lumping” together persons with putative divergent etiopathogeneses into the same study. Such studies could also be tailored to identify the respective influence of each genetic factor on the various aspects of neurocognition. In the course of such studies, new insights into the etiology of schizophrenia and the identification of novel molecular therapeutic targets may be expected.

## **Treatment**

We will focus on five aspects of schizophrenia therapy: Novel mechanisms of

antipsychotic drug action involving the metabotropic glutamate receptor, first- vs second-generation antipsychotics, novel targets for schizophrenia therapy, the role of psychosocial therapy, and the role of early intervention and prevention.

### **Novel mechanisms of antipsychotic drug action**

Regarding novel mechanisms of antipsychotic drugs, the recently published study by Patil and coworkers showing beneficial effects against positive and negative symptoms of a new compound acting via metabotropic glutamate receptors not only opens new avenues for the pharmacotherapy of psychotic disorders, but also suggests that neurotransmitter receptors other than the dopamine receptors may be useful targets for pharmacological interventions (keeping in mind that the antipsychotic actions observed by Patil and coworkers may have been due to indirect effects on the dopamine system mediated via glutamate receptors) (Patil et al 2007). Further randomized controlled clinical trials are warranted to confirm and extend these initial findings.

### **First- or second-generation antipsychotics for the treatment of schizophrenia?**

Three major studies have addressed the question of the “real world” effectiveness of antipsychotic treatment, the CATIE trial (Lieberman et al 2005), the CuT-LASS trial (Jones et al 2006) and a more

recent trial comparing compliance and remission rates between patients treated with haloperidol and patients treated with second-generation antipsychotics (EUFEST Study, Kahn et al 2008). CATIE and CuTLASS stirred a controversy about the putative superiority of first- vs second-generation antipsychotic drugs, with the debate still on-going. EUFEST showed that while symptom reduction was similar, discontinuation rates were significantly higher with haloperidol compared to second-generation antipsychotics. With such results at hand, guideline development for the treatment of schizophrenia becomes a critical issue. A review of guideline recommendations prepared in 2004 showed that nine of 24 guidelines recommended second-generation antipsychotics as first-line therapy in multi-episode psychosis, 13 recommended first-generation or second-generation antipsychotics, and one recommended only first-generation drugs (Gaebel et al 2005). Clearly, an update of this review is warranted given that it was prepared before the beforementioned “real world” studies were published. The WPA Pharmacopsychiatry Section has recently reviewed the comparative effectiveness of antipsychotics in the treatment of schizophrenia coming to the conclusion that antipsychotic treatment needs to be individually tailored to promote optimal recovery (Tandon et al 2008b). A major issue of schizophrenia psychopharmacology is the side effect spectrum of modern second-generation antipsychotics, especially the weight gain and associated risk for developing diabetes mellitus (Ücok & Gaebel 2008).

## **Novel targets for schizophrenia therapy**

Target-symptom guided therapies for example against cognitive symptoms in schizophrenia are gaining increasing interest. Amelioration of cognitive symptoms may hopefully result in a significant increase of quality of life and social functioning, and the MATRICS initiative has provided the tools to address this question in future clinical trials on a standardized methodological basis. In addition to traditional domains of cognition, studies addressing social cognition in schizophrenia are warranted given the relationship between cognition and functional outcome (reviewed by Penn et al 2008). Novel research indicates that neurocognition conceived as a construct composed of verbal and working memory functions, attention, executive functions, processing speed and thought disorder may be an important mediator between social cognition and vocational outcomes in schizophrenia rehabilitation (Bell et al 2009). A recent NIMH Workshop on definitions, assessment and research opportunities in this area paved the way for further systematic studies (Green et al 2008). Currently, two approaches are being tested to enhance cognitive functions: Using pharmaceuticals like cholinesterase inhibitors to improve cognition, and using psychotherapeutic training techniques to improve specific cognitive functions like mimic affect recognition (Wölwer et al 2005).

## **Psychosocial therapy**

Closely related to the treatment of cognitive dysfunctions in schizophrenia is

the more general question of the efficacy of psychosocial therapies in schizophrenia. Psychosocial therapies broadly fall into four categories (cognitive behavioural therapy, family intervention therapy, social skills therapy and cognitive remediation therapy). For these treatment methods, studies have shown beneficial effects on compliance, reduction of symptoms, increased social functioning and others, with diverse differential response rates. Thus, the selection and use of psychosocial therapies demands expert knowledge, just like psychopharmacology. Their application in everyday clinical practice, however, is limited by the clinician's training, time and resources (reviewed by Paterson & Leeuwenkamp 2008).

### **Other biological therapies**

Based on findings regarding altered structural connectivity in the brains of patients with schizophrenia ("white matter hypothesis") and the electrophysiological findings of desynchronized neural networks in patients with schizophrenia, novel therapeutic approaches like deep brain stimulation or transcranial magnetic stimulation (the latter already used in preliminary studies to suppress auditory hallucinations) are receiving attention. As a side remark, clozapine apparently also re-synchronises disturbed neural networks. However, several ethical issues arise when considering novel therapeutic strategies, especially those of an invasive nature.

### **Early intervention and prevention**

A relatively new aspect is that primary prevention of schizophrenia may be fea-

sible not on the basis of the identification of genetic risks, but rather by identifying prodromal symptoms. This prodromal state is associated with reduced subjective quality of life. Prospective ascertainment of individuals at high risk for psychosis was demonstrated with a positive predictive power of 68–80% (Cannon et al 2008). In the prepsychotic phase, both psychosocial therapies and pharmacotherapy with antipsychotic medication seem to favourably influence the disease course, although this has not been found in all studies. Therefore, further research is needed and future studies should be multicentric using standardized methods for diagnosing a prodromal state with a high likelihood of conversion to psychosis, and including placebo control groups.

### **Stigma and discrimination**

One suggestion to overcome the stigmatization associated with the diagnostic term "schizophrenia" is to rename the disorder, and this has taken place in Japan with the interesting trend of an increased information for the patients about their novel diagnosis of "integration disorder" (Sato 2006). Another approach to overcome stigma and discrimination is the information of the public about the disorder, and such awareness and information programmes do show some efficacy in controlled studies (Gaebel et al 2008). Further research is needed in this important area.

### **Conclusions**

In conclusion, the scientific foundations of the diagnostic group "schizophrenia" is currently being investigated

in the framework of the revision of the psychiatric classification systems, with the result of this investigation still being open. Neurobiological research has identified genetic risk factors predisposing to psychotic symptomatology, but no genetic risk markers are yet available for routine screening purposes. Environmental factors also seem to play a major role in the pathogenesis of schizophrenia. Treatment consists of psychosocial and psychopharmacological interventions, with a current emphasis in research on a standardization of cognitive tests for future clinical studies addressing the question how cognitive symptoms may be ameliorated. Early prevention appears to be feasible in the near future. Stigma and

discrimination research profits from the introduction of controlled trials.

These are exciting times for schizophrenia research and treatment. Functional brain imaging techniques combined with genetic studies and psychophysiological tests are beginning to unravel the complex pathophysiology of schizophrenia, hopefully leading to novel biomarkers that may be used for diagnostic purposes, but also as surrogate markers for clinical endpoints in clinical research. The analysis of disordered neuromental functions and the elucidation of the pathophysiological mechanisms underlying such dysfunctions in schizophrenia are expected to lead to the development of new and optimised therapies.

## References

- Bell M, Tsang HWH, Greig TC, Bryson GJ (2009). Neurocognition, social cognition, perceived social discomfort, and vocational outcomes in schizophrenia. *Schizophr Bull* 35:738–741
- Bondy B, Spellmann I (2007). Pharmacogenetics of antipsychotics: useful for the clinician? *Curr Opin Psychiatry* 20:126–130
- Cannon TD, Cadenhead K, Cornblatt B, Woods SW, Addington J, Walker E et al (2008) Prediction of psychosis in youth at high clinical risk: a multisite longitudinal study in North America. *Arch Gen Psychiatr* 65:28–37
- De Lisi LE (2008). The effect of cannabis on the brain: can it cause brain anomalies that lead to increased risk for schizophrenia? *Curr Opin Psychiatry* 21:140–150
- Gaebel W, Weinmann S, Sartorius N, Rutz W, McIntyre JS (2005) Schizophrenia practice guidelines: international survey and comparison. *Br J Psychiatr* 187:248–255
- Gaebel W, Wölwer W, Zielasek J (2006). Von der deskriptiven zur funktionalen Psychopathologie: Auf dem Weg zur modularen Psychiatrie. *Die Psychiatrie* 3:221–232
- Gaebel W, Zäske H, Baumann AE, Klosterkötter J, Maier W, Decker P et al (2008). Evaluation of the German WPA „program against stigma and discrimination because of schizophrenia – Open the Doors”: results from representative telephone surveys before and after three years of antistigma interventions. *Schizophr Res* 98: 184–193
- Green MF, Penn DL, Bentall R, Carpenter WT, Gaebel W, Gur RC et al (2008). Social cognition in schizophrenia: An NIMH Workshop on definitions, assessment, and research opportunities. *Schizophr Bull* 34:1211–1220

- Jones PB, Barnes TR, Davies L, Dunn G, Lloyd H, Hayhurst KP et al (2006). Randomized controlled trial of effects on quality of life of second-generation vs. first-generation antipsychotic drugs in schizophrenia. *Arch Gen Psychiatr* 63:1079–1087
- Kahn RS, Fleischhacker WW, Boter H, Davidson M, Vergouwe Y, Keet IPM et al (2008). Effectiveness of antipsychotic drugs in first-episode schizophrenia and schizophreniform disorder: an open randomised clinical trial. *Lancet* 371:1085–1097
- Lieberman JA, Stroup TS, McEvoy JP, Swartz MS, Rosenheck RA, Perkins DO et al (2005). Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) investigators. Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 353:1069–1072
- Martin LF, Hall MH, Ross RG, Zerbe G, Freedman R, Olincy A (2007). Physiology of schizophrenia, bipolar disorder, and schizoaffective disorder. *Am J Psychiatr* 164:1900–1906
- Meyer U, Murray PJ, Urwyler A, Yee BK, Schedlowski M, Feldon J (2008). Adult behavioural and pharmacological dysfunctions following disruption of the fetal brain balance between pro-inflammatory and IL-10-mediated anti-inflammatory signalling. *Mol Psychiatry* 13:208–221
- Owen MJ, Craddock N, Jablensky A (2007). The genetic deconstruction of psychosis. *Schizophr Bull* 33:905–911
- Patil ST, Zhang L, Martenyi F, Lowe SL, Jackson KA, Andreev BV et al (2007). Activation of mGlu2/3 receptors as a new approach to treat schizophrenia: a randomised phase 2 clinical trial. *Nat Med* 13:1102–1107
- Patterson TL, Leeuwenkamp OR (2008). Adjunctive psychosocial therapies for the treatment of schizophrenia. *Schizophr Res* 100:108–119
- Penn DL, Sanna LJ, Roberts DL (2008). Social cognition in schizophrenia: an overview. *Schizophr Bull* 34:408–411
- Sato M (2006). Renaming schizophrenia: a Japanese perspective. *World Psychiatr* 5:53–55
- Tamminga C, Van Os J (2007). Deconstructing Psychosis. *Schizophr Bull* 33:861–862
- Tandon R, Keshavan MS, Nasrallah HA (2008a). Schizophrenia, “Just the Facts”: What we know in 2008 Part I: Overview. *Schizophr Res* 100:4–19
- Tandon R, Belmaker RH, Gattaz WF, Lopez-Ibor Jr. JJ, Okasha A, Singh B et al for the Section of Pharmacopsychiatry, World Psychiatric Association (2008b). World Psychiatric Association Pharmacopsychiatry Section statement on comparative effectiveness of antipsychotics in the treatment of schizophrenia. *Schizophr Res* 100:20–38
- Üçok S, Gaebel W (2008). Side effects of atypical antipsychotics: a brief overview. *World Psychiatry* 7:58–62
- Wölwer W, Frommann N, Halfmann S, Piaszek A, Streit M, Gaebel W (2005). Remediation of impairments in facial affect recognition in schizophrenia: Efficacy and specificity of a new training program. *Schizophr Res* 80:295–303

---

**Wolfgang Gaebel**, University Professor, Department of Psychiatry and Psychotherapy, Heinrich-Heine-University, LVR-Klinikum, Bergische Landstr 2, D-40629 Düsseldorf, Germany  
**E-mail:** wolfgang.gaebel@uni-duesseldorf.de

# **Neurobiology of Schizophrenia and Addictions New vistas**

---

**Mohammed T. Abou-Saleh**

Section on Biological Psychiatry, World Psychiatric Association

## **Introduction**

Advances in biological psychiatry encompass advances in preclinical and clinical neurosciences which have the potential to be harnessed for improving outcomes of treatment and care for people with psychiatric disorders. The last few decades have witnessed important advances in our knowledge of brain function and importantly brain dysfunctions underlying major psychiatric disorders with the largest burdens such as schizophrenia and addictive disorders.

These advances in clinical neuroscience have been informed by advances in preclinical animal studies and translational research. A simple PubMed search to inform this review with the keywords “biological, depression, schizophrenia and addictions” recovered 8,700 papers on depression, 3,300 papers on schizophrenia, and 700 papers on addictions. There is a clear trend for increasing number of publications over the last five years in the biology of schizophrenia: 280 papers in

2003, 900 papers in 2004, 600 papers in 2005, 1300 papers in 2006, and 1045 papers in 2007.

It is difficult to do justice to this vast literature and this review will highlight a few major advances in clinical neurosciences particularly ones that are informative for their potential impact on clinical practice and for improving the utility of psychiatric diagnosis and treatment outcome. The review will be confined to focussing on findings of translational and clinical studies of schizophrenia and addictions.

Advances in biological psychiatry have been driven by major advances in methods and techniques to investigate the neurobiology of psychiatric disorders, most importantly neuroimaging and molecular genetics. In some respects, biological psychiatry as a broad overarching subject may have outlived its utility except perhaps in providing integrated models and frameworks for the understanding of the complexity of the neurobiological mech-

anisms involved in the aetiology and pathogenesis of psychiatric disorders.

In this selective review, recent advances in the use of neuroimaging and molecular genetics techniques in the study of major psychiatric disorders will be described. Selective reference is made to studies of schizophrenia and addictions and their inter-relationship exemplified in cannabis-related schizophrenia.

### **New paradigms**

Paradigm shifts and the introduction of new technologies have revolutionized psychiatric research, providing a useful framework for understanding rapid developments in the biology of psychiatric disorders (Stahl and Niculescu 2002, Abou-Saleh 2006). The first paradigm shift is underpinned by the finding that clinical comorbidity is common and is the rule rather than the exception as shown in community and clinical population studies. There is evidence that comorbid disorders share biological substrate, including shared genes. Secondly, it is increasingly recognized that the brain is a highly complex organ with marked structural and functional plasticity and capacity for repair and tissue remodeling. A new concept that may be essential in the field of psychiatry in the forthcoming years is that of cumulative end-organ damage in different regions of the brain. Some concerted approaches for study, which integrate different methodologies concurrently (phenotypical assessment, pharmacological studies, animal models, molecular and cellular biology, genetics, and brain imaging), have been proposed (Stahl and Niculescu, 2002). For exam-

ple, convergent functional genomics is an approach to integrate data from animal studies, human genetic studies, and brain imaging studies: to use data from brain imaging studies to select brain regions of interest in psychiatric disorders and analyze gene expression patterns in those regions in post-mortem human brains.

### **Schizophrenia**

Advances in the study of the neurobiology of schizophrenia in the last decade have been in the study of brain dysfunction as measured by cognitive and neuroimaging techniques and of its genetic basis using molecular genetic methods.

As reviewed in the previous volume of "Advances" (Abou-Saleh 2005), structural neuroimaging studies have repeatedly shown numerous abnormalities, including reductions in prefrontal and medial temporal cortical regions in schizophrenia, including studies of first-episode schizophrenia. Structural abnormalities have also been reported using the magnetic resonance imaging (MRI) based technique of diffusion tensor imaging (DTI) that depicts the integrity of white matter tracts. Studies using functional MRI (fMRI) have also confirmed these findings, demonstrating reduced activation of the prefrontal cortex and medial temporal cortex in patients with schizophrenia. These abnormalities have also been detected using other functional neuroimaging techniques to measure cerebral blood flow (CBF), brain metabolism, and neurochemical changes, indicating changes in frontal, temporal, cingulate, thalamic, and cerebellar regions in patients with schizophrenia. Positron emis-

sion tomography (PET) and single photon emission computerised tomography (SPECT) techniques have been used to study neurotransmitter mechanisms; of particular importance are studies of dopamine D2 receptors using the amphetamine-induced reduction of raclopride binding, indicating increased dopamine release and confirming the dopamine hypothesis for schizophrenia. Finally, studies using magnetic resonance spectroscopy (MRS) have also demonstrated *in vivo* neurochemical changes in patients with schizophrenia, most notably, a reduction in the concentration of N-acetyl aspartate in the frontal and temporal cortical regions, indicating neuronal loss and supporting findings obtained using structural MRI studies of reduced gray matter in patients with schizophrenia (reviewed by Abou-Saleh 2006).

More recently, Fusar-Poli and Broome (2006) have aptly addressed the conceptual issues in psychiatric neuroimaging by reviewing advances round the themes of functional connectivity and focussed on conceptual issues relating to biological psychiatry and its relationship with cognitive neuroscience and concluded that despite advances in “biological psychiatry and the power of the cognitive neuropsychiatry paradigm, its findings are logically contingent upon psychopathology and the normatively defined terms employed”. More recently, researchers have combined the powers of neuroimaging and genomics techniques to the study of schizophrenia. Van Haren et al (2008) concluded that the BDNF and COMT genes are favourites for genetic imaging studies with consistent findings of associations between these polymorphisms

and structural brain changes which can be considered as endophenotypes to investigate the complexity of the phenomenon of schizophrenia although no single cause or pathogenic pathway has been found from these studies.

Recent reviews of neuroimaging studies of schizophrenia, including structural imaging techniques, have confirmed the enlargement of lateral ventricles, undersized superior temporal gyrus and prefrontal abnormalities as reported in neuropathological studies. McGuire et al (2008) reviewed the role of functional imaging techniques to study the pathophysiology of schizophrenia and importantly the role of dopamine and glutamate highlighting their potential for improving its diagnosis and the development of new drugs for its treatment. Patients with schizophrenia show impairments in facial emotional recognition and a specific deficit at recognising happy faces whereas they were more able to attribute other facial emotions such as fearful or sad faces. Rotarska-Jagiela et al (2008) have demonstrated connectivity changes affecting specific brain regions and involving the corpus callosum: using diffusion tensor imaging they showed white matter changes in schizophrenia which involved disintegration of healthy functional axons and strengthening of aberrant connections resulting in increased severity of clinical symptoms.

Kumra and Schulz (2008) highlighted the research progress in early-onset schizophrenia referring to cognitive neuroimaging and genetic studies which suggest a similar profile of clinical and neurobiological abnormalities between early and adult onset patients. Early on-

set schizophrenia is suggested to reflect a more severe form of the disorder, associated with greater genetic predisposition and anticipated future imaging and genetic studies of this disorder will provide further insight into the neurodevelopmental origins and the complexity of genetic and environmental factors interactions that modulate the risk to developing this disorder.

Malhi and Lagopoulos (2008) in an extensive review of the published literature from 1965 to 2007 of neuroimaging studies of psychiatric disorder have highlighted the novel neuroimaging applications and their potential clinical utility. They highlighted meaningful findings in mood disorder, schizophrenia and other disorders suggesting the coupling of multimodal imaging with genetics and pharmacotherapeutic studies which promises to improve clinical care.

Concerning the genomics of schizophrenia and despite the large scale linkage and association studies there has been a small yield of positive findings including whole genome studies. It is evident that schizophrenia is an oligogenic with several genes of small effect contributing to its occurrence. An important finding was that neuroregulin 1 and catechol-*O*-methyl transferase (*COMT*) genotype variants are associated with increased risk of developing schizophrenic symptoms in association with MRI and fMRI brain abnormalities (Lawrie et al 2008). The other important finding was that *DISC1* gene is a risk factor for the occurrence of psychotic symptoms in schizophrenia, bipolar disorder and recurrent major depression with influences on cognitive function in healthy subjects. The

*DISC1* gene interacts with a number of proteins with neurobiological pedigrees including *Ndel1* (*NUDEL*) a key regulator of neuronal migration, with endo-oligopeptidase activity, and *PDE4B*, a phosphodiesterase that is critical for cyclic adenosine monophosphate signalling that is directly linked to learning, memory and mood.

### **Neurobiology of cannabis-related schizophrenia**

The role of cannabis in inducing psychotic illness and in aggravating it has received increasing attention from practising clinicians and researchers. This category captures the challenge of defining this “dual diagnosis” or comorbidity and determining its aetiology and mediating pathogenesis. There is compelling evidence from cohort and clinical studies that cannabis use increases the risk for psychotic illness, particularly schizophrenia. Elucidating the aetiology of cannabis-related schizophrenia is conceptually based on studying the interplay of their aetiological factors-particularly their neurobiology.

It has been well established that both cannabis heavy and regular use and schizophrenia are associated with impairments in cognitive (working memory, planning, decision making, and problem solving) and brain functions serving these cognitive purposes. Moreover, both conditions are under genetic influences which also overlap: gene variants may be shared particularly those that regulate the activity of dopamine (*COMT*) and cannabinoid receptor gene (*CNRI*) gene, which encodes cannabinoid (*CB1*) receptors:

both gene variants are associated with increased risk for schizophrenia. Moreover, both conditions are associated with neuroimaging abnormalities. Cannabis chronic use is associated with structural abnormalities and regular users show reciprocal changes in brain activity globally and in cerebellar and frontal regions. Chronic use results in attenuated brain activity in task-activated regions or activation of compensatory regions with partial correlations with neuropsychological measures.

A recent review explored the association of cannabis with schizophrenia, its effects on the brain, and whether the brain changes known to be present in schizophrenia could be caused by cannabis and thus lead to a psychosis (deLisi 2008). The review concluded that this is unlikely and that cannabis may even have benign effects on brain structure, not producing deleterious damage but that its neurochemical interactions with the dopaminergic pathway may, particularly in genetically vulnerable individuals, have adverse consequences. However a recent study examined the effects of cannabis on brain microstructure using DTI-Tractography, a highly sensitive structural brain imaging technique, in people with heavy and regular cannabis use and compared the results with those obtained in non-cannabis users. Cannabis users showed impairment in the structural integrity of white matter relative to controls, in the region of the corpus callosum (CC) where white matter passes between the prefrontal lobes, an observation that is in keeping with previous reports of altered and diversified activation patterns in cannabis (Arnone et al 2008). Structur-

al abnormalities revealed in the CC may underlie cognitive and behavioural consequences of long term heavy cannabis use. Interestingly, there is evidence for abnormal brain connectivity in first-episode psychosis in a diffusion MRI tractography study of the genu and splenium tracts of the CC (Price et al 2007). First-episode schizophrenia patients who use cannabis show a more pronounced brain volume reduction over a 5-year follow-up than patients with schizophrenia who do not use cannabis (Rais et al 2008). These effects may be mediated by chronic exposure to cannabinoids which desensitizes CB1 receptors and the loss of their protective effects against stress and increased activation resulting in accelerated loss of brain tissue and loss of GABA inhibitory function .

## Addictions

Neuroimaging technological advances have provided powerful tools to investigate biological mechanisms underlying addictive behaviour and its relationships with cognitive, behavioural, and environmental variables within addictions. The focus of PET and SPECT studies has been on the brain dopamine system, the pivotal neurotransmitter system through which drugs of abuse exert their reinforcing effects. Moreover, fMRI studies have identified brain regions and circuits involved in drug addiction (intoxication, withdrawal, and craving) and linked their activities to behaviour (Abou-Saleh 2006). Animal studies have shown that environmental factors such as social status can affect dopamine D2 receptor expression that, in turn, affects the pro-

ensity for cocaine self-administration. Recently, a model that conceptualizes addiction as a “state initiated by the qualitatively different and larger reward value of the drug, which triggers a series of adaptations in the reward, motivation/drive, memory and control circuits of the brain” has been proposed. These changes result in an enhanced and permanent saliency value for the drug and in the loss of inhibitory control, favouring the emergence of compulsive drug administration. The model also highlights the need for therapeutic approaches that include pharmacological and behavioural interventions in the treatment of drug addiction. Further, there are new findings on biological vulnerability to drug addiction. It has been hypothesized that genetic factors make a major contribution to the individual’s innate vulnerability to addictive behaviour. Individuals with low dopamine D2 receptor levels find methylphenidate pleasant, while higher D2 receptor level individuals find it unpleasant, supporting the “reward deficiency hypothesis” and the notion that individuals with low dopamine receptors may have an understimulated reward system and, as a result, experience pleasurable effects when subjected to drug-induced elevation in dopamine (Volkow et al 2004). It has been suggested that neuroimaging may provide the means to objectively link behavioural and neurochemical changes and to objectively evaluate treatment. With the identification of new genes related to addictive behaviour, imaging promises to provide the necessary tool to directly translate this knowledge to human evaluation (Volkow et al 2004).

A recent conference on the neurobiology of addictions: new vistas, held at the Royal Society, UK in February 2008 (<http://royalsociety.org/event.asp?id=6064>) brought together international experts for an update on the nature of addictions, their causes, long term consequences and their treatment. Presentations by the speakers captured the remarkable advances in elucidating the neurobiological mechanisms underlying addictions with reference to findings of animal studies, translational research and studies in clinical populations. On the nature of addictions, Koob provided an update on his theory of the opponent motivational processes in addictions: opponent process as a motivational explanation for negative reinforcement of drug dependence and its neurobiological basis. The neurochemical mechanisms involved in reward and stress and based in forebrain structures of the ventral striatum and extended amygdala are dysregulated in addictions and thus convey the opponent motivational processes that drive addictions. These neurochemical processes include reductions in reward neurotransmission involving dopamine and opiate peptides in the ventral striatum and the brain stress systems such as corticotropin releasing factor (CRF), nor epinephrine, vasopressin and diacetylmorphine in the extended amygdala. Studies have shown that acute withdrawal from drugs results in increases in reward thresholds in stress responses and in levels of corticotropin releasing factor in the amygdala. Acute excessive drug intake may activate the brain stress response system which is then sensitised during repeated episodes of drug withdrawal and may persist during prolonged

abstinence and stress – induced relapse. CRF antagonists may therefore have therapeutic potential by blocking excessive drug use in addiction. Everitt summarised the neurobiology of learning and memory processes in addiction. Drug addiction has been considered the end point of transition from voluntary drug seeking and use for its reinforcing effects through loss of control over this addictive behaviour to its compulsive use. The neurobiology of this transition in behaviour reflects a shift in its control from the ventral to the dorsal striatum and mediated by dopamine -dependent serial connectivity between these areas. The end point of compulsive drug use also depends on loss of executive control over drug seeking behaviour which may be a consequence of chronic drug taking-induced prefrontal cortical dysfunction. Everitt and Robbins (2005), have therefore hypothesised that drug addiction depends upon “a complex set of interactions between vulnerability traits, reinforcement of pavlovian and instrumental learning mechanisms as well as the effects of chronic administered drugs that are mediated in neural terms by a shift from pre frontal to striatal control over drug seeking behaviour”.

Incentive sensitisation as a theory of addiction was reviewed by Robinson, proposing that “addiction is caused primarily by drug-induced sensitisation in the brain meso-cortico-limbic system which attributes incentive salience to reward – associated stimuli, rendering this system hypersensitive and thus causing pathological incentive motivation or “wanting for drugs”.

Behavioural studies in humans and laboratory animals have demonstrated that

exposure to drug-related stimuli, to drugs themselves and to stressors may precipitate a relapse into drug abuse. Molecular and neurochemical studies have shown lasting changes arising from chronic drug use as well as a result of conditioning in learning of the association between drug-related stimuli and their effects. A combination of these neural and psychological mechanisms of relapse perpetuates vulnerability to drug-related stimuli. The brain circuits that are involved in these processes are the meso-cortico-limbic dopamine system and its glutamatergic inputs and the corticotrophin-releasing factor and noradrenergic systems of the limbic brain.

The concept of addiction has been extended to two other disorders: gambling and obesity. The current diagnostic criteria for pathological gambling have similarities with those for drug addiction: criteria of tolerance, withdrawal, loss of control, and compulsion. Pre clinical studies implicate brain monoamine dysfunction in the neurobiology of impulsive decision-making and risk-taking behaviours. Neuroimaging studies have also suggested the involvement of ventromedial prefrontal cortex and ventral striatum in the pathophysiology of pathological gambling and similarly studies have suggested a genetic contribution to pathological gambling implicating specific polymorphisms.

The extension of the concept of addiction to obesity has been supported by PET studies which showed abnormalities in brain dopamine activity in obese individuals. Striatal dopamine D2 receptor availability was shown to be significantly reduced in obese individuals compared

to normal controls with obese individuals with the lowest D2 values having the largest body mass index. The role of dopamine is pivotal as it modulates motivation and reward circuits and its deficiency in obese individuals may perpetuate pathological eating as a means to compensate for decreased activation of these circuits. These findings have implications for treatment strategies of obesity which has become a major public health problem worldwide with associated increased risks for cardiovascular disease, diabetes and cancer. Moreover, obesity is associated with reduction in life expectancy by 5–20 years. These considerations, in addition to the complex interplay of aetiological factors including genetic and neurochemical mechanisms, have been the basis for recommending the inclusion of obesity as a mental disorder in DSM-V (Volkow and O'Brien, 2007).

Vulnerability to addiction is related to two main areas of genetic and psychological factors. The genetic basis of addictions has been reviewed in the previous edition of "Advances in psychiatry" (Abou-Saleh 2005, Schumann 2007) has identified the genetic mechanism of addictive behaviour by developing a model of integrated translational addiction research to disentangle the complexity of the genetic and neurobiological basis of addictions proposing an integrated translational approach involving functional genetic analysis, animal behavioural experimentation and neuroimaging studies. Examples of this approach are provided by describing research that has identified the relevance of circadian rhythm genes in regulating alcohol drinking behaviour in animal models and humans.

Complementary approaches using endophenotypes in human gene – neuroimaging studies where the effect of single and combined genetic variations on processing of aversive emotional stimuli in the limbic system have supported this approach.

Brain imaging techniques have enabled the investigation of trait and state variables that contribute to the aetiology of addictions. Nader and Czotky (2008) highlighted the use of *in-vivo* imaging in non human primate models of drug abuse. They proposed that monkey models are particularly relevant for the study of behavioural and biological mechanisms in human addictions. Brain imaging studies of the dopamine system in monkeys have implicated D2 receptors in cocaine addiction. Moreover, environmental factors including those associated with formation of social hierarchy can impact receptor availability and sensitivity to the abuse-related effects of cocaine. Studies using a homologous model of the human condition showed that cocaine self-administration can be altered in an orderly fashion by presentation of an acute stressor, such as an intruder to the social group whilst acute environmental enrichment may have a converse effect. Translated to the human condition, this may explain the powerful positive reinforcing effects of work and occupation with their boosting effects on self esteem and thus contributing to recovery from addiction.

An important advance in the study of psychological factors contributing to vulnerability to addiction is the context-induced relapse to drug seeking. A rat model was developed to study this behaviour by Crombag and Shaham followed by

studies using this model which reported reliable context-induced reinstatement of drug seeking in rats with a history of heroin, cocaine, alcohol and nicotine self administration. Studies have also been conducted on the psychological and neuropharmacological mechanisms underlying context-induced reinstatement of drug seeking with important clinical implications.

One of the most important developments in our knowledge of the consequences of addiction has been the effects of drugs of abuse on transcriptional mechanisms reflecting drug-induced neural plasticity. An established molecular mechanism of addiction is upregulation of the cAMP second messenger pathway in many neuronal cell types in response to chronic administration of drugs resulting in activation of the transcription factor CREB which mediates aspects of tolerance and dependence. In contrast, induction of another transcription factor, Fos-B in the brain's reward regions exerts the opposite effect and may contribute to sensitise responses to drug exposure. An important mechanism underlying drug induced neural and behavioural plasticity is through chromatin remodelling by regulating the expression of specific target genes in the brain reward pathways. Studies of cocaine self-administration in non human primates have demonstrated altered functional activity in the temporal lobes consistent with evidence of progressive cognitive decline in humans exposed to cocaine. Functional imaging studies of cocaine abusers have demonstrated reward and cognitive deficits that may be consequential for the development, maintenance or relapse to ad-

diction. fMRI abnormalities were related to prefrontal cognitive deficits in cocaine dependence with an emerging picture of cocaine users having attentional bias towards drug-related stimuli, poor performance in laboratory tests of inhibitory control and compromised monitoring and evaluation of their behaviour (Garavan & Hester 2007). These cognitive deficits may contribute to the continuation of drug use in dependent people and may qualify as important targets for therapeutic interventions.

Finally, these advances in our knowledge on the neurobiology of addiction have major implications for the development of specific behavioural and pharmacological treatments. New medications have been developed for treating withdrawal from drugs of addiction and most importantly for prevention of relapse (O'Brien et al, 2006). Good examples include modafinil for the treatment of cocaine dependence and naltrexone for the prevention of relapse into alcohol dependence. Translational research needs to be conducted to evaluate the effects of dopamine D2 receptor blockers (antipsychotics) or dopamine boosting medications such as disulfiram (antabuse) for treatment of cocaine addiction. Cycloserine which modulates the glutamate system with therapeutic effects in anxiety disorder has therapeutic effects of reducing craving in alcohol and nicotine addiction and has boosting effects of cue exposure for relapse prevention. Importantly, pharmacological treatments are most effective when applied within the context of comprehensive psychosocial rehabilitation programmes.

## Conclusion

The last decade has witnessed unprecedented advances in the neurobiology of schizophrenia and addictions. The use of neuroimaging and molecular genetic techniques and their combination has pro-

vided new knowledge of their aetiology. These advances promise to contribute to the deconstruction of present diagnostic entities into their true genotype–phenotype entities and inform the development of designer medicines and the introduction of preventive interventions.

## References

- Abou-Saleh MT (2006). Neuroimaging in psychiatry: an update. *J Psychosom Res* 2006 61:289–293
- Abou-Saleh MT (2005). *The search for the “Holy Grail”: the biology of psychiatric disorders in Advances in Psychiatry*. Vol. 2. Christodoulou GN (ed) World Psychiatric Association
- Arnone D, Barrick TR, Chengappa S, Mackay CE, Clark CA, Abou-Saleh MT (2008) Corpus callosum damage in heavy marijuana use: preliminary evidence from diffusion tensor tractography and tract-based spatial statistics. *Neuroimage* (Epub ahead of print)
- CME Institute of Physicians Postgraduate Press, O’Brien CP, Koob GF, Mee-Lee D, Rosenthal RN (2006). New developments in addiction treatment. *J Clin Psychiatry* 67:1801–1812
- Crombag HS, Shaham Y (2002). Renewal of drug seeking by contextual cues after prolonged extinction in rats. *Behav Neuroscience* 116:169–173
- Davis P, Abou-Saleh MT (2008). Developing an enhanced counselling intervention for the primary prevention of hepatitis C amongst injecting drug users addictive disorders and their treatment 7:65–67
- Everitt BJ, Robbins TW (2005). Neural systems of reinforcement for drug addiction: from actions to habits to compulsion. *Nat Neurosci* 8:1481–1489
- Fusar-Poli P, Broome MR (2006). Conceptual issues in psychiatric neuroimaging. *Curr Opin Psychiatry* 19:608–612
- Garavan H, Hester R. The role of cognitive control in cocaine dependence. *Neuropsychol Rev* 2007 17:337–345
- John C, Abou-Saleh MT (2007). Conducting randomised controlled trials of psychological interventions in the field of drug addiction-trials and tribulations. *Arab Journal of Psychiatry* 18:70–83
- Kumra S, Schulz C (2008). Editorial: research progress in early-onset schizophrenia. *Schizophr Bull* 34:15–17
- Lawrie SM, Hall J, McIntosh AM, Cunningham-Owens DG, Johnstone EC (2008). Neuroimaging and molecular genetics of schizophrenia: pathophysiological advances and therapeutic potential. *Br J Pharmacol* 153(Suppl 1):S120–S124
- McGuire P, Howes OD, Stone J, Fusar-Poli P (2008). Functional neuroimaging in schizophrenia: diagnosis and drug discovery. *Trends Pharmacol Sci* 29:91–98
- Malhi GS, Lagopoulos J (2008). Making sense of neuroimaging in psychiatry. *Acta Psychiatr Scand* 117:100–117

- Nader MA, Czotky PW (2008). Brain imaging in nonhuman primates: insights into drug addiction. *ILARJ* 49:89–102
- Price G, Cercignani M, Parker GJ, Altmann DR, Barnes TR, Barker GJ et al (2007). Abnormal brain connectivity in first-episode psychosis: a diffusion MRI tractography study of the corpus callosum. *Neuroimage* 35:458–466
- Rotarska-Jagiela A, Schönmeier R, Oertel V, Haenschel C, Vogeley K, Linden DE (2008). The corpus callosum in schizophrenia-volume and connectivity changes affect specific regions. *Neuroimage* 39:1522–1532
- Schumann G (2007). Okey Lecture 2006: identifying the neurobiological mechanisms of addictive behaviour. *Addiction* 102:1689–1695
- Stahl SM, Niculescu AB (2002). Molecular and cellular biology research. In: Lopez-Ibor JJ, Gaebel W, Maj M, N Sartorius N (eds) *Psychiatry as a neuroscience*. John Wiley & Sons Ltd, Chichester, UK (pp 29–58)
- van Haren NE, Bakker SC, Kahn RS (2008). Genes and structural brain imaging in schizophrenia. *Curr Opin Psychiatry* 21:161–167
- Volkow ND, Fowler JS, Wang GJ (2004). The addicted human brain viewed in the light of imaging studies: brain circuits and treatment strategies. *Neuropharmacology* 47:3–13
- Volkow ND, O'Brien CP (2007). Issues for DSM-V: should obesity be included as a brain disorder? *Am J Psychiatry* 164:708–710
- 

**Mohammed T. Abou-Saleh**, Professor of Psychiatry. St George's, University of London. Cranmer Terrace, London SW17 0RE, UK  
**E-mail:** mabousal@sgul.ac.uk



# **New Contributions of Psychiatric Research in the Field of Intellectual Disability**

**Marco Bertelli, Angela Hassiotis, Shoumitro Deb, Luis Salvador-Carulla**

Section of Psychiatry of Intellectual Disability, World Psychiatric Association

## **Introduction**

Intellectual Disability (ID) or Mental Retardation is a lifelong condition included in the group of mental disorders in the international classification systems (ICD-10, DSM-IV-TR). ID is associated with significant health problems worldwide such as multiple disabilities and other medical conditions, although a substantial proportion of ID is due to preventable causes. ID has consequences throughout the life-span, imposing a considerable burden on families and caregivers. It also requires high service provision and produces high health and societal costs. However, ID is largely disregarded as a health issue by national and international organisations.

Recent data point at a decreasing rate of ID in Western societies whereas an opposite trend appears in very low income countries. For example, prevalence of ID is now below 1.0% in developed countries such as Finland or the Netherlands (van Schrojenstein Lantman et al 2006).

Even in this context, ID morbidity rates are above schizophrenia or bipolar disorders within the group of neuropsychiatric conditions. The situation is far worse in developing countries, where rates of ID may reach 4% according to some estimates. Environmental factors such as lead exposure, iron deficiency, malnutrition, perinatal problems and many other non-genetic conditions play a major role in the excess of people with intellectual disabilities (PWID) in non-developed countries.

The lack of adequate and reliable data on the epidemiology of ID was a major reason for excluding this significant health condition from the WHO/World Bank Burden of Disease study, and thus ID is still a hidden problem to the health sector. A global chasm exists between awareness, planning and delivery of services for people with ID and the unmet needs of this disadvantaged population group. The recently published WHO Atlas on ID (WHO 2007) is the first ever general overview of this problem world-

wide. It is particularly relevant for placing ID within the health care sector. The WHO Atlas on ID is the first full and comprehensive report on the resources and care conditions in 170 countries around the world. The report provides information that may be generally available in other health areas but which was previously omitted in ID. It provides a broad description on the terminology, use of classification systems, funding arrangements, care patterns, legislation, public campaigns and training as well as role of NGOs and international organizations and sources of information and research in ID.

It is also important to note that over 30% of people with ID have a comorbid psychiatric disorder, which often has onset in childhood and persists through adolescence and adulthood (Einfeld et al 2008). Approximately one-eighth of the population appears to have borderline intelligence (defined as intelligence level 70–85) which is associated with a high prevalence of various mental disorders and social disability (Hassiotis et al 2008). Nevertheless, ID and related conditions are still considered to be a marginal area of psychiatry. In many countries there is little or no training provision on ID during undergraduate medical training or psychiatric specialisation. However, the last five years have showed a mounting research activity in this area, which has moved from a descriptive and epidemiological phase to one of defining multidimensional pathogenic mechanisms, valid assessment procedures, and better outcome measures.

## Terminology and Classification

The name “Mental Retardation” has been changed to “Intellectual Disability” by the main national and international organisations in this field. The WPA section on this topic changed its name to “Psychiatry of Intellectual Disability” in 2006 (Salvador-Carulla & Bertelli 2008). WHO has implicitly accepted this new term in its recent Atlas on ID (WHO 2007).

The classification of Intellectual Disabilities (ID) remained unchanged since the 80s to recent years and the debate on the revision of the concept and classification of ID has yet to be completed. The three criteria used in DSM and ICD (IQ below 70; impairment in adaptive skills and age of onset below 18 years of age) do not fit current knowledge and developments in this field. In addition to that, the classification of psychiatric disorders within the main classification systems may require specific adaptation for ID. The American Association on Intellectual and Developmental Disabilities (AAIDD) has developed a classification system based on intensity of needs for supports (rather than the IQ-based previous system of mild, moderate, severe and profound) (Schalock & Luckasson 2004). A thorough review of the taxonomy of ID should be carried out both in DSM-V and in ICD-11.

ID may be regarded not as a disease or as a disability but as a syndrome grouping (metasyndrome) similar to the construct of dementia. It includes a heterogeneous group of clinical conditions, ranging from genetic to nutritional, infectious,

metabolic or neurotoxic conditions. The ID metasyndrome is characterized by a deficit in cognitive functioning prior to the acquisition of skills through learning. The intensity of the deficit is such that it interferes in a significant way with individual normal functioning as expressed in limitations in activities and restriction in participation (disabilities). The name 'developmental cognitive impairment' has been suggested to coexist with ID for naming the metasyndrome previously called mental retardation following a polysemic-polynomial approach (Salvador-Carulla & Bertelli 2008).

### **Psychiatric assessment**

A significant advance in the recognition, assessment and treatment of psychiatric disorders in ID has been made in recent years, as specific diagnostic systems have been produced in this field such as the DC-LD in the UK or the DM-ID in the USA.

The National Association for the Dually Diagnosed (NADD) has developed in collaboration with the American Psychiatric Association the Diagnostic Manual – Intellectual Disability [DM-ID (NADD, 2007)]. DM-ID was developed by consensus based analysis and review of existing evidence. Its usability was assessed in a series of international field trials. Although all major diagnostic categories of mental disorders, as defined in the DSM-IV-TR are covered in the DM-ID, significant differences exist between the two manuals. For example, specific criteria have been developed for Adjustment Disorders and Autistic Spectrum Disorders.

Additionally, Obsessive Compulsive Disorders and Post Traumatic Stress Disorders are discussed separately from the Anxiety Disorders, as they are frequently underdiagnosed in persons with ID.

Further progress has been documented, especially in the areas of mood and schizophrenia-spectrum disorders. A variety of self-reports or informant-based rating scales were used in many studies demonstrating advances in the applicability of structured and semi-structured evaluation of individuals across the range of ID.

The studies of the application of the Diagnostic Criteria for Psychiatric Disorders for Use with Adults with Learning Disabilities/Mental Retardation (DC-LD – Royal College of Psychiatrists) to individuals with most severe ID for the assessment of mood disorders revealed important limits with many cases in the residual category (Felstrom et al 2005). Appetite/eating behaviour and aggression were deemed to be frequent symptoms of mood disorders. Other useful criteria were thought to be sadness, irritability, decreased social interaction, regression in skill level, sleep disturbances, and diurnal variation (Hurley 2006).

Knowledge has been improved by recent studies in the presentation, neuropathology, and assessment of Schizophrenia-spectrum disorders (SSDs). Strengths and limitations of frequently used instruments of assessment have been pointed out. For example, the PASS-ADD (Psychiatric Assessment Schedule for Adults with Developmental Disabilities) Checklist was found to have low sensitivity

in detecting a disorder, and the famous PANSS negative-symptom scale was not applicable to people with ID, even in the mild range. People with SSDs and ID were found to have a higher number of observable symptoms, negative symptoms, and greater functional disability than people with SSDs without ID (Hemmings 2006).

Behavioural problems (BPs) still represent one of the main issues in daily work with people with ID. They often reach severe proportions in both intensity and frequency and necessitate urgent intervention. The presentation of BPs is determined by many complex factors. The pathogenic contribution of organic conditions, psychiatric disorders, environmental influences, or a combination of these, has to be carefully established for every single case. Thus, functional behavioural assessment has gained widespread use in all settings in which people with ID might present behavioural problems. Recent research has shown promise in training non-professionals in learning to carry out such assessments and in implementing effective behavioural interventions (Tassé 2006).

Both psychiatrists and behavioural therapist offer key tools in behavioural assessment and resolution. We believe that the coordinated effort of these two disciplines affords the most comprehensive and efficacious method of assessing, understanding and treating a wide range of behavioural problems and associated psychiatric pathology in individuals across the range of intellectual disability.

## Genetics and behavioural phenotypes

This is the area of research where major advances have taken place in the last years.

Some highly specific biological and psychological mechanisms are likely to account for a link between genotype and phenotype. Examples include the risk for Alzheimer's disease in people with Down syndrome, the progressive differentiation of support and communication strategies on the basis of variability in autistic-spectrum development, the spectrum of problems experienced by people with Prader-Willi syndrome and Cornelia de Lange syndrome (CdLS).

CdLS is a syndrome with multiple congenital anomalies characterised by a distinctive facial appearance, microcephaly, hypertrichosis, prenatal and postnatal growth deficiency, psychomotor delay, behavioural problems, autistic features, sleep problems, heart defects, cleft palate, and upper limb defects. In Europe the overall CdLS prevalence is estimated at 1.6–2.2/100,000 (Barisic et al 2008). Recently, mutations in *NIPBL*, the human homologue of the *Drosophila Nipped-B* gene, were found to cause CdLS. Mutations have been found in 39% of reported cases. Behavioural problems are highly correlated with the level of adaptive functioning, and also include autism. No correlation of behaviour with the type of mutation was found (Bhuiyan et al 2006). Low frequency of eye-contact in early interactions of children may serve as a risk factor (Sarimski 2007).

A great variability of behavioural characteristics was demonstrated in CdLS in addition to highlighting the contribution of some variables to both the behavioural profile of CdLS and the developmental trajectory of the behavioural pattern. Behavioural characteristics were correlated with certain clinical and functional aspects such as chronological age, cognitive level and clinical phenotype. The variability of the behavioural profile in CdLS reflects the wide variability in cognitive and adaptive functioning across individuals (Basile et al 2007).

A number of comparative studies have demonstrated the significant differences in profiles of psychopathology in genetic disorders causing intellectual disability. *De novo* copy-number variation has been identified as a major cause of ID and other complex disorders, suggesting that new mutations are an important, previously overlooked factor in the aetiology of complex diseases. These observations support the notion that research into the previously neglected monogenic disorders should become a priority of genome research (Ropers 2007). Because of the introduction of novel high-throughput, low-cost sequencing methods, sequencing and genotyping will soon converge with far-reaching implications for the elucidation of genetic diseases and health care. These techniques will have a major impact in the generalisation and standardisation of genetic screening in routine clinical practice. In any case, the complexity of ID has to be managed with a bio-psycho-social approach, where functional models, developmental perspective, and more precise detection of physical and mental ill-health collaborate in

providing useful interdisciplinary strategies for assessment and intervention.

### **Treatment strategies**

Interest in new-generation antipsychotics as a treatment for behaviour disorder has dominated the literature in the recent years (see Deb & Unwin 2007, Tyrer et al 2008). Several empirical studies support the use of these compounds, although some recent publications are more sceptical of the quality of the evidence to date. Special attention is given to their side-effects. Recommendations on prevention and management of weight gain, dyslipidemia, hyperglycemia, and QTc prolongation must be considered.

Current psychopharmacology tends to evaluate the usefulness of pharmacological treatments in terms of effectiveness rather than in terms of efficacy (on target symptoms) and safety. This new outcome measure, which adds the capability to determine the stay on treatment, seems to be strongly associated with the final outcome of any disorder. The growing need of new patient-oriented outcome measures has brought the centrality of Quality of Life (QoL) in the program aims of most pharmacological interventions. Conceptual differences between generic and health-related QoL have been pointed out (Bertelli & Brown 2006).

In contrast to the advances in diagnosis and assessment, research on treatment of depressive disorders continues to be inadequate. Antidepressants are still the mainstay of treatment for mood disorders frequently prescribed off-label (Haw & Stubbs 2005) or without a proper diagnostic procedure. The difficulties in the

diagnostic and assessment procedures still encourage the use of the *ex-ivanti-bus* criterion in the choice of a drug for the treatment of observable symptoms and behavioural alterations.

In the UK, a national guide was developed recently (Deb et al 2007) in order to provide clinicians advice regarding the use of psychotropic medication for the management of problem behaviour in adults with ID. The guide emphasises the full involvement of people with ID and their carers in the decision making process, full consultation with multidisciplinary team where appropriate and consideration of all no-medication based options before opting to prescribe medication. The Special Interest Group in Intellectual Disability (SPID) of the World Psychiatric Association has now developed an international guide based on the UK guide.

### Support and needs

Owing to the complexity of their psycho-physical vulnerability, people with

ID need additional support and services throughout their lives. International reports indicate that not only adjunctive needs but even basic needs of people with ID are still insufficiently met by most national health services across the world. In Europe, the areas of most concern seem to be lack of contact with primary care service, the way of prescribing medications, the need for accessible information, the need for developing non invasive effective psychological treatments for depression and behavioural problems, the care of people with severe mental health problems, practical and adequate support in hospital, the effect of long waiting times, communication between health and social services, and health awareness (O'Hara 2006). A first major survey of PWID's needs has been conducted in England in the biennium 2003–2004. Social exclusion, feeling unsafe, and lack of control over one's own life were the most frequently reported difficulties (Health and Social Care Information Centre 2005).

### References

- Barisic I, Tokic V, Loane M, Bianchi F et al (2008). Descriptive epidemiology of Cornelia de Lange syndrome in Europe. *Am J Med Genet A* 146:51–59
- Basile E, Villa L, Selicorni A, Molteni M (2007). The behavioural phenotype of Cornelia de Lange Syndrome: a study of 56 individuals. *J Intellect Disabil Res* 51:671–681
- Bertelli M, Brown I (2006). Quality of life for people with intellectual disabilities. *Current Opinion in Psychiatry* 19:508–513
- Bhuiyan ZA, Klein M, Hammond P, van Haeringen A et al (2006). Genotype-phenotype correlations of 39 patients with Cornelia De Lange syndrome: the Dutch experience. *J Med Genet* 43:568–575 (Epub 2005)
- Deb S, Unwin GL (2007). *Guide to using psychotropic medication for the management of behaviour problems among adults with intellectual disability: technical document*. University of Birmingham, Royal College of Psychiatrists, MENCAP, UK. [www.ld-medication.bham.ac.uk](http://www.ld-medication.bham.ac.uk)

- Deb S, Unwin G (2007). Psychotropic medication for behaviour problems in people with intellectual disability: a review of the current literature. *Current Opinion in Psychiatry* 20:461–466
- Deb S (2008) (ed) *WPA-SPID Problem behaviour in adults with intellectual disabilities: international guide for using medication*. World Psychiatric Association: Section “Psychiatry of Intellectual Disability”. WPA Educational Material
- Einfeld SL, Piccinin AM, Mackinnon A et al (2006). Psychopathology in Young People with Intellectual Disability. *JAMA* 296:1981–1989
- Felstrom A, Mulryan N, Reidy J et al (2005). Refining diagnoses: applying the DC-LD to an Irish population with intellectual disability. *Journal of Intellectual Disability Research*, 2005; 49:813–819
- Health and Social Care Information Centre (2005). Adults with learning difficulties in England 2003/4: full report. UK: NHS, Health and Social Care information Centre
- Hemmings CP (2006). Schizophrenia spectrum disorders in people with intellectual disabilities. *Current Opinion in Psychiatry* 19:470–474
- Hurley AD (2006). Mood disorders in intellectual disability. *Current Opinion in Psychiatry* 19:465–469
- National Association for the Dually Diagnosed (NADD) (in Association with the American Psychiatric Association) (2007). Diagnostic Manual – Intellectual Disability (DM-ID). Kingston, NY, NADD Press
- O’Hara J (2006). Standards and quality measures for services for people with intellectual disabilities. *Current Opinion in Psychiatry* 2006, 19: 497–501
- Ropers HH (2007). New perspectives for the elucidation of genetic disorders. *Am J Hum Genet* 81:199–207
- Sarimski K (2007). Infant attentional behaviours as prognostic indicators in Cornelia-de-Lange syndrome. *J Intellect Disabil Res* 51:697–701
- Salvador-Carulla L, Bertelli M (2008). “Mental retardation’ or ‘intellectual disability’”: time for a conceptual change. *Psychopathology* 41:10–16
- Schalock RL, Luckasson R (2004). The 2002 AAMR Definition, Classification, and Systems of Supports and its relation to international trends and issues in the field of intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities* 1:136–146
- van Schrojenstein Lantman-de Valk HM, Wullink M, van den Akker M, van Heurn-Nijsten EW, Metsemakers JF, Dinant GJ (2006). The prevalence of intellectual disability in Limburg, the Netherlands. *J Intellect Disabil Res* 50:61–68
- Tassé MJ (2006). Functional behavioural assessment in people with intellectual disabilities. *Current Opinion in Psychiatry* 19:475–480
- Tyrer P, Oliver-Africano PC, Ahmed Z et al (2008). Risperidone, haloperidol and placebo in the treatment of aggressive challenging behaviour in patients with intellectual disability: a randomised controlled trial. *Lancet* 371:57–63
- World Health Organisation. Atlas on Country Resources in Intellectual Disabilities (Atlas-ID) WHO, Geneva, 2007. [http://www.who.int/mental\\_health/evidence/atlas\\_id\\_2007.pdf](http://www.who.int/mental_health/evidence/atlas_id_2007.pdf)

---

**Marco Bertelli**, MD, Lungarno Cristoforo Colombo, 28/A 50 100 Firenze, Italy  
**E-mail:** bertelli.fi@tiscali.it



# Meteoropathy

## A New Disease

---

**Luigi Janiri, Giuseppe Spinetti,  
Marianna Mazza, Marco Di Nicola**

Section of Ecology, Psychiatry and Mental Health, World Psychiatric Association

“Whoever wishes to investigate medicine properly, should proceed thus: in the first place to consider the seasons of the year, and what effects each of them produces for they are not at all alike, but differ much from themselves in regard to their changes. Then the winds, the hot and the cold, especially such as are common to all countries, and then such as are peculiar to each locality. We must also consider the qualities of the waters, for as they differ from one another in taste and weight, so also do they differ much in their qualities...”

*(Hippocrates, “Airs, waters and places”, 400 BC)*

Biometeorology is that branch of ecology which deals with the effects on living organisms of the extraorganic aspects of the physical environment (such as temperature, humidity, barometric pressure, rate of air flow, and air ionization). It considers not only the natural atmosphere but also artificially created atmospheres such as those to be found in buildings and shelters, and in closed ecological systems, such as satellites and submarines. Meteorotropism is the response to influence by meteorological factors noted in certain

biological events, such as sudden death, attacks of angina, joint pain, insomnia, and traffic accidents. Meteoropathology is the pathology of conditions caused by atmospheric conditions, while meteoropathy is a term which indicates any disorder due to conditions of climate.

The term meteoropathy, from the Greek “meteora” (things high in the air or celestial phenomena) and “pathos” (illness, suffering, pain), indicates every pathological dimension in some way related to weather conditions. This concept is

referred to a set of temperature, humidity, barometric pressure and brightness. Someone said to suffer from meteoropathy is called a meteoropathic. Some people may feel tired when weather changes but still can't sleep, some people get nervous when winds become strong, or some people may feel sad and depressed when it rains. Those people are meteoropathic and their ability to function properly depends greatly on weather. According to the recent research the number of people who feel the effects of weather changes is growing. And with them the interest for meteoropathy.

Meteoropathy is different from historical conceptions of "air" causing diseases and strongly influencing people's sense of well-being. There appear to be significant and measurable correlations between particular atmospheric events (such as a sudden increase in humidity and temperature) and the onset of disease. Meteoropathy is a syndrome, that is, a group of symptoms and pathological reactions that manifest when there is a gradual or sudden change in one or more meteorological factors in a given area. Meteorological factors are represented by the air temperature, relative humidity, wind speed, atmospheric pressure, rain and thunderstorms with the typical effects on the air that they have – ionization, the electrical state and turbulence. These variations can manifest themselves in a brusque manner as cold fronts pass, with thunderstorms or with squalls, or in a gradual way. For example, on Continental Europe, after a period of good weather, when a disturbance from the Atlantic arrives, we can detect various effects

on the body manifested in the various organs and systems. This phenomenon is more noticeable when more atmospheric factors are involved at the same moment. The living organism is constantly affected by natural electromagnetic influences covering a wide range of frequencies and amplitudes. One of these influences, with frequencies in the very low frequency (VLF) range (1–100 kHz), is represented by a phenomenon called VLF-atmospherics or VLF-sferics. Sferics are very short, weak, and dampened electromagnetic impulses generated by atmospheric discharges (lightning). Due to this fact, they can be used to study the characteristics of lightning, as well as the lower ionosphere. Besides their significance as indicators of thunderstorm activity, it has been hypothesized that sferics are able to affect the functioning of living organisms and physico-chemical systems. More specifically, this atmospheric parameter has been considered a possible trigger for changes in the somatic and emotional well-being of humans, sometimes referred to as weather sensitivity symptoms or meteoropathy (Schienle et al 2006).

Scientists claimed that middle aged persons, especially women are at greater risk of becoming meteoropathic, but even children are at risk. It is becoming clear that meteoropathy is a disease of modern times, and, in fact, it is probably caused by the modern way of life. Spending too much time indoors and in spaces that are climatized reduces our ability to cope with changes of weather and weather conditions in general. People who have disturbances in the neural system, especially anxious and depressed persons, are

more vulnerable to meteoropathy. Nowadays, neural instability is influenced by the increase in frequency of negative factors in life, such as stress, loss of values, difficulty finding work or the disadvantages of retirement, the continuing competition to get ahead, and, not least, pollution – both atmospheric and aural. Usually, around 24–48 hours before the arrival of the weather change, particularly sensitive people may show various symptoms which, taken together, make up the meteoropathic syndrome. The most frequent symptoms are an increase in depression, both mental and physical weakness, hypertension, cephalgia, a desire to remain indoors, increased susceptibility to pain in the joints and muscles, difficulty in breathing and a heavy feeling in the stomach. There may also be mood disturbances, irritability and symptoms in the cardiovascular system, such as palpitations or pain in the sternum. These symptoms last for one or two days. They begin to decrease once the weather has changed, but return if the weather changes again. When the changes follow one another, the symptoms decrease in intensity each time, as a sort of adapting process occurs.

Everyone has a different level of sensitivity to weather changes. Physically active people and people who spend a few hours a day outdoors usually do not even notice the changes in weather.

On the other hand older people, people who had surgery even long ago, especially ones that don't spend time outdoors, feel and suffer from every change in weather no matter how insignificant it might seem.

The difference between the terms “meteorosensibility” and “meteoropathy” is quantitative: “meteorosensitive” are those biologically susceptible to feel the effect of particular atmospheric events on mind and body; “meteoropathic” are those individuals who develop a specific illness or a worsening of the existing diseases as a consequence of these climatic changes.

### **Effect of weather on mood, behavior and psychiatric disorders**

Weather has long been regarded to impact everyday behavior. Behavioral changes result from physical characteristics of the environment stimulating the organism. Evidence indicates a pattern of alternating sympathetic and parasympathetic nervous system stimulation by contrasting meteorological conditions, with each system's incitement, in turn, causing secondary behavioural changes (Persinger 1980). Recently, the hypothesis has been developed of a possible interaction between the periodic variations of climatic-environmental factors and the biological systems underlying a variety of disturbances: hypertension, cardiovascular disease, arthropathy, hyperthyroidism, stress syndrome, level of anxiety. Along with the implication of hormonal and neurotransmitter systems, observations derived from clinical practice testify that environmental stimuli, in particular physical variables, can have a role in the complex pathogenic mechanisms underlying psychiatric disorders.

**Table 1.** Ways to fight meteoropathy (adapted from www.jubave.com).

---

<p>Spending time outdoors is essential for your ability to cope with weather changes. No matter how busy you are you can always find some free time to spend outdoors</p> <p>Try to learn to love cold weather and humidity. Teach yourself to enjoy snow falling. When you do that, meteoropathy will become a part of history, because it is caused by our love of comfort</p> <p>Your body can be trained to adapt to changes in weather, by going to sauna or taking hot and cold showers. This is recommended to persons with low blood pressure, who are especially sensitive to weather changes</p> <p>Become physically active when outdoors, ride a bike, maybe run, even when it is cold and when it rains. Develop resistance to weather changes by spending time outdoors in all weather conditions. Cold, rain, snow, shouldn't bother you anymore</p> <p>Meteoropathy is a new disease. This disease is a product of your own behavior</p>	<hr/>
--	-------

---

The literature shows contradictory evidence as it relates to weather and mood. One of the largest examinations of the mood-weather hypothesis found no significant correlation between mood (measured by self-report using the Positive and Negative Affect Scale, or PANAS) and any of the assessed weather variables (barometric pressure, precipitation, sunshine, and temperature) (Watson 2000). On the other hand, some studies have investigated how identical weather conditions may impact affect of individuals who have spent a significant time period in differing geographic and climatic locations. In particular, it has been documented that geographically-relocated individuals display greater mood variability attributable to weather conditions and heightened responsiveness to external environmental agents or events, of which physical light constitutes one (Reid et al 2000). Finally, in two correlational studies and an experiment manipulating participants' time outdoors, pleasant weather (higher temperature or barometric pres-

sure) was related to higher mood, better memory and broadened cognitive style during the spring as time spent outside increased. The same relationships between mood and weather were not observed during other times of the year, and indeed hotter weather was associated with lower mood in the summer. These results suggest that pleasant weather improves mood and broadens cognition in the spring because people have been deprived of such weather during the winter (Keller et al 2005).

Concerning the effect of weather on psychiatric disorders, several trials have shown an efficacy of bright light on depressive symptomatology in non-seasonal depression (Deltito 1991, Martiny 2004). Some studies of suicide and parasuicide behaviour have shown a relation to weather conditions. A significant correlation between parasuicide rates and meteorological parameters has been found in women but not in men (Barker 1994). Other studies have demonstrated correlations between violent suicides

and temperature and sunlight duration (Linkowsky 1992, Maes 1994). Moreover, Salib (1997) outlined a significant positive association between suicide in an elderly population and hours of sunshine and relative humidity.

In Bipolar Disorder, the factors inducing a new episode are probably many and still unknown. As seasonal variation has been noticed, it has been suggested that weather conditions may play a role. Myers & Davies (1978) found a peak of mania episodes in summer and a nadir in winter and a relation between the number of admissions due to mania and (1) temperature in the current month and (2) mean day-length and mean daily hours of sunshine in the month before. Several investigations have showed a relation between the amount of hours of sunshine and mania episodes (Carney 1988, Peck 1990, Lee 2002). In a recent study Christensen et al (2008) tried to elucidate whether meteorological parameters such as a change in mean and maximum temperature, rainfall, plus atmospheric pressure, hours of sunshine and cloudiness might influence the development of new bipolar phases. They found that though meteorological factors may have an impact on triggering new episodes in bipolar patients, they do not constitute a dominant cause.

The demand for psychiatric services is not random and may fluctuate with climatic variables. Seasonal variability and weather have been shown to predict hospital admissions among patients with major psychiatric disorders. In particular, a recent study showed that rain and average temperature were predictive of emergen-

cy department visits. More patients were visited on warmer days and on days without rain (Santiago et al 2005). Besides, climate factors have been demonstrated to have an impact on inpatient psychiatric length of stay. In a study by Federman et al (2000), medical centers in colder climates had the longest lengths of stay in winter and fall.

### **A questionnaire for the detection of meteoropathy and meteorosensibility: the Q-METEO**

According to the possible effect of weather conditions on mood disorders, a sample of 139 patients with a diagnosis of bipolar disorder type I, bipolar disorder type II and cyclothymic disorder (DSM-IV-TR) was administered a recently formulated questionnaire, the Q-METEO, in order to assess the sensitivity to climate changes, their impact on symptomatologic modifications and on phases of disease. The Q-METEO consists of 11 items and a structured checklist aiming to identify the physical and psychological symptoms mainly related to climate variations. Excluded were patients under 18 and over 75 years, patients with Seasonal Affective Disorder (SAD) or “rapid cycling” disorder, those suffering from endocrine diseases, patients with a primary diagnosis of cannabis, drug or alcohol abuse, and patients with serious organic brain disorders.

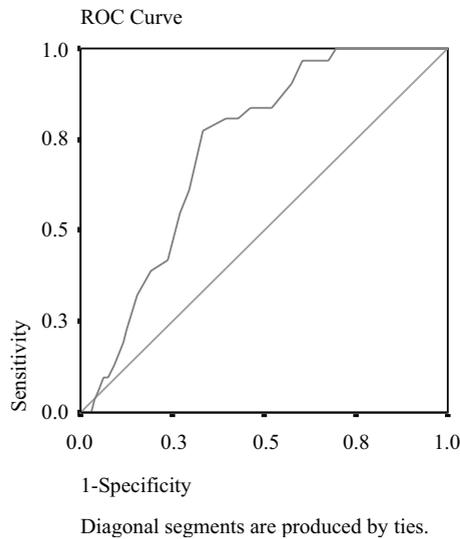
A control group consisting of 331 non-clinical subjects, matching for socio-demographic characteristics with the clinical group, was also evaluated.

In bipolar patients the assessment of mood, phase of disease (euthymic, manic and depressive) and psychiatric symptoms was made according to Hamilton Depression Rating Scale (HDRS), Hamilton Anxiety Rating Scale (HARS) and the Mania Rating Scale (MRS). All patients were also assessed by the Temperament and Character Inventory-Revised (TCI-R) to evaluate personality profile, subsequently correlated with scores derived from the questionnaire Q-METEO and with the phase of disease.

Preliminary results have shown a greater presence in the experimental group of meteorosensitivity and meteoropathy traits compared with the control group and a significant difference between mania phase and euthymia ( $P < 0.005$ ). Moreover we found a significant prevalence of physical and psychological symptoms identified with the structured checklist and signif-

icant correlations with specific character and temperamental dimensions in the clinical group compared with the control group (Mazza et al, unpublished data).

The accuracy of the Q-METEO, measured by the area under the ROC curve, is 0.72 (figure 1). The Q-METEO would be considered to be “fair” in separating bipolar patients with or without meteoropathic symptoms. On the other hand, this test represents a sufficiently accurate discrimination to correctly classify those with and without meteoropathic symptoms also in the sample of healthy controls (figure 2). Though our findings support the relevance of dimensions such as meteoropathy and meteorosensitivity in the cyclical progress of bipolar disorders and the possible use of Q-METEO to evaluate these traits, a larger sample of subjects and multiple comparisons would be necessary to confirm or complete these results.



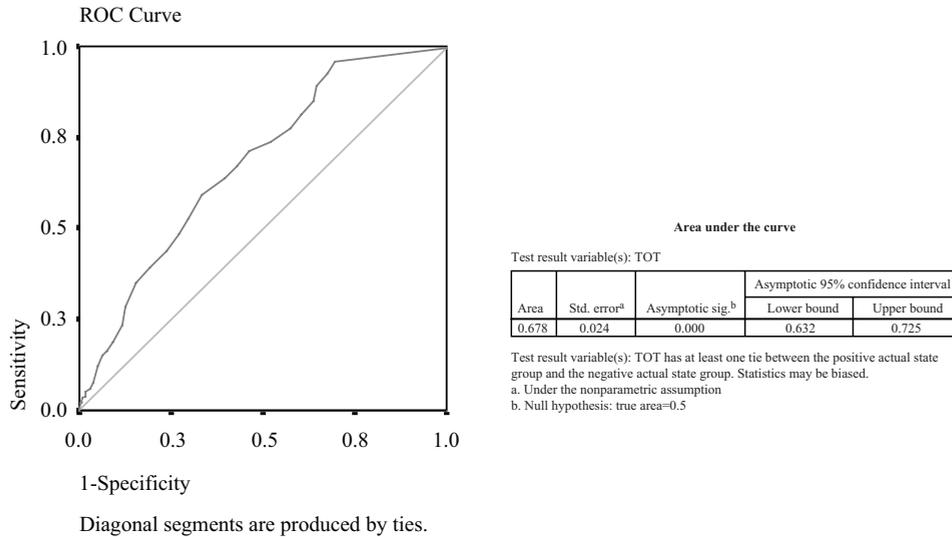
Area under the curve

Test result variable(s): TOT

Area	Std. error <sup>a</sup>	Asymptotic sig. <sup>b</sup>	Asymptotic 95% confidence interval	
			Lower bound	Upper bound
0.727	0.036	0.000	0.657	0.797

Test result variable(s): TOT has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.  
 a. Under the nonparametric assumption  
 b. Null hypothesis: true area=0.5

**Figure 1.** ROC curve for Q-METEO in bipolar subjects.



**Figure 2.** ROC curve for Q-METEO in healthy subjects.

## References

- Balsamo V, Sirtori PG, Miani A Jr, Di Francesco A, Franceschini R, Mauro F et al (1992). Meteoropathy: a syndrome continuously on the increase. *La Clinica Terapeutica* 141:3–8
- Barker A, Hawton K, Fagg J, Jennison C (1994). Seasonal and weather factors in parasuicide. *British Journal of Psychiatry* 165:375–380
- Carney PA (1998). Influence of climate on the prevalence of mania. *British Journal of Psychiatry* 152:820–823
- Christensen EM, Larsen JK, Gjerris A, Peacock L, Jacobi M, Hassenbalch E (2008). Climatic factors and bipolar affective disorder. *Nord Journal of Psychiatry* 62:55–58
- Deltito JA, Moline M, Pollak C, Martin LY, Maremmani I (1991). Effects of Phototherapy on non-seasonal unipolar and bipolar depressive spectrum disorders. *Journal of Affective Disorders* 23:231–237
- Federman EJ, Drebing CE, Boisvert C, Penk W, Binus G, Rosenheck R (2000). Relationship between climate and psychiatric inpatient length of stay in veterans health administration hospitals. *American Journal of Psychiatry* 157:1669–1673
- Hippocrates. *Ancient Medicine*. Volume I. Translated by WHS Jones (1923). Harvard University Press
- Keller MC, Fredrickson BL, Ybarra O, Cotè S, Johnson K, Mikels J et al (2005). A warm heart and a clear head. The contingent effects of weather on mood and cognition. *Psychological Science* 16:724–731
- Lee HJ, Kim L, Joe SH, Suh KY (2002). Effects of season and climate on the first manic episode of bipolar affective disorder in Korea. *Psychiatry Research* 113:151–159

- Linkowsky P, Marin F, De Maertelaer V (1992). Effect of some climatic factors on violent and non-violent suicides in Belgium. *Journal of Affective Disorders* 25:161–166
- Lopez del Val LJ, Rubio E, Calatayud V, Lopez del Val JA, Sanchez E (1991). Effect of atmospheric factors on the presentation of cerebrovascular accidents. *Neurologia* 6:52–55
- Maes M, De Meyer F, Thompson P, Peeters D, Cosyns P (1994). Synchronized annual rhythms in violent suicide rate, ambient temperature and the light-dark span. *Acta Psychiatr Scand* 90:391–396
- Martiny K (2004). Adjunctive bright light in non-seasonal major depression. *Acta Psychiatr Scand* 425(Suppl):7–28
- Myers DH, Davies P (1978). The seasonal incidence of mania and its relationship to climatic variables. *Psychological Medicine* 8:433–440
- Peck DF (1990). Climatic variables and admissions for mania: A reanalysis. *Journal of Affective Disorder* 20:249–250
- Persinger MA (1980). *The weather matrix and human behavior*. New York, Praeger Press
- Reid S, Towell AD, Golding JF (2000). Seasonality, social zeitgebers and mood variability in entrainment of mood: implications for seasonal affective disorder. *Journal of Affective Disorders* 59:47–54
- Salib E (1997). Elderly suicide and weather conditions: Is there a link? *International Journal of Geriatric Psychiatry* 12:937–941
- Santiago PN, McLay RN, Hammer PS (2005). Meteorologic factors in emergency evaluation, admission and discharge. *Psychiatric Services* 56:1625
- Schienze A, Stark R, Vaitl D (2006). Biological effects of very low frequency (VLF) atmospherics in humans: a review. *Journal of Scientific Explorations* 12:6
- Watson D (2000). *Mood and temperament*. New York, Guilford Press
- 

**Giuseppe Spinetti**, Bipolar Disorder Unit, Department of Psychiatry, Catholic University Medical School, Rome, Italy  
**E-mail:** gspinetti@libero.it

# **Psychotherapy**



# **Psychoanalysis in Psychiatry**

## **An open reflection on the future**

---

**Florence Quartier, Simon-Daniel Kipman, Michel Botbol,  
Ayça Gurdal-Küey, Craciela Onofrio**

Section of Psychoanalysis in Psychiatry, World Psychiatric Association

### **Introduction**

Psychiatry is evolving in order to find its place in the vast field of health care: will psychiatry in the coming years be more medical and biological, or more social? Will it be mainly a fight for everybody's access to healthcare or will it be relegated to the rank of an obscure specialty in the back yard of healthcare? All these questions and others of similar nature, are being asked by young colleagues in training who worry about their future as psychiatrists while nevertheless passionate about this discipline. Let's listen to them! It is by working with and for them and thus hoping to work with the future of psychiatry that we attempt to make progress in the section "Psychoanalysis in Psychiatry".

The section was founded in 2002, at the 12th World Congress of the WPA in Yokohama. An immense merit goes to DS Kipman for having finalized this project which existed already for a long time.

Without considering psychoanalysis to be superior to psychiatry as was sometimes the case in the past, section "Psychoanalysis in Psychiatry" resolutely places its project at the heart of the processes which take place in society as a whole as well as in the vast field of healthcare.

### **Medicine, psychiatry, psychoanalysis, a common approach**

In medicine, the discussion is re-opened and many are those who wish to preserve the doctor-patient relationship, in order to establish bonds with the patient as well as with the patient's entourage, so as not to reduce the complexity of the individual to the illness from which he suffers only. One discovers that the training programs again contain bases of the "humanities", ethics and attention to the psychological aspects that accompany every illness.

There is everywhere some revived interest in clinical practice capable of giv-

ing a central role to the patient as an individual rather than to his illness. It is very interesting to propose to general practitioners workshops led by a psychiatrist-psychoanalyst. The one and the other have in common a special care for the person, for his history, his family and for the context in which this person evolves. Moreover, the general practitioners as well as the psychiatrists-psychoanalysts attribute great importance to the quality of the relationship that they establish with the patient. And both of them, each in his own way, know that a good inter-personal relationship can become a true therapeutic tool.

Section “Psychoanalysis in Psychiatry” has proposed workshops intended for psychiatrists, psychiatric teams and general practitioners in Switzerland, France, Greece and Turkey (Quartier 2004, Sommer 2007, Giannakopoulos & Quartier 2007)

## Psychiatry for the person

In psychiatry, the interest of the relational aspects of treatment is obvious: in Switzerland for example, the training program of specialists in psychiatry comprises the double title of psychiatrist and psychotherapist. And the individual interview is considered to be the basic therapeutic tool in psychiatry. Section “Psychoanalysis in Psychiatry” proposes a greatly enlarged activity in this sense: workshops in Greece, Turkey, Switzerland, Germany and France; diverse publications (Kipman 2005, Quartier, Ammon 2004, 2007), workshops in different Congresses and manifestations.

This interest for the relational aspects of the treatment will necessarily go together with the acknowledgment of the difficulties that the group leaders are confronted with. They have to face contradictory movements, sometimes violent and destructive, which the patients use involuntarily in the therapeutic relationship. Counter-transference, a key concept in psychoanalysis, is known in psychiatry in pernicious forms and is often not identified by the leaders. Since its creation and without interruption, section “Psychoanalysis in Psychiatry” proposed and continues to propose a reflection on counter-transference, “a non-verbalized reality in psychiatry” (Intervention in the Istanbul Congress, Ayça Gurdal-Küey; Vaslamatzis, Quartier).

In the workshops, we make precise propositions in the hope that they will be integrated into training programs like those proposed by the WPA in the Congresses. As concerns for example interviewing, we advocate including the relational aspects in the investigation which can lead to diagnosis and then again during treatment. Thus we:

- Include what happens in the here and now situation with the patient
- Try to understand who he is and who he wants to be
- Consider or “embrace” what he expects from us (sometimes the most unexpected things)
- Link all this with the signs and symptoms detected.

Let us take a very brief example of daily practice. Such an example permits the participants in very diverse training to

follow the procedure and put it into practice:

Thus, in young adults with delusions and agitation, we evaluate the signs and symptoms of psychosis, and at the same time we evaluate who this young person affected by psychosis is. We take great care to detect dysfunctional signs in the process of adolescence. The patient is as much someone suffering from a psychiatric disorder, as a young person uneasy with his sexuality and with the biologic urge of becoming an adult. Psychosis accentuates, but also perverts the process of adolescence. In addition, quite frequently nowadays there is drug consumption, which further and severely complicates the process of adolescence. It is therefore very important that we speak to the patient's family about psychosis and also about the process of adolescence. It is very important to include in the training programs for psychiatrists, the neurobiological processes as well as those more abstract, which govern the desire and/or fear of becoming an adult. To conclude, we must constantly define and facilitate the understanding of the link between the processes of adolescence and psychosis. It is the link that is the central issue.

This brief example also permits to underline the importance of the diagnosis and therefore of the classification. The lively debate around this subject is known not only in the psychiatric world but even beyond, given that the World Health Organisation is necessarily largely implicated. The WPA section "Classification, Diagnostic, Assessment and Nomenclature" has since a long time, started a very useful initiative for all practitioners and one

knows the very vivid interest that Juan Mezzich attaches to this question. Psychoanalysis can contribute to this initiative as long as its approach is holistic, as it relies on the evaluation of the global functioning of the individual. And mainly as long as it considers the existence of a continuum between the normal and the pathological.

The section "Psychoanalysis in Psychiatry" intends to enlarge the debate on the subject of diagnosis, believing that this is an opening to our future. Common studies with section "Classification, Diagnostic Assessment and Nomenclature" are planned. The diagnostic approach offers important opportunities for the exploration and discovery of new therapeutic means. That is why we propose to establish seminars that will teach how to formulate a functional diagnosis aimed at the individual that is the patient, with his history and that of his family.

### **Biology, psychiatry, psychoanalysis: the discovery of a new method**

The links between psychoanalysis and biology are multiple today. The section "Psychoanalysis in Psychiatry" has obviously chosen to participate in this debate. And therefore, we have decided to follow the clinical path that is primarily ours. It becomes clear that we must create new "clinical objects" that highlight the advances in neurobiology but also the advances in the domain of relations: psychoanalysis has, in recent years, largely helped to develop the use of interpretation. It is now easier to inte-

grate it into the practice of the interview. Let's take an example that every practitioner, every speaker will be confronted with, in the coming years, due to the demographic explosion of the elderly: when announcing the diagnosis of Alzheimer's disease, it is not possible anymore to be content with the measurable deficit only. One must be able to explain to the patient and his surroundings in a comprehensible manner, how his previous history has impregnated his cognitive disorder and on the other hand how his cognitive disorder alters his mental functioning. We must also manage to convey that not all hope is lost and emphasize that the prognosis is partially unpredictable. This procedure is similar to the one commonly used in psychoanalysis: investigating without a priori, gathering known and identifiable elements, and at the same time paying spe-

cial attention to the unexpected elements that always arise in clinical practice.

At the other extremity of life, at its dawn, is the newborn child. One must today understand the detail of its neurobiological development and shape the way it interacts with abstract elements (thoughts, emotions and recollections). Because it is largely on these abstract elements that, much later, the psychiatric caretaker will lean in order to attempt to disentangle the patient from his difficulties and his suffering. What are the traces of childhood that are still active in the suffering of the adult? How can these traces, these forgotten memories, still play a role? And perhaps they do not play a role at all anymore? Ample reflection on psychiatry and its alliance with developments in psychoanalysis may prove to be profitable.

## References

- Ansermet F, Magistretti P (2004). A chacun son cerveau, plasticité neuronale et inconscient. In: Odile Jacob (ed) English translation: Ansermet F, Magistretti P (2007). *Biology of freedom: neural plasticity*. Experience and the unconscious, Other Press
- Botbol M, Mammari N, Barrère Y (2006). Institution soins études en psychiatrie de l'adolescent et du jeune adulte. In encyclopédie médico-chirurgicale/Psychiatrie, 37-218-a-15
- Diatkine R, Quartier-Frings Fl, Andreoli A (1991). Psychose et changement. Le fil rouge, PUF Paris. Spanish translation: Diatkine R, Quartier F, Andreoli A (1993). *Psicose e mudança*, Casa do Psicólogo, Sao Paulo
- Giannakopoulos P, Quartier Fl (2007). *Un avenir pour la vieillesse, pratiques cliniques contemporaines en psychiatrie de l'adulte et de l'âge*. Doin, Paris
- Kipman DS (sous la dir de), Amslem-Kipman A, Thurin M, Torrente J (2005). *Dictionnaire critique des termes de psychiatrie et de santé mentale*, Doin
- Kipman DS (2008). *La Consultation psychiatrique, de l'examen à l'échange*. Doin, coll thématiques en santé mentale, Paris
- Kipman SD (2005). *Les destins croisés de la psychiatrie et de la psychanalyse*, coll. thématiques en santé mentale, Doin

- Kipman SD (2004). Les dieux intimes. Aspects individuels et collectifs de la conviction (ed) *Doin*, coll. thématiques en santé mentale, Paris
- Quartier FI (2004). *Freud clinicien, pratiques cliniques contemporaines en psychiatrie et en médecine*, coll. thématiques en santé mentale, Doin, Paris. Turkish translation: Quartier FI, Bir Klinisyen Olara Freud (2004). Türkçesi, Burcu Aliefendioglu, Düs/Düşün 15, Baglam
- Shea Shawn Christopher (2005). *La conduite de l'entretien psychiatrique. L'art de la compréhension*. Elsevier. (1st ed, American 1988, in the preface of which Juan Mezzich is warmly thanked)
- Sommer J, Jenni F, Meier S, Quartier FI (2007). A quoi sert une supervision dans le modèle analytique pour le médecin de premier recours? *Rev Med Suisse* 3:2856–2859
- 

**Florence Quartier**, Consultant Physician, University Hospital, Department of Psychiatry, Geneva, Switzerland

**E-mail:** [florence.quartier@worldcom.ch](mailto:florence.quartier@worldcom.ch)



# Cognitive and Behavioral Therapy in Depressed Athletes

---

**David A. Baron, Steven H. Baron, Thomas Foley**

Section of Exercise, Psychiatry and Sport, World Psychiatric Association

Few controlled studies have examined the efficacy of Cognitive Behavioral Therapy (CBT) in athletes suffering from depression. This article will address the issue of cognitive and behavioral therapy in depressed athletes. CBT is a well-studied, effective form of psychotherapy (talk therapy) used to treat a number of psychiatric conditions, including depression. In addition to addressing the lack of information for CBT use in this population, we will discuss the issue of athletes as a special group of patients who face several challenges in the treatment of depression including social stigma, coach bias, and some of the unique symptoms of this disease in these individuals. Cases of CBT use in treatment of depressed athletes will also be presented in order to demonstrate the usefulness of this form of therapy for these patients.

A significant amount of time and money is spent on the treatment of physical injury and illness in athletes (Glick 2001). Sports sections of newspapers all over the

world extensively report on the physical health of athletes. Sideline reporters in high school, college and professional athletes extensively cover the status of an athlete's injury. Video footage of injuries sustained on the playing field is routinely replayed multiple times during the coverage of a game or match. However, it is rare for the emotional state of an athlete to even be mentioned. The status of an athlete's depression would appear to be a taboo topic to cover. Glick (2001) and Biegel (1992) offer a number of compelling explanations for this: the most prominent being the significant social stigma associated with psychiatric/psychological illness. The ongoing stigma associated with mental illness globally in the general population is even greater in the world of sport. The diagnosis and treatment of depression in athletes offers a unique challenge for the sports mental health professional.

Despite its well-documented effectiveness in treating depression, very few well-

controlled studies have been conducted examining CBT in effectively treating athletes suffering from depression. Meyers (1996) has published a review of cognitive behavioral strategies on performance enhancement. Although this paper did not report on its effect in depressed athletes, it did demonstrate that cognitive behavioral techniques could improve athletic performance. Ross (1996) studied the effect of CBT in 60 male athletes who required arthroscopic surgical repair of a meniscus tear. His data revealed that the CBT intervention group reported less pain and anxiety during their post-operative rehab program and returned to athletic participation faster than the control group. However, this study did not assess depression in any of the research subjects. Begel (1998) reported a case study of several adolescent athletes treated with various forms of psychotherapy, including CBT, and concluded "adolescent athletes often become intensively involved in their treatment for brief periods of time, with good success." Perna (1998, 2003) studied 40 rowers who were taught Cognitive Behavioral Stress Management (CBSM). This technique utilizes relaxation training, guided imagery, and cognitive restructuring to buffer psychological distress. His data revealed decreased fatigue and depressed mood after heavy exercise in the study group compared to matched controls who were not taught CBSM. Similarly, Booth (1987) and Meeuwisse (1998) reported quicker physical and emotional recovery following surgery in those athletes using CBSM. They also reported a significant reduction in the number of illness and injury days, and half the number of health

care visits, compared to matched controls. Unfortunately, none of these studies screened for depression in the study group athletes prior to the intervention.

In this paper, we will discuss the role of cognitive therapy in the treatment of depressed athletes. For the interested reader, there are literally thousands of papers and many books describing this form of therapy. To briefly summarize, CBT was developed by Aaron T. Beck, MD in 1952 and involves identifying automatic unrealistic negative thoughts about life circumstance, the world and the perceived future. The treatment involves working with the therapist to challenge these intermediate and core beliefs, and consider alternative explanations. The treatment goal is to help the patient understand the bidirectional relationship between thoughts, feelings and behaviors. It also strives to have the patient appreciate how changing thoughts and behavior can influence their emotions. For example, the CBT therapist would challenge an athlete who fails at a competition and develops the thought, and subsequent behaviors, that they have failed as a person and are a failure in all areas of life. This therapist would ask the athlete to consider alternative explanations such as "I'm a good athlete and a good person who had a bad day on the field". CBT treatment includes homework assignments for the patient and an ongoing self-assessment of their thoughts, feelings and behaviors. This form of treatment has been used successfully in depressed athletes by a number of sports psychiatrists and psychologists.

A critical issue to address is the diagnosis and treatment of depression in ath-

letes. Significant amounts of resources have been spent on diagnosing and treating physical injuries in athletes. Unfortunately, this is not the case when considering psychiatric problems: the existing professional literature on the topic is relatively scant. What has been well documented is the reluctance of athletes to seek help for depression. A number of possible explanations for this have been discussed, and one of the most important factors seems to be the stigma associated with any mental health problem. Stigma against psychiatric disease is common all over the world, but it appears to be particularly prominent in the world of sports. Furthermore, the diagnosis of depression in athletes can be problematic. Unlike the symptoms commonly seen in depressed non-athletes, athletes may first present with symptoms related to training and competing. A coach may notice a problem on the practice field or in competition and not consider an underlying depression as the etiology of the problem. Even if the athlete is aware that something is not right, they commonly resist considering an underlying depression. Depression has many faces and the disease presents with a variety of different symptoms. Most people think of depression as being sad. Many people suffering from depression, including adolescents and athletes, may not report feeling sad, but rather irritable, negative, hopeless or helpless. A common presenting symptom in all people suffering from depression is the loss of the ability to experience joy. An athlete who used to look forward to competing, no longer experiences any joy in it. They may actually begin to dread or avoid past pleasurable

activities. For the depressed athlete, a decline in performance is a virtual given. This may be an early initial warning sign. The experienced, skilled coach or trainer, although not a mental health professional, may often instinctually pick up on subtle changes in their athletes, but not know how to handle the situation. An important role for sports psychiatrists and psychologist is to help coaches and trainers identify depression in their athletes and get them appropriate treatment. Depression will not only adversely affect their performance, but have a negative impact on all areas of their life and may result in suicidal thoughts. It is important to note that CBT has been demonstrated to be particularly effective in treating suicidal ideation.

## **Psychotherapy**

Psychotherapy is talk therapy. There are many different forms of psychotherapy but all are based on a verbal interaction between the patient and the therapist. The goal of psychotherapy is to improve emotional or behavioral symptoms. Such sessions can be conducted with the therapist one-on-one, in groups, or with couples and families. Mental health problems can include psychological, social and somatic dimensions, which often make it hard for people to manage their lives and achieve their goals. Psychotherapy is aimed at these problems, and attempts to help people to solve them via a number of different approaches and techniques. Most psychotherapies are either direct descendants of psychoanalysis, or they were developed in reaction to psy-

choanalysis. Therefore, when describing the history of psychotherapy, most traditionally start with Sigmund Freud, who is credited with being the father of psychoanalysis and the first to use dialogue as a therapeutic tool.

While there are some ideas in psychology without Sigmund Freud in their legacy, most can be traced back to his work starting in the 1880s in Vienna. Trained as a neurologist, Freud began noticing neurological problems in patients that had no recognizable biological cause. Seeing blindness, paralysis and anorexia with no apparent organic cause, he looked towards the mind for answers. Finding some evidence that those who were mentally ill could exhibit physical symptoms, he discovered colleagues and teachers who were equally perplexed and interested in such matters.

Freud opened a private practice in 1886 until 1896 that mostly treated women who showed symptoms of hysteria, which were very loosely defined at the time. Using such techniques as dream interpretation, free association, transference and analysis of the id, ego and superego, his colleagues developed a system of psychotherapy termed psychoanalysis. Students and colleagues of his became psychoanalysts themselves, and formed their own differentiating systems of psychotherapy. These were all later termed under a more broad label of psychodynamic, meaning anything that involved the psyche's conscious and unconscious influence on external relationships and the self. Psychodynamic psychotherapy and psychoanalysis are considered to be particularly effective at treating certain men-

tal disorders, such as personality disorders and mood disorders. However, this method of treatment requires hundreds of sessions over a period of several years.

Current psychodynamic approaches continue to develop and change. Contemporary Freudian approaches usually retain Freud's emphasis on sexuality, aggression, and mental conflict, and often prefer insight-oriented psychotherapy to the more supportive techniques. For the most part, contemporary Freudians continue to believe that psychotherapy is most effective when it leads to increased self-knowledge on the part of the patient. Conversely, there are forms of psychotherapy in which the therapist is actively involved in helping the patient change and develop. Cognitive behavioral therapy is an example of one of these relatively newer therapies.

## **Cognitive behavioral therapy**

Cognitive Behavioral Therapy (CBT) is a form of psychotherapy that emphasizes the important role of thinking in how we feel and what we do. For example, if a patient is experiencing unwanted feelings and behaviors, it is important to identify the thought process that is causing these problems and to learn how to consider alternative explanations, which are less negative. Some forms of therapy assume that the main reason people have better results is secondary to the positive relationship between the therapist and patient. Similarly, Cognitive-behavioral therapists believe it is important to have a good, trusting relationship, but they also believe this is not enough. They

feel that the patient changes when one learns to challenge automatic negative thoughts. CBT therapists focus on teaching balanced self-counseling skills. The role of the therapist is to listen, teach, and encourage, while the patient's role is to express concerns, learn, and implement what they have learned.

Cognitive-behavioral therapists seek to learn what their patients want out of life and then help their patients achieve those goals. CBT is based on the scientifically supported assumption that most emotional and behavioral reactions are learned. Beck designed this therapy to address his observation that depressed persons hold unrealistically negative views about themselves, the world, and the future. The benefit of this belief is that we can change the way we think in order to feel and act better even if the situation remains constant. Therefore, the goal of therapy is to help patients unlearn their unwanted reactions and to become skilled at taking back control of their life. Along these lines, Beck describes a person's schema as an integrated knowledge structure that influences what the patient remembers and how they process and store new experiences. He explains that such negative schema content remains latent during periods of normal mood, but can be activated by environmental or physiological stressors.

Generally speaking, CBT is easy to use, has broad empiric support, is a first-line treatment, and can help patients cope with depression, anxiety, and other psychological problems. This form of treatment has been repeatedly studied and its efficacy is supported by more research

than any other form of psychotherapy. The therapy involved in CBT is collaborative, structured, goal-oriented, and designed to be a short term form of treatment (however, therapy for complex cases and those of severely mental illness may take longer). Along these lines, this therapy is considered among the most expedient in terms of results obtained: the average number of sessions required for all types of problems is only 16, whereas other forms of therapy, like psychoanalysis, can take years. Furthermore, CBT's highly instructional nature, along with its use of homework assignments, allows for a more rapid form of therapy. Athletes often find this approach more desirable than other less structured forms of psychotherapy.

## Depression

This is a widely used term that describes a person's mood as being reduced from what is perceived as being normal. The word "depression" is used to describe a below average mood state, i.e. sadness, as well as the psychiatric syndrome Depression. Descriptions of depression can be found in ancient document dating back into antiquity. In fact, Hippocrates used the term melancholia, a word we now use to describe a severe depressed state, and the Roman physician Celsus described melancholia in his work *De re medicina* as depression caused by black bile.

Some two-thousand years later, the first edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) was created in 1952 and allowed communica-

tion between psychiatrists (especially in different countries) to be uniform. After five revisions, we are left with current form, the DSM-IV-TR. Under this version, the term major depressive episode has five or more of the following symptoms present during the same 2-week period and represent a change from previous functioning: (1) depressed mood most of the day, nearly every day, (2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day, (3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day, (4) insomnia or hypersomnia nearly every day, (5) psychomotor agitation or retardation nearly every day, (6) fatigue or loss of energy nearly every day, (7) feelings of worthlessness or excessive or inappropriate guilt nearly every day, (8) diminished ability to think or concentrate nearly every day, (9) recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

The lowered mood varies little from day to day, is unresponsive to circumstances and may be accompanied by so-called "somatic" symptoms, such as loss of interest and pleasurable feelings, waking in the morning several hours before the usual time, depression worse in the morning, marked psychomotor retardation, agitation, loss of appetite, weight loss, and loss of libido. Depending upon the number and severity of the symptoms, a depressive episode may be specified as mild, moderate or severe. In a

mild depressive episode, two or three of the above symptoms are usually present and the patient is usually distressed by these but will probably be able to continue with most regular activities. Moderate depression is defined as four or more of the above symptoms are usually present and the patient is likely to have great difficulty in continuing with ordinary activities. A severe depressive episode occurs when several of the above symptoms are marked and distressing, in addition to typically loss of self-esteem and ideas of worthlessness or guilt. Suicidal thoughts and acts are common and a number of "somatic" symptoms are usually present.

As useful as the DSM is for mental health clinicians, these symptoms of depression do not necessarily hold true for special subgroups of individuals such as athletes. In addition to those indicators of depression found in the DSM, symptoms that may be more common in athletes include irritability, lack of motivation, and decline in performance. Athletic trainers are instructed to watch for possible signs of a depressed athlete, which include a slumped posture, lack of enthusiasm, being tardy or missing practice, and not providing a usual level of participation in practice sessions. Another indication that the athlete is having trouble may be excessive self-criticism or setting unrealistically high standards for themselves. These are possible indicators of athlete depression to which mental health professionals must be aware and should make an effort to discover if they are present via thorough history.

Several circumstances such as female sex, being over the age of 65, having rel-

atives with a history of mood disorders, individuals who have clinical depression in the past, and any chronic or serious medical illness are known to put patients at risk for a depressive episode. An important risk factor for depression in the athlete would include injury. In particular, an injury that results in the individual not being able to participate in practice or competition for an extended period of time can be a risk factor. Furthermore, a person potentially susceptible to a depressive episode would be the marginal athlete who is not living up to his or her own expectations: such situations have been correlated with chronic fatigue and depression in athletes.

### **CBT in the depressed athlete**

As discussed, CBT is an effective and efficient treatment for depressed patients. Despite research showing that this therapy is useful in several aspects of sports enhancement, there is little data to support the use of CBT in treating depressed athletes. Further studies are needed in order to determine whether this form of therapy is useful in this unique population.

It is important to consider that when working with this group of individuals, athletic trainers must be mindful that serious sport competitors have been known to cover-up their depression via athletic endeavors, which may include a regimen of intense exercise. Often, athletes suffering from depression will train harder in an effort to suppress their negative mood. While these patients may often be successful, this tactic will be ineffective

for those with moderate to severe depression. Recognizing overtraining as an attempt by athletes to self-treat and cope with depression is important in the diagnosing the disease.

There are several potential problems in treating depressed athletes. Many of these individuals would be hesitant to admit an emotional problem and often feel that doing so would be taboo. Superstition weighs heavily on the minds of most athletes, and knowing they have to seek the help of a mental health professional would do little for their self-esteem. Moreover, seeking the assistance of a psychologist or psychiatrist would be even more difficult for those athletes with narcissistic traits. Not only is there a stigma on the part of competitors, but among coaches as well. Those supervising and guiding these patients must be aware of the warning signs of depression and be open-minded as to the treatment options available to these athletes in order to prevent under-diagnosis secondary to stigma. After all, the purpose of a coach is to improve the overall performance of the athlete; this cannot be accomplished without the mind functioning as a sharp, coordinated and positive unit.

### **Case presentations**

Though not developed with an athletic audience in mind, the cognitive-behavioral model is very well suited to working with this population. As a therapeutic model rooted in learning psychology and experimental psychology, athletes have been trained to listen, learn and do "homework". The athletic environment is

one whereby the individuals must be able to hear and absorb the messages provided to them by their coaches. As such, the type of interaction embedded in CBT is a natural fit. Furthermore, they are used to “being told what to do” between training sessions (“homework”). Finally, these individuals are also used to working on their own. One can certainly draw parallels between the interactions an athlete has with a coach and cognitive-behavioral therapist.

Just as the athlete must be able to think through the “lessons” provided by the coach, CBT asks the patient to consider the nature of their thoughts. Just as the athlete learns to train on their own between sessions, the patient in the CBT model is asked to do “homework” assignments between sessions. This demonstrates just two of the obvious parallels between these two worlds.

Regretfully, such parallels can just as easily be as much a part of the problem as the intervention. In most sports where assessment is subjective (versus objective sports such as track and swimming) athletes are often subjected to irrational thinking. For example, the figure skater or gymnast who is told that they would have scored higher had they “shed a few pounds” or, the soccer player that is told that they were cut because they were too short is overtly being led to irrational thoughts. Tragically, in each case the athlete is often well aware of shorter, heavier competitors who were provided the exact opposite message. In such cases what is being “taught” is irrational thinking.

### *Case 1 – Elana*

Elana was a late adolescent (nineteen years of age) at the start of treatment. She had already been living away from home for more than four years. The patient was now at her second Olympic Training center having spent the previous four years training with a different coach after moving to work with a new coach and partner.

Her coach had made the initial arrangements for Elana to start working with a sport psychologist for “performance enhancement”. Elana was an amicable, intelligent, hard working young woman who was immediately engaged in the process. By the end of the first session, it was clear that Elana was interested in more than imagery, stress reduction and goal setting. In fact, by the end of the second session it was clear that Elana was dealing with issues requiring more than traditional sport psychology interventions. Moreover, she finally brought forward that she had in fact previously seen a psychiatrist prior to moving to the center. Elana had been diagnosed with comorbid depression and anorexia nervosa. It was clear that her clinical issues were of utmost importance to her personal well being and, her athletic pursuits. A plan was developed to first address her clinical issues then, to “tackle” her performance with more traditional performance enhancement techniques.

Elana was a classic case of someone who had been exposed to a lot of confusing, contradictory messages and abuse. As the many mixed, contradictory and irrational messages had started

during late childhood, their impact was that much more devastating. Like many young women aspiring to be an elite athlete in subjective sports, Elana had developed numerous irrational beliefs about her self, her athletic success and, subsequently, her personal worth.

Once the diagnosis was clarified, a treatment plan, which was anchored in CBT, was established. Her first assignment was the start of her readings. The reading list had focused articles on nutrition, sport performance, human development, eating disorders and depression. These homeworks were assigned one per session in an effort to support the stages of her treatment.

Elana's depression seemed to be fueled by an ever increasing pressure (both from within and stemming from feedback from her coaches) and growing sense of failure associated with her competitive results over the past three years. She described receiving recent feedback that "she was too heavy", "too weak" in addition to other personally attacking comments. Like so many others in her situation, it was clear that the feedback was offered with little tangible proof.

Unfortunately, it was clear that such feedback had been internalized and now surfaced in the form of numerous irrational belief systems: this included a series of stringent "musts", "oughts" and "shoulds". These irrational belief systems were clearly reinforcing her depressive thoughts. "It is my fault, I must do better", I "ought" to be able to drop the weight so I can present the proper look, and I "should" be doing better.

One area of intervention centered on helping Elana gain control over what seemed to be automatic thoughts; the problem was that Elana did not believe this to be the case. She had poor insight as to the automaticity and depth of her irrational thoughts. For this reason, Elana was given homework to place a rubber band on her wrist and give it a small snap every time she recognized one of her "musts", "oughts", and "shoulds". Prior to the completion of this session, it was necessary to help her identify examples of such thoughts because she had no insight. Upon her return for her fourth session, it was clear that she got the point. In fact, she explained that she had to take the rubber band off after two days due to the pain. It was now time to control these thoughts. During this session, Elana worked on a series of "replacement" thoughts. From the start it was clear that her irrational belief systems had completely impaired her ability to conjure more rational thoughts. Once again, the focus on the face-to-face treatment time needed to focus on learning. In this case, learning the difference between rational versus irrational thoughts was important and a list was quickly compiled with which she could work. Her homework (in addition to readings on success) was to repeat (to herself) a rational thought (three times) each time an irrational thought "popped" into her head.

The next work objective was focused on her readings in the area of success. In an effort to continue and provide a greater sense of personal control over her athletics and her life in general, her treatment now turned toward re-defin-

ing success. The focus was placed on helping her learn to ascribe more value to her own, fair, objective evaluations versus those of coaches and judges. One technique employed was to come up with a list of objective measures, which she could use versus the subjective, external feedback she had become so totally reliant upon.

Over the course of the next three sessions, Elana became progressively more rational in her evaluations. Further efforts were made to re-establish personal goals, which provided greater opportunity for personal control and further relief of the original depressive symptoms.

The final piece of treatment was to reshape her self-perceptions. Once again, the irrational nature of her thoughts became the focus. In this case, it appeared the polarization of her “self-evaluation” was the root of the problem. As such, she was provided short readings on this form of irrational belief system with concurrent discussion during face-to-face sessions.

Ultimately, Elana grew ever stronger in her abilities to think clearly, rationally, develop a greater sense of control and personal worth. After approximately twelve sessions, Elana’s treatment became less clinically oriented and more embedded in traditional performance enhancement. Occasionally there was the need to return to the themes that dominated the first twelve sessions. One final note, in Elana’s case there was never the need for psychopharmacologic interventions and her anorexic behaviors abated along with her depression.

### *Case 2 – Vera (professional soccer player)*

Vera was a recent college graduate playing in her first season as a professional soccer player. She had attended a very strong academic college on a full scholarship. As such, by the time she moved to the town in which she was to play, she had already been away from home for several years. Unlike Elana, Vera arranged for her first therapeutic contact. Upon meeting Vera for the first time, she communicated that she had no acute issues, but that she presented in order to “serve as a role model to the rest of the team”. As could be expected, it took little before concerns and “issues” were being brought forward. For example, Vera began talking about clear disparities in feedback she used to get from previous elite coaches and her present coach. She went on to talk about concerns over her future should her present status not improve (with respect to financial security and participation). Ultimately, by the end of the first session the nature of her presentation turned toward a presentation of depressive symptoms.

Subsequent to this initial session, a meeting with her coach revealed relevant and contradictory information to what Vera presented. The coach described that from day one, her performance was far below how Vera saw herself. In fact, the coach presented a picture of a spoiled athlete with a poor work ethic and marginal skills; this was very different than the reality in which Vera apparently lived. Once again, irrational thinking had provided the fertile ground for the roots of her depression.

As was the case with Elana, Vera was also a wonderful client. She was open to consider new points of view and alternative explanations (Further evidence of the utility of CBT to this population) despite her initial reluctance with the idea that she might be dealing with depression. Upon completing a few articles on athletes and depression, Vera returned to her second session ready to confront the possible diagnosis. An improved state was clearly noted and it appeared that the insight and explanation alone provided a great sense of relief and hope.

Vera had been an Olympic champion prior to being signed to her first professional contract. She was well recognized and thought of very highly. Her recent “fall from grace” caused her great concern, as she saw no rational explanation for the change in feedback. Making matters worse, she was receiving contradictory feedback from her previous coach. Vera was clearly receiving mixed, contradictory signals. She was caught in the middle and suffering. Although she did not want to admit to being depressed, she did admit that she wanted to “feel better”.

As the available information was so diametrically opposed, the first step was to determine what was fact and what might have been fancy. Prior to the first session, it was important to determine what points were irrefutable and might be used as a starting point. It was true that she had been an Olympic champion and it was true that she was a stand out athlete in college. It was also ascertained that the other coaches felt her to be a strong player at the present time. Again, the factors

clearly pointed to an emerging set of irrational beliefs at the core of her depression.

Once the situation was clarified, an intervention plan was established. As Vera’s schedule would have her frequently out-of-town over the next three months, the plan included significant bibliographic work and electronic communications.

The first step was to help Vera establish a foundation as to the facts regarding her present situation: what “negatives” were justified/real and which ones were not. What, if any, tangential factors might be contributing and which were not. By the end of the first session of her intervention plan it was clear that Vera was already showing an abatement of symptoms stemming from what she now understood.

Because Vera’s schedule permitted her to be in town for the next three weeks, the focus was an “overloading” of her face-to-face time in order to be able to maximize the time she would be away. For each session, a specific facet of her life was examined. Just as the first session, fact and fantasy were separated and efforts were made to find rational thoughts to replace the irrational thoughts that had emerged. At the start of each session, there was a “warm-up” which focused on how well the lessons learned from the previous session had worked then, the “training” or, next area of attack. Yes, the terminologies were purposeful and useful.

Each time Vera would go out-of-town she was provided articles that were chosen to further entrench what had been learned. For example, provided works in-

cluded articles written about her sport to highlight realistic assessment and articles about her developmental phase. During her last trip, the articles focused on life after sport! This was the protocol for her treatment.

### *Case 3 – Cory (High School Athlete)*

When I first met Cory he was a senior two-sport, high school athlete. Unlike the previous two cases, Cory was a psychiatric referral. At the time of the referral, he was eighteen years old and going into his senior year of high school at a “prep” school. His father made Cory’s initial psychiatric contact. Part of the precipitating cluster of symptoms that most concerned the father was the son’s suggestion that he was going to quit the basketball and track teams for his senior year. This, in addition to alterations in sleep, energy and appetite led to the referral.

Unlike the previous two cases, Cory showed very little insight during the initial consultation. In fact, Cory never mentioned his diagnosis and, seemed to be very unaware as to why he was even involved. After several sessions, things would completely change. It became clear that Cory’s lack of insight was actually a lack of comfort and trust. Interestingly, when given the choice to discontinue, Cory chose to return. As CBT suggests a much more “directive” therapist style than many other applied schools, Cory seemed to gain trust, feeling that the therapist “understood” what it was like to be young, scholarly athlete.

Through the course of a fifteen-week treatment (not consecutive weeks as

Cory was in boarding school and could not make the commute every week) Cory progressively exposed tremendous insight into original triggers, ongoing causes and day-to-day factors that were maintaining his depressive symptoms.

Though not shared until the fifth week, Cory had been moved into a Prep school after seventh grade due to a dramatic drop in grades and increasing social issues. He finally explained that during this time he was diagnosed with Attention Deficit Hyperactivity Disorder that was compounded by involvement with a poor social group. Regretfully, Cory left that phase of his life with a completely altered, irrational, incorrect sense of self. From that phase of his life Cory had clearly begun to operate off of numerous irrational belief symptoms. He showed textbook examples of:

- Perfectionism
- Reframing
- Catastrophizing
- Personalization
- Fallacy of fairness
- Polarized thinking
- One-trial generalizations
- Self-criticism

As these had been permitted to go unchallenged for more than four years, they had clearly become entrenched ways of thinking with significantly deviant automatic thoughts attached. Cory dealt with a lot of self-blame and improper reframing with respect to his interactions with his father. Of note, it was the weeks when Cory was unable to make his face-to-face appointments that much of his “work” was done. Cory did very well with homework such as listing his values and self-

worth, thought-stopping and general writing. Interestingly, over time he actually started doing his own bibliographic work via the Internet. Such efforts proved to be very therapeutic. Finally, after ten weeks, Cory agreed to have his father (a core component to his present circumstances) join us for a session. As was expected, the father became a true voice to refute much of Cory's irrational, automatic thoughts.

Cory did in fact participate in both sports his senior year. In fact, he was named captain of both teams.

## Summary

Depression is a common disorder, which presents with many different "faces". Athletes suffering from depression may not present with the classic symptoms, such as sad mood. Their mood symptoms may manifest in the form of increased irritability, poor performance in practice and in competition, lack of enjoyment in competing, over-training, or drug and alcohol use. Depression ad-

versely affects the athlete's ability to train and compete. In this population, the disorder is often under-appreciated by athletes, coaches, and the community. Given the pivotal role of the coach in an athlete's life, it is important for coaches and trainers to be aware of the signs and symptoms of depression in their athletes and encourage them to seek appropriate treatment. The ongoing stigma against mental health disorders is more acute in the world of sports. This global reality contributes to the denial of athletes that emotional problems may be present, delaying diagnosing and treatment of the problem.

As demonstrated in the case examples, Cognitive Behavioral Therapy is a proven effective treatment for depression. Additional well designed research studies are needed to better understand the impact of depression in athletes, the role of the coach in early detection, and the most effective treatment strategies for this unique population. As has been discussed in this article, depressed athletes are a special population and CBT may be particularly useful in treating these individuals.

## References

- Begel D (1998). The psychotherapist and the adolescent athlete. *Sport Psychiatry* 7:867-877
- Begel D (1992). An overview of sport psychiatry. *American Journal of Psychiatry* 149:5
- Booth W (1987). Arthritis institute tackles sports. *Science* 237:846-847
- Brewer BW (1994). Review and critique of models of psychological adjustment to athletic injury. *Journal of Applied Sport Psychology* 6:87-100
- Ferraro T, Rush S (2000). Why athletes resist sport psychology. *Athletic insight: The Online Journal of Sport Psychology* 2
- Ferraro T (2004). Is sport psychology failing the athlete? *Athletic Insight: The Online Journal of Sport Psychology* 6
- Glick JD, Horsfall JL (2001). Psychiatric conditions in sports: Diagnosis, treatment, and quality of life. *The Physician and Sportsmedicine* 29

- Maddison R, Prapavessis H (2005). A psychological approach to the prediction and prevention of athletic injury. *Journal of Sport and Exercise Psychology* 27:289–310
- Maerov PJ (2006). Demystifying CBT: effective, easy-to-use treatment for depression and anxiety. *Current Psychiatry* 5:27–39
- Meeuwisse Wh, Fowler PJ (1988). Frequency and predictability of sports injuries in intercollegiate athletes. *Canadian Journal of Sports Science* 13:35–42
- Perna FM, Antoni MH, Kumar M, Cruess DG, Schneidermann N (1998). Cognitive-behavioral intervention effects on mood and cortisol during exercise training. *Annals of Behavioral Medicine* 20:92–98
- Russell W (1996). The utility of family therapy in the field of sport psychology. *Family Therapy* 23:37–42
- Ross MJ, Berger RS (1996). Effects of stress inoculation training on athletes' postsurgical pain and rehabilitation after orthopedic injury. *Journal of Consulting and Clinical Psychology* 64:406–410
- 

**David Baron**, Professor of Psychiatry, 100E. Leigh Ave., MAB 305, Temple Episcopal, Philadelphia PA 19125, USA

**E-mail:** dbaron@temple.edu

# **Critical Learning Periods for Self-Esteem Mechanisms of Psychotherapy and Implications for the Choice Between Individual and Group Treatment**

---

**Daniel R. Wilson, John S. Price, Antonio Preti**

Section of Psychotherapy, World Psychiatric Association

For some years the Psychotherapy Section of the World Psychiatric Association has been oriented towards evolutionary biology. This examination of the interplay between clinical neuroscience, evolutionary genetics and psychotherapy is largely due to the influence of Ferdo Knobloch, a former section chair, and was motivated partly by his belief that psychotherapy, like the rest of psychiatry, should be based on the basic sciences, including evolutionary psychiatry. Also he held firmly to keep the Section open to all, but not dominated by any of the many competing schools of psychotherapy. Knobloch, who is known for his multidisciplinary day hospitals, first in the Czech Republic and later in British Columbia, summarized his work in the very readable *Integrative Psychotherapy* (Knobloch & Knobloch 1979). Other contributions of evolutionary psychiatry to psychotherapy can be found in Stevens & Price (2000) and Wilson & Cory (2007).

Evolutionary psychiatry is based largely on comparative ethology, behavioural ecology, genetics and evolutionary theory. One of the contributions of comparative ethology is the concept of critical or sensitive learning periods. The most extreme example is that of imprinting in precocial birds, in which the chick learns to follow whatever it first sees after hatching. This is normally the mother, but if other objects are substituted, bizarre outcomes are possible, such as cockerels that first follow and then try to mate with cardboard boxes. Critical learning periods are important in learning bird song, and it is well known that cats exposed to mice between 10 and 16 weeks will become good mousers, but if not exposed to a mouse during that time they lose all capacity to chase mice.

Critical learning periods also apply to humans, and one example relevant to psychotherapy is the learning of self-es-

teem [Stevens & Price 2000 (pp. 268–273), Price 2002). Since the early work of Maslow, we have known of the enormous individual variation in self-esteem, such that some people think they own the whole world, whereas others barely think they have a right to exist. This is important for psychotherapy, because most psychotherapy patients suffer from low self-esteem. Our evolutionary orientation suggests to us that there are two critical learning periods for self-esteem, and the choice of type of psychotherapy may well depend on which of the two critical learning periods was responsible for low self-esteem in the individual patient.

One critical learning period is early childhood (about 2 to 5 years). This is when, according to Heinz Kohut, the parents and other adults “mirror the grandiose self” of the child (Siegel 1996). Each little achievement is applauded and the child is surrounded by praise and love. However, as we know only too well from the psychiatric clinic, not all children have this boost to their self-image. Many children exit from childhood feeling that they are fundamentally bad people, or failures, or unwanted, or less favoured than a sibling. Maslow himself was permanently scarred by a remark from his father to the effect that “no woman will ever look at someone with such an ugly face.”

The second critical learning period for self-esteem is adolescence. At this time the influence of parents is reduced or even becomes negative, while the input of the peer group is vital. To be accepted and valued by the peer group leads to high self-esteem. But many adolescents are re-

jected by their peers for various reasons. They may look different in some way, or have disability, or move into an area where the peer group is “full” and does not require newcomers. This rejection by their peers may undermine high self-esteem inculcated by parents, or aggravate low self-esteem developed in early childhood. The negative adolescent experience is clearly expressed in Irvin Yalom’s novel “The Schopenhauer Cure” (New York: Harper Collins 2005), Bonnie is taking part in group therapy and says:

“You all remember me, I’m sure. I was the little fat girl in your grade-school classroom. Very chubby, very clumsy, hair too curly. The one who was pathetic in gym, got the fewest valentines, cried a lot, never had best friends, always walked home alone, never had a prom invitation, was so terrified that she never raised her hand in class, even though she was smart as hell and knew all the right answers” (p 129).

After adolescence, self-esteem is difficult to alter. Of course important life events may have an effect, such as being granted a knighthood, or being blackballed from a desirable club, but on the whole it takes a long time to alter self-esteem, and in the clinic we see lots of successful, happily married people who have problems due to bad experience in early childhood or adolescence.

One contribution of Ferdo Knobloch was his recognition of the value of the “corrective experience”, first suggested by Alexander and French (1946) in which therapy can supply a re-run of an experience which was bad for the patient [Kno-

bloch & Knobloch 1979 (pp 95–100]. The Knobochs say, “Candidates for psychotherapy are people not able to arrange corrective experience for themselves .... By corrective experience we understand partial reexposure to situations which the person was not able to master in the past, but reexposure under more favorable circumstances, so that successful mastery is achieved.” (p 96, italics in original)

Ferdo Knobloch was firmly convinced that individual psychotherapy could provide a rerun of the parent/child relationship. Over a long period of treatment by an accepting, attentive and supportive therapist, the patient could overlay the bad early learning experience with a new and positive experience. This is helped by the style of therapy emphasizing the importance of childhood experiences, favouring the idea of the therapist adopting the role of parent, and resulting in the phenomenon of transference. Then the good therapist is able to elevate the patient into something like equality, in the way that a good parent eventually gives adult status to their child.

However, if the low self-esteem dates from negative experiences in adolescence, individual therapy cannot effect a re-run. The parent figure is impotent at this stage. What is required is a re-run with a group of people to represent the peer group. This can be achieved with group therapy, in which the other group members stand in for the adolescent peers, and here the transference is not to the therapist but to the peer group as a whole. The patient ideally leaves the group feeling accepted and valued by the other group members.

From the point of view of evolutionary biology, low self esteem is not so much a disorder as a strategy for dealing with life’s problems. Differential parenting and the vicissitudes of adolescence yield an adult population consisting of a mix of “hawks” who always attack and “doves” who always give in, the balance between hawk and dove being maintained in the genome by negative frequency-dependent selection (Maynard Smith 1982). Low self-esteem is mediated by the lower levels of the triune brain (Stevens & Price 2000), but can be replaced by a dove strategy adopted at a higher level. This latter conscious and rational assumption of the dove role is an approach emphasised by many religions and philosophies which teach humility. Here, humility represents a de-escalating strategy of the neocortical or rational brain, whereas low self-esteem is a de-escalating strategy mediated at the paleomammalian and/or reptilian levels of the forebrain. It may well be that group therapy teaches humility as a means of being accepted and valued by the other group members with salutary sociophysiological sequelae.

So far as we know, the considerations outlined above are not currently taken into account by those who assess for psychotherapy and triage patients to either individual or group therapy. Theoretically, it would be possible to test these ideas by having an independent assessment of self-esteem during the triage process and predicting that those patients whose low self-esteem originated in early childhood would do better with individual therapy whereas those whose low self-esteem

originated in adolescence would do better with group therapy.

It might seem that once a critical learning period has expired, it would be impossible to reactivate it for therapeutic purposes. This is an empirical matter, but from the theoretical point of view we could postulate the existence of archetypes (Stevens & Price 2000) for both the parent/child relationship and for the adolescent/peer group relationship. These may be active throughout life and affect relations with older people and with peers, respectively. The basic level of the self-esteem component of the archetypes would be set in early childhood and adolescence, but might conceivably be activated and altered by the unique situation of the therapist/patient relationship, particularly as it occurs in psychoanalysis in which forgotten childhood memories are retrieved and nursery conflicts are analyzed; and in some forms of group therapy in which sensible adult discussion is discouraged by the therapist and the group members are reduced to something approaching teenager status.

Moreover, in the last several decades, innovative work of Kandel and others has shown brain structures and synaptic connections are remarkably dynamic (Etkin et al 2005). Increasingly, research confirms considerable neural plasticity continues across the life span as synapses are modified by diverse environmental factors, including processes of learning and memory.

It is increasingly clear that psychotherapy involves more than talk or even thought – it actually activates and alters

memory and learning. Indeed, events are remembered as both emotional Gestalts (implicit memory) as well as more cogent narratives (explicit memory). Thus, the accounts of past and current episodes of a life offer hermeneutical clues as to the internal mental states of people (Jaspers 1913, Etkin et al 2005, Wahler & Castlebury 2002).

Implicit emotional recollection is an often vivid yet pre-verbal mechanism whereas narrative competence is the ability to understand, remember, reorganize and create complex linguistic structures such as “stories” or “tales”. Narrative functions are an important resource for interpreting affectively charged experiences reposing in implicit memory and, so, transform these into explicit memories. Upon conscious recollection and consideration of thoughts and feelings, persons can more easily integrate these toward construction of a coherent recollection of the *dasein* of experience itself, which facilitates true understanding and elaboration – at least of insight and, sometimes, of wisdom (Wahler & Castlebury 2002).

Mental disorders often impact narrative competence, coherence and cogency, as is reported most notably in psychoses, delusional depression and mania. Patients suffering from these disorders sometimes generate bizarre narratives about themselves and the others, i.e., delusions. Jaspers argued that beliefs ought not be deemed delusional due to mere content, but rather due to how a patient holds such a belief. Moreover, he viewed primary delusions as autochthonous, that is, ultimately without any speck of rationality having given rise to their formation (Jaspers 1913).

Likewise ability to anticipate mental states of others, the so-called “theory of mind”, is affected both in patients diagnosed with schizophrenia (Janssen et al 2003), and in those diagnosed with a bipolar disorder, even in euthymic phases (Kerr et al 2003). The ability to conceptualize other people’s beliefs and intentions is an essential part in understanding and creation of narratives. Such narrative competence is thought to contribute to social cognition allowing the individual to build up a collection of scripts where intentions and beliefs are correctly located (Bruner 1986).

In Post-Traumatic Stress Disorder (PTSD) particularly, patients are unable to properly retrieve specific memories about the traumatic event, and, contemporarily, are upset by the recrudescence of the traumas in the form of flashbacks (Ehlers et al 2004). Other narrative incongruities in PTSD involve confusion about temporal order, and difficulty in accessing important details, both of which contribute to problematic appraisals of the traumatic event. To date, it is unknown whether this defect of narrative competence is a consequence of the disorder itself, or a factor favouring its onset and development. But clearly in PTSD, narrative competence is related to recovery, particularly as the coherence, identification of meaning, and self-evaluation in the building up of a narrative regarding the trauma are concerned (Tuval-Mashiach et al 2004). Psychotherapy, by helping reassert archetypes at the foundation of current self-esteem, also can integrate a more positive narrative of the self from childhood to adulthood.

A line of research that links narrative competence and psychological wellness comes from very specific investigation of linguistic representation of early attachment as conceptualized by Bowlby (1973). Mary Main and co-workers developed these ideas via an interview to investigate the quality of the relationship subjects (adult or adolescent) recall having had with their parents as children (Main 1991). Individual narrative style (particularly when of greater coherence and fluency) is a key factor in assessing the quality of attachment in childhood. The most decisive subfactors in attachment were: orientation, the way of placing the protagonists of a story into the narrative context; structure, the degree of linking events in terms of cause and effect; affection, the presence of emotions and feelings consistent with narrated events; integration, the degree of linking facts with emotional reactions related to them and within the story-telling context (Main 1991, Baerger & McAdams 1999). People having better narrative coherence of their remembrance have a better chance of being psychologically healthy and well-adjusted adults, even despite negative events or emotions related to early memory.

Psychotherapy often involves the putting together of a story. Earlier ideas about the mechanisms of psychotherapy emphasized beneficial effects attributable to a specific kind of relationship patients developed with therapists. These hinged on social interactions that led to specific behavioural changes learned and developed in the course of the therapeutic relationship. However, gradually forming

a story—a more and more coherent story about the past, the present and the future prospects—contributes to both the symptom improvement observed in patients undertaking psychotherapy as well as the actual brain mechanisms that underlie such improvements (Fitzpatrick & Hanly, 1996). It is not yet clear how best to fully disentangle effects of secure attachment such as on the development of a valid narrative competence (via a positive feedback from a reliable parent), or from epigenic factors affecting risk of mental disorders. So too, it is not clear whether narrative competence is a protective factor against psychopathology, or if psychopathology disrupts narrative competence and renders people suffering from a mental disorder less able to express a coherent tale of their past. Indeed, recent studies of persons suffering from PTSD demonstrate that an increase in length of narrative from pre- to post-treatment was related to a better organization of thoughts about the trauma and a decrease of symptoms of depression (Foa et al., 1995). This effect may also be particularly important for patients suffering from affective disorders, as they are likely to have also had deeply upsetting life experiences. Better integration of nega-

tive events into a more textured existential continuum of the subject (*dasein*), by means of improved narrative competence is a key step in the path toward symptom stabilization and fuller recovery.

Such insights concerning critical learning periods, narrative capacity and the neuroscience entailed in such existential adaptation are rapidly enhancing research that spans neuroscience and psychoanalysis and nearly all types of psychotherapy while also bolstering the scientific foundation of psychotherapy. In practical terms, the sequelae of negative childhood events are perhaps best addressed by individual therapy whereas those due to adversities in adolescence are likely to benefit from group therapy. It is less widely appreciated but quite important to appreciate that such research also directly links psychotherapy to evolution, particularly the emotive and rational capacities and reactivities of highly social species such as *Homo sapiens*. Most patients are able to give a clear account of how they felt about themselves in childhood and adolescence, and these reports should be taken into account in deciding between individual and group therapy as well as in guiding the course of any dynamic therapy.

## References

- Alexander F, French TM (1946). *Psychoanalytic Therapy*. New York, Ronald
- Baerger DR, McAdams DP (1999). Life story coherence and its relation to psychological well-being. *Narrative Inquiry* 9:69–96
- Bowlby J (1973). *Attachment and loss: Attachment*. New York, Basic Books
- Bruner J (1986). *Actual minds, possible worlds*. Cambridge, MA, Harvard University Press
- Ehlers A, Hackmann A, Michael T (2004). Intrusive re-experiencing in post-traumatic stress disorder: phenomenology, theory, and therapy. *Memory* 12:403–415

CRITICAL LEARNING PERIODS FOR SELF-ESTEEM

- Etkin A., Pittenger C, Polan HJ, Kandel ER (2005). Toward a neurobiology of psychotherapy: basic science and clinical applications. *J Neuropsychiatry Clin Neurosci* 17:145–158
- Fitzpatrick Hanly M (1996). “Narrative”, now and then: a critical realist approach. *International Journal of Psychoanalysis* 77:445–457
- Foa EB, Molnar C, Cashman L (1995). Change in rape narratives during exposure therapy for posttraumatic stress disorder. *Journal of Trauma Stress* 8:675–690
- Janssen I, Krabbendam L, Jolles J, van Os J (2003). Alterations in theory of mind in patients with schizophrenia and non-psychotic relatives. *Acta Psychiatrica Scandinavica* 108:110–117
- Jaspers K (1913). *Allgemeine Psychopathologie: Ein Leitfaden für Studierende, Ärzte und Psychologen*. Berlin, Springer. In: Hoening J, Hamilton MW (eds) *General Psychopathology, trans.* Chicago, University of Chicago Press, 1963
- Kerr, N., Dunbar, R.I., Bentall, R.P. (2003). Theory of mind deficits in bipolar affective disorder. *Journal of Affective Disorders* 73: 253-259
- Knobloch, F. and Knobloch, J. (1979) *Integrated Psychotherapy*. New York: J. Aronson
- Main M (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) model of attachment. Findings and directions for future research. In: Parkes CM, Hinde JS, Marris P (eds) *Attachment across the life cycle*. London, Routledge (pp 127–159)
- Maynard Smith J (1982). *Evolution and the theory of games*. Cambridge, Cambridge University Press
- Price JS (2000). Subordination, self-esteem and depression. In: Sloman L, Gilbert P (ed) *Subordination and defeat: an evolutionary approach to mood disorders and their therapy*. Mahwah NJ, LEA (pp 165–177)
- Siegel AM (1996). *Heinz Kohut and the psychology of the self*. London, Routledge
- Stevens A, Price J (2000). *Evolutionary psychiatry: a new beginning*. 2nd ed. London, Routledge
- Tuval-Mashiach R, Freedman S, Bargai N, Boker R, Hadar H, Shalev AY (2004). Coping with trauma: narrative and cognitive perspectives. *Psychiatry* 67:280–293
- Wahler RG, Castlebury FD (2002). Personal narratives as maps of the social ecosystem. *Clinical Psychological Reviews* 22:297–314
- Wilson DR, Cory GA (2007). *The evolutionary epidemiology of mania and depression: a theoretical and empirical interpretation of mood disorders*. New York, Mellen Press
- 

**Daniel R. Wilson**, Professor & Chairman of Psychiatry, Professor of Anthropology, Creighton University, Omaha, Nebraska, USA  
**E-mail:** wilson@creighton.edu



# **Family Interventions for Patients with Mood and Eating Disorders An Update**

---

**Gabor I. Keitner, Ferenc Túry**

Section on Family Research and Intervention, World Psychiatric Association

An understanding of families, their ways of reacting to and dealing with psychiatric illness in their loved ones, as well as the effectiveness of various forms of family interventions continue to be active areas of systematic investigations. This Update focuses on recent findings from family studies in patients with mood disorders (major depression and bipolar disorders) and eating disorders (anorexia and bulimia) as examples of ongoing family research. There is continued recognition that empirical data is necessary in order to validate the important role that families play in the evolution of psychiatric disorders and to ensure that family interventions are utilized and reimbursed in the treatment of these disorders.

## **Mood Disorders**

### *Depression*

Over the last few years studies have continued to attempt to unravel the relationship between marital satisfaction, in-

terpersonal conflict, and the onset and course of depressive disorders. Previous studies have identified difficulties that are apparent in the psychosocial functioning of depressed patients. Difficulties in relationships have also been noted to negatively influence the course of the depression and its likelihood to recur. It is still unclear, however, whether the interpersonal conflict predates the onset of depression or is the consequence of it. The specific components of the marital discontent have also not been fully identified.

A recent study by Heene et al (2007) has attempted to address some of these questions. This research group from Belgium studied 69 clinical couples with major depression, and compared them with 69 non-clinical control couples. They focused on conflict communication, attribution, and attachment as important domains in the context of marital satisfaction. They found that both depressed patients and their partners experienced more marital maladjustment in their rela-

tionships than control couples. This was particularly the case when the identified patient was female. The majority of depressed women believed that their depression was caused by problems in their relationships while almost half of the depressed men attributed their depression to work related problems. Couples in which there was a depressed partner also reported a lower level of constructive communication and greater avoidance of each other. These couples also tended to be ambivalently and insecurely attached to each other. In general, couples where the patient was a woman experienced more marital dissatisfaction, poorer conflict resolution and more insecure attachment in comparison to couples where the depressed patient was a male and also in comparison to nonclinical couples. Women tended to express more demands in contrast to men who tended to exhibit more withdrawal. This study suggests that family interventions that target and modify dysfunctional perceptions of reasons for the onset of the depression help to improve communications in order to resolve conflicts and which improve a sense of connectedness, and attachment between the couples, may be particularly helpful. The study also suggests that it may be important to modify the therapeutic approach to couples depending on the gender of the identified patient.

The relationship between marital satisfaction and depression was also investigated in a Latino sample in Brazil (Hollist et al 2007). This group also investigated the relationship between marital dissatisfaction and the likelihood of recurrence of depression. They studied 99 depressed

women during a depressive episode and during a 2-year follow-up period. 58% of the sample was white, 27 black and 14% reported a mixed racial heritage. The majority were lower middle-class. This study found that depressed women reported poor marital satisfaction and to a degree that was even greater than reported for women in the United States. They also found that marital satisfaction at intake to the study, during a depressed episode, was predictive of the recurrence of depression two years later. Marital dissatisfaction was a better predictor of subsequent depression than the level of depressive symptomatology during the index episode. Marital discord then was found to both cause and maintain depressive symptoms. This relationship appears to be even stronger in Latinas than it is for whites. The authors of this study suggested that it is particularly important to treat the family in addition to the depression in those depressed women where marital dissatisfaction is present.

There are still very few studies on the outcome of family or couples treatment for depression. Such studies are difficult to conduct due to the expense, lack of manualized family therapy treatment protocols, lack of sufficient numbers of well-trained family therapists who are interested in research and lack of consensus about appropriate instruments to measure outcomes. Recent studies nonetheless reinforce the important role that family interventions can have in the treatment of depression.

In one of the few studies of patients with moderate to severe depression, Miller et al (2005) randomly assigned

121 patients recruited from the inpatient or partial hospital units of a psychiatric hospital, to pharmacotherapy alone; combined pharmacotherapy and cognitive therapy; combined pharmacotherapy and family therapy; or combined pharmacotherapy, cognitive therapy and family therapy. The family therapy provided was the Problem Centered Systems Therapy of the Family (PCSFT), which is based on the McMaster Model of Family Functioning. The PCSFT is a structured, short term family systems intervention that is based on the following principles: an emphasis on “macro” stages of treatment (assessment, contracting, treatment, closure), as opposed to the idiosyncratic “micro” moves of each therapist; emphasis on assessment; inclusion of the entire family; active collaboration between the therapist and family members; open, direct communication with the family; focus on the family’s responsibility for change; emphasis on current problems; focus on behavioral change; an emphasis on family strengths; time limited nature. A greater proportion of those patients who had family therapy as a part of their treatment experienced improvement and a significant reduction in their depression and suicidal ideation than patients who received pharmacotherapy and/or cognitive therapy, but no family therapy. This study highlighted the importance of adding family therapy to pharmacotherapy and or cognitive therapy for patients with moderate to severe depressions in order to maximize their likelihood of a favorable response to treatment.

A significant minority of patients who have responded to acute treatment of de-

pression develop tachyphylaxis to their antidepressant medications. These patients experience a return of their depressive symptoms during maintenance antidepressant treatment. It is unclear what the best course of treatment should be at this stage of the depressive illness. Fabbrì et al (2007), randomly assigned 20 depressed outpatients and their significant others to either a dose increase of their medications and clinical management or to family therapy using the PCSFT, which is described above. Patients received the family treatment over a 12-week period. Seven of 10 patients responded to an increase in their medication dosage, as did seven of 10 patients who received the family intervention. However, all but one of the patients receiving the increased medication dosage relapsed on that those during follow-up whereas only one patient receiving the family therapy relapsed during the follow up period. This study suggests that providing family therapy is just as effective as increasing the drug dosage when there is a recurrence of depression during maintenance treatment. But that the addition of family therapy is more effective at sustaining remission than is pharmacotherapy. Both studies also show that the PCSFT is a useful form of family therapy for patients with clinical depression.

## **Bipolar disorder**

Psychosocial variables continue to be seen as significant contributors to the course and outcome of bipolar disorder. The stress diathesis model postulates that certain nonspecific stresses negatively im-

pact on biologically vulnerable individuals. Factors such as disruption of regular social routines, stressful life events, family attitudes and maladaptive interactional styles, non-adherence with pharmacotherapy, and comorbidity of personality disorders can contribute to aggravating a biologically based vulnerability to the onset of mood episodes or interfere with its likelihood of improvement (Scott 2006). This conceptualization provides the rationale for combining pharmacotherapy with psychosocial treatments, including psychotherapy and family interventions. In addition, caring for patients with bipolar disorder creates a significant sense of burden on the caregivers.

In a recent study of primary caregivers of 500 patients with bipolar disorder, Perlick et al (2007) found that 89% of caregivers reported moderate or higher levels of burden in relation to patient problem behaviors, role dysfunction or disruption of household routines. High levels of burden created physical health problems, depressive symptoms, and health service utilization by the caregivers. Some of the burden for caregivers was mediated by their perception of stigma associated with their relative's mental illness.

Two forms of family interventions as adjunctive treatments for bipolar disorder have been studied recently. Miller et al (2008), randomly assigned 92 patients diagnosed with bipolar disorder and their family members to pharmacotherapy alone, family therapy plus pharmacotherapy or a multi-family psycho educational group, and pharmacotherapy. Treatments and assessments continued for up to 28

months. The family therapy provided was the problem centered systems therapy of the family (PCSTF) as described above. For the total sample, the addition of a family intervention did not improve outcome. However, in patients from families with high levels of impairment, the addition of a family intervention resulted in a significantly improved course of illness. In contrast, for patients from low impairment families, the addition of a family intervention did not improve the course of illness.

Micklowitz et al (2007) randomly assigned 293 outpatients with bipolar I or II disorders and depression to pharmacotherapy and psychotherapy (family focused therapy, interpersonal and social rhythm therapy or cognitive behavior therapy) or collaborative care, a brief psycho educational intervention. Patients receiving the psychotherapies had significantly higher recovery rates (64.4% versus 51.5%), and shorter times to recovery than patients in collaborative care there was no difference in outcomes for the three psychotherapies. Patients in the psychotherapy groups also reported significant improvements in overall functioning, relationship functioning and life satisfaction. The family intervention used was family focused therapy (FFT). FFT is provided in 21 sessions over a nine-month period. It consists of three modules: psycho education, communication enhancement training and problem solving skills training.

Overall, adjunctive psychosocial therapies for bipolar disorder appear to reduce rates of relapse, but are more effective for depression than for mania. There is no evidence that any particular therapy has

a unique mechanism of action or any specific advantages over any other approach (Scott et al 2006). In general, family interventions, while not impacting consistently on patient's symptomatic status do improve the family's knowledge and understanding of the bipolar illness. They also lead to a better connection with the family to the patient's treatment and are helpful in delaying and reducing relapses and the need for re-hospitalizations. All family interventions encourage active collaboration between the therapist and families. They emphasize education, and compliance. They tend to focus on improving problem-solving skills and communications and to decreasing levels of criticism within the family. They help the family to deal with prodromal and residual symptoms and to develop strategies for dealing with relapses.

## Eating disorders

Eating disorders are prevalent and severe psychiatric conditions. The severity of anorexia nervosa is reflected in the high mortality rate, which is about 20% in chronically ill adults with anorexia after twenty years. It is partly for this reason that many psychotherapeutic approaches are tried in its management. The efficacy of the different treatment approaches is inconsistent, however, and the proportion of therapy resistant patients is high.

In the history of family therapy, anorexia nervosa played a paradigmatic role, serving as a good model for family dysfunctions. Several major family therapeutical schools (structural, strategic, multigenerational approaches) elaborated their the-

oretical cornerstones studying anorectic families. While family therapy became a popular method in the treatment of eating disorders from the '70-s (especially in anorexia nervosa), evidence for its effectiveness, based on randomized controlled trials, appeared only in the last two decades. Some studies performed in the Maudsley Hospital, London, proved the efficacy of family therapy in the treatment of anorexia nervosa, especially in younger patients with short duration of illness (Dare et al 2001). An important study was published also from the Maudsley by Eisler et al (2007). Conjoint family therapy and separated family therapy (formerly called family counseling) was administered in the treatment of anorexia nervosa. This study confirmed the efficacy of family therapy, and after a five-year-long follow-up the patients stayed well. The authors do not recommend conjoint family therapy, if a raised level of parental criticism (high level in expressed emotions) is present in the family.

In an attempt to study the relative effectiveness of family therapy and individual therapy, a study was designed to compare behavioral systems family therapy to ego-oriented individual treatment (Robin et al 1999). A significant improvement in anorectic symptoms was found at the end of treatment. 67% of the patients reached target weight and 80% regained menstruation. The long-term outcome is even more important: after one year about 75% of the patients had reached their target weight and 85% resumed menses. Patients in the family therapy group showed significantly greater weight gain in comparison to the individual therapy. More-

over, the family therapy group produced a more rapid treatment response.

In the past few years treatment manuals have also been elaborated in order to help the family treatment of anorectic patients (Lock et al 2001). The Maudsley model is a practical approach, focusing in the initial phase on the problems of eating, and on the promotion of weight gain. A family meal is organized providing the opportunity of improving parental skills, and helping the identification of problem areas. When the impact of eating habits and weight loss decreases, the therapist begins to deal with the more general issues of adolescence, e.g. the process of separation and individuation. This approach can be standardized. There are some efficacy studies using treatment manuals, for instance in an Australian eating disorder service. The advantages of the manualized program were the positive changes in the dynamics of the eating disorder team, the experience of families that consulted the service, and a significant decrease in readmission rates (Wallis et al 2007).

An important new theoretical and pragmatic model in the family therapy of eating disorders is narrative family therapy. There is a close association between attachment experiences and the coherence of narratives. From a systemic point of view it is important to stress that early interactions in families generate special emotional attachment patterns, and also shape the content and style of the narratives that are formed. During therapy these associations are explored, and it is suggested that commonly observed patterns are consistent with transgenerational experiences (Dallos 2004).

Another new approach in family therapy is the multifamily group therapy, which is an intensive form of treatment. In this setting several eating disordered families participate in the therapeutic session (Dare et al 2000). The aim of this therapy is to enable families to find their own resources, and to cope with severe family tensions. Characteristic eating habits, and problematic interactional patterns are addressed. Similar experiences in the families strengthen the cohesion of the multifamily group, and the therapeutic process becomes intensive. The need to find the family's own solutions makes the therapy more acceptable. Multifamily groups can be an economic alternative to single family sessions.

Psychoeducation for eating disordered families can also be more economic, and as effective as the traditional forms of family therapy. In the study of Bryant-Waugh et al (2007) psychoeducational focus groups and individual interviews were used to help the mothers of eating disordered pre-school children. The identification of different topics related to the eating disorders was a useful tool to support the mothers. Parental self-help groups are also organized in many specialized eating disorder units.

In the last decade there has been a growing interest in the family therapy of bulimic patients. Although there are still only a few studies in this area, it can be an effective method. First publications relating to the family therapy of bulimic patients summarized mainly clinical experiences in case reports. The bulimic symptoms can be regarded as intra-familial messages to the parents. In a

randomized controlled trial supportive psychotherapy and family therapy was compared for adolescents with bulimia nervosa. Family therapy was significantly more advantageous than supportive therapy after treatment and at a 6-month follow-up (Le Grange et al 2007). Psycho-educational methods are also useful for bulimics and their families.

Another study compared the efficacy and cost-effectiveness of family therapy and cognitive behavior therapy guided self-care in adolescents with bulimia nervosa. At six months, bingeing showed significantly greater reduction in the CBT guided self-care group than in the family therapy group, but the difference disappeared at 12 months. There were no other differences between the groups. The direct cost of treatment was lower for guided self-care than for family therapy. The acceptability of the patients is greater for bulimic adolescents (Schmidt et al 2007). Studying the predictors of outcome in a randomized clinical trial of family therapy in anorexia nervosa, Lock et al (2006) found that the major predictive factors were psychiatric comorbidity, family behaviors, and early response to treatment.

In spite of the supportive data outlined above, some therapists object to family therapy, arguing that the autonomy of the patients cannot be stimulated if the family therapy increases parental control over eating. To solve this problem, more randomized controlled trials should be performed. In practice, using a systemic approach, the parents can be involved in this process, as well, providing the opportunity of a more basic improvement.

In family-based treatments, parents can be regarded an important resource for therapy.

In summary, family therapy can be an important contribution to the treatment of eating disordered subjects, both in anorexia and bulimia. In the first three decades of the application of family interventions mainly clinical observations and case studies were published, but the impact of randomized, controlled trials is increasing.

## Conclusions

The family continues to play a very important part in the understanding of the nature of mood and eating disorders. Studies suggest that including the families in the treatment of these patients is likely to improve the overall management of their illness. A variety of family approaches have been found to be helpful including psychoeducation, multi-family groups, and family interventions that focus on communications and problem solving skills. Family interventions are synergistic with individual and psychopharmacological approaches and are usually provided as an adjunctive treatment. A limitation to the implementation of family interventions is the dearth of psychiatrists and other mental health professionals who are well trained in family therapy. Residency training programs should put greater emphasis on helping trainees to acquire family therapy skills. In the interim there is a need for a clinical manual to help guide those who are interested in trying to implement some of the findings outlined in this Update.

## References

- Bryant-Waugh, R, Turner H, East P, Gamble C (2007). Developing a parenting skills-and-support intervention for mothers with eating disorders and pre-school children. Part 1: Qualitative investigation of issues to include. *Eur Eat Disord Rev* 15:350–356
- Dallos R (2004). Attachment narrative therapy: integrating ideas from narrative and attachment theory in systemic family therapy with eating disorders. *J Fam Ther* 26:40–65
- Dare C, Eisler I (2000). A multi-family group day treatment programme for adolescent eating disorder. *Eur Eat Disord Rev* 8:4–18
- Dare C, Eisler I, Russell G, Treasure J, Dodge I (2001). Psychological therapies for adults with anorexia nervosa: Randomized controlled trial of outpatient treatments. *Br J Psychiatry*, 178:216–221
- Eisler, I, Simic, M, Russell GF, Dare C (2007). A randomized controlled treatment trial of two forms of family therapy in adolescent anorexia nervosa: a five-year follow-up. *J Child Psychol Psychiatry* 48:552–560
- Fabrizi S, Fava GA, Rafanelli C, Tomba E (2007). Family intervention approach to loss of clinical effect during long-term antidepressant treatment: A pilot study. *J Clin Psychiatry* 68:1348–1351
- Heene E, Buysse A, Van Oost P (2007). An interpersonal perspective on depression: The role of marital adjustment, conflict communication, attributions, and attachment within a clinical sample. *Fam Process* 46:499–513
- Hollist CS, Miller RS, Falceto OG, Fernandes CL (2007). Marital satisfaction and depression: A replication of the marital discord model in a latino sample. *Fam Process* 46:485–497
- Le Grange D, Crosby RD, Rathouz PJ, Leventhal BI (2007). A randomized controlled comparison of family-based treatment and supportive psychotherapy for adolescent bulimia nervosa. *Arch Gen Psychiatry* 64:1049–1056
- Lock J, Couturier J, Bryson S, Agras S (2006). Predictors of dropout and remission in family therapy for adolescent anorexia nervosa in a randomized clinical trial. *Int J Eating Disord* 39:639–647
- Lock J, Le Grange D, Agras WS, Dare C (2001). Treatment manual for anorexia nervosa. A family approach. New York, Guilford
- Miklowitz DJ, Otto MW, Frank E, Reilly-Harrington NA, Kogan JN, Sachs GS et al (2007). Intensive psychosocial intervention enhances functioning in patients with bipolar depression: Results from a 9-month randomized controlled trial. *Am J Psychiatry* 164:1340–1347
- Miller IW, Keitner GI, Ryan CE, Solomon DA, Cardemil EV, Beevers CG (2005). Treatment matching in the post hospital care of depressed patients. *Am J Psychiatry* 162:2131–2138
- Miller IW, Keitner GI, Ryan, CE, Uebelacker LA, Johnson, SL, Solomon DA (2008). Family treatment for bipolar disorder: Family impairment by treatment interactions. *J Clin Psychiatry* 69:732–740
- Perlick DA, Miklowitz DJ, Link BG, Struening E, Kaczynski R, Gonzales J et al (2007). Perceived stigma and depression among caregivers of patients with bipolar disorder. *Br J Psychiatry* 190: 535–536
- Robin AL, Siegel PT, Moyer A, Gilroy M, Dennis AB, Sikand A (1999). A controlled comparison of family versus individual therapy for adolescents with anorexia nervosa. *J Am Acad Adolesc Psychiatry* 38:1482–1489

FAMILY INTERVENTIONS WITH MOOD AND EATING DISORDERS

- Schmidt U, Lee S, Beecham J, Perkins S, Treasure J, Yi I et al (2007). A randomized controlled trial of family therapy and cognitive behavior therapy guided self-care for adolescents with bulimia nervosa and related disorders. *Am J Psychiatry* 164:591–598
- Scott, J. Psychotherapy for bipolar disorders - efficacy and effectiveness (2006). *J Psychopharmacology* 20(Suppl)46–50
- Scott J, Paykel E, Morriss R, Bentall R, Kinderman P, Johnson T et al (2006). Cognitive behavior therapy for severe and recurrent bipolar disorders: a randomized controlled trial. *Br J Psychiatry* 188:313–320
- Wallis A, Rhodes P, Kohn M, Madden S (2007). Five-years of family based treatment for anorexia nervosa: the Maudsley Model at the Children's Hospital at Westmead. *J Adolesc Med Health* 19: 277–283
- 

**Gabor I. Keitner**, MD, Department of Psychiatry, The Warren Alpert Medical School of Brown University, Rhode Island Hospital, 593 Eddy street, Providence, Rhode Island, USA  
**E-mail:** GKeitner@lifespan.org



# **Psychopharmacology**



# Report on Two Section Statements of the WPA Section Pharmacopsychiatry

---

**Hans-Juergen Möller**

Section of Pharmacopsychiatry, World Psychiatric Association

In the last years the WPA section on pharmacopsychiatry worked very intensively on the preparation of two section statements, which combined evidence-based reviews with expert opinion. With these section statements two hot spots in the current discussion on clinical pharmacopsychiatry were interlocked. Especially after the publication of the main results of the CATIE trial in 2005 (Lieberman et al. 2005) the one question is whether the second generation antipsychotics (SGAs) should still be seen as the first rank treatment in schizophrenic psychoses and other disorders, or whether the result of the CATIE study and similar so called “effectiveness” or “real world” studies (Möller 2008) would have the power to question the preference of SGAs, considering additionally the high price of these drugs, a problem especially in countries with low health budgets.

The second hot topic was the discussion about potential negative effects of

SSRIs, which in the last decade primarily started out from the child and adolescent psychiatry, but was later on also regarded as a prominent problem in adult psychiatry. The section members discussed these questions very intensively, considering also the methodological problems related to these two topics. A full agreement could finally be reached on the antipsychotics section statement which was recently published in “Schizophrenia Research” (Tandon et al 2008). The section statement on antidepressants has been published as well (Möller 2008). An important aim of these section statements was to balance potential negative effects (Möller 2006b) of antidepressants with the known positive effects on depression in terms of reducing depression scores and also reducing suicidality (Möller 2006a). The two key positions of these section statements will be presented in the following.

## **Comparative effectiveness of antipsychotics in the treatment of schizophrenia**

Despite significant advances in our understanding of the nature of the disease, schizophrenia remains one of the most challenging medical conditions of our times. It is characterized by high morbidity and mortality, and available treatments for schizophrenia are incompletely and variably effective and associated with a range of adverse effects. Despite these impediments, however, the individualized provision of a comprehensive array of treatment, rehabilitative and social support services can effectively promote recovery of persons with schizophrenia (Tandon et al 2006). The sequential introduction of “atypical” or second generation antipsychotics (clozapine, amisulpride, zotepine, risperidone, olanzapine, quetiapine, sertindole, ziprasidone, aripiprazole and paliperidone), led to increased optimism among physicians and patients about what can be achieved with effective antipsychotic therapy in schizophrenia. Like the about 50 older “typical” or “conventional” first-generation antipsychotics (FGAs), the eleven newer “atypical” second-generation antipsychotics (SGAs) are at least as effective in reducing the delusional thinking, hallucinatory experiences, and thought disorganization that are the hallmarks of psychosis (positive symptoms). Compared to the older FGAs, however, this new generation of SGAs has a lower liability for inducing extra pyramidal side effects (EPS) resulting in their being termed

“atypical” (Kapur & Remington 2001, Möller 2000).

FGAs and SGAs both constitute very heterogeneous classes of antipsychotic medications. The principal distinction between SGAs and FGAs is the ability of the former to provide an equivalent antipsychotic effect with a lower liability to cause EPS, although there is substantial variation within each class in this regard.

Clinical trial data collectively indicate that SGAs may demonstrate a broader spectrum of efficacy than FGAs (equivalent efficacy in positive symptoms and variably greater efficacy in negative, mood, and cognitive symptoms), substantially related to their lower propensity to cause motor side-effects. Whereas neither the modestly greater efficacy of SGAs over FGAs nor its significant explanation by the reduced propensity of SGAs versus FGAs to cause EPS is fully established, they are consistent with the preponderance of data. Recent findings further reinforce the importance of achieving an antipsychotic effect without EPS. Clozapine is more effective than other antipsychotic agents in treatment-refractory schizophrenia patients (specifically those with antipsychotic-refractory positive symptoms), ameliorating symptoms in about one-third of such patients; reduced EPS liability does not explain this greater efficacy. Indirect comparisons of efficacy across studies and direct comparisons in the relatively few randomized, controlled head-to-head studies between other SGAs suggest that they are essentially similar with regards to overall efficacy and efficacy in treating posi-

tive and negative symptoms; if differences exist, these are small.

The occasional observation of the superior efficacy of some SGAs may be explained by the fact that optimal dose ranges for olanzapine, risperidone, and amisulpride are somewhat better defined than those for quetiapine, ziprasidone, and aripiprazole. Additionally, the need for multiple-daily dosing and administration with food may complicate the real-life optimal dosing of ziprasidone. In view of the significant individual variability in drug pharmacokinetics and treatment responsivity, it should also be emphasized that equivalent overall efficacy across patient groups does not translate into equal efficacy in each individual patient. There is no best agent or a best dose of any agent for all patients. It is not currently possible to prospectively predict which antipsychotic medication might be optimal for a given patient. Decisions about antipsychotic therapy consequently entail a trial and error process with careful monitoring of clinical response and adverse effects and an ongoing risk-benefit assessment.

Substantial differences in the adverse effect profiles of these medications are very well documented and different individuals are differentially tolerant of different adverse effects. Generally, SGAs have a lower propensity to induce EPS than FGAs although there are differences among both groups of agents with regard to the ease and consistency with which an adequate antipsychotic effect can be achieved without EPS. Metabolic side-effects which increase the risk of ischemic heart disease (weight gain, dys-

lipidemia, diabetes mellitus) have recently received particular attention (Möller 2000). In view of their likely contribution to the increased mortality of persons with schizophrenia, they warrant close attention. Although SGAs are generally associated with metabolic adverse effects to a greater extent than FGAs, there are variations among both SGAs and FGAs with regard to their liability to cause these side-effects. CATIE, for example, found olanzapine to cause more weight gain and related metabolic side-effects than perphenazine, risperidone and quetiapine to cause equivalent weight gain to perphenazine, while ziprasidone caused fewer metabolic problems than perphenazine. Other adverse effects differ among FGAs and SGAs as well (Tandon et al 2006), the impact of these adverse effects on both the safety and tolerability of these agents differs across individuals. A minimum protocol for monitoring adverse effects should be implemented and this needs to be customized to the patient's specific vulnerabilities/needs and the agent selected.

If bothersome or hazardous adverse effects develop, informed treatment adjustments should be made collaboratively by the physician-patient team. Switching antipsychotics because of inadequate efficacy or poor tolerability has been found to be useful (Tandon et al 2006), but the risks of discontinuing a partially effective treatment need to be weighed against the benefits of switching to a possibly more effective one; both the risks and benefits were evident in CATIE and to a more limited extent in CUtLASS. Antipsychotic treatment has a significant impact on the

long-term course of schizophrenic illness and can significantly facilitate recovery. Early intervention has much promise in reducing the substantial decline in function that frequently accompanies the onset of schizophrenic illness, but effects of early antipsychotic treatment and differences between agents are inadequately characterized. Extrapolating effectiveness findings from trials conducted in chronically ill subjects as in CATIE and CUTLASS to first-episode patients warrant great caution. Previous studies suggest benefits of SGAs over FGAs in this population (Schooler 2007). This was also confirmed by the results of the recently completed European First-Episode Schizophrenia Trial (Kahn et al 2008) in the sense that patients treated with haloperidol had a much higher discontinuation rate and a higher EPS side effect burden than patients treated with SGAs.

Antipsychotic treatment needs to be individually tailored to promote optimal recovery and this requires careful monitoring and ongoing joint decision making by the clinician-patient team about choice of antipsychotic agent, dosing, continuation/switching, and augmentation. Although existing antipsychotic treatments for schizophrenia are not completely satisfactory, they can meaningfully reduce the devastating effects of the illness.

### **Do SSRIs or antidepressants in general increase suicidality?**

The concerns that induction of suicidality should be seen as a serious side effect of antidepressants primarily focussed on the SSRIs, although these concerns later

extended to include the tricyclic antidepressants (TCAs) as well. On the basis of several reanalyses, not only children and adolescents but also adult patients were also considered to be a risk group.

The problem is not as new as many people seem to believe. For decades it has been part of medical teaching that treatment can have an early stimulating effect such that depressed patients may acquire the energy to follow through on suicidal impulses before the mood improvement associated with AD or other treatment takes effect. This so-called drive-mood dissociation in the early phase of AD treatment has long been seen as a special risk factor for suicidal behaviour, and physicians were warned to observe patients carefully in this phase and to deal pragmatically with the potential risks: this has formed a principle of good clinical practice. Therefore early in treatment, frequent visits and supportive psychotherapy are recommended, and a preference for sedative ADs and/or co-medication with benzodiazepines was also thought to reduce the risk of suicidal behaviour.

The classical drive-mood dissociation was thought of as a property of the illness course, not as a side effect of any given treatment. There additionally exists since long time the clinical experience that activating antidepressants in particular can provoke agitation and associated suicidal thoughts as a side effect related phenomenon, which induced related warning as part of good clinical practice. The discussion about the suicidality-increasing effects of the SSRIs might be seen in line with these two issues.

The current controversy, starting with children and adolescents, has resulted in a renewed debate about SSRI-induced suicidality in adults (Möller 2004) and was finally expanded to all antidepressants. The FDA put tight restrictions on the use of SSRIs and other ADs in children and adolescents (FDA Public Health Advisory 2004). CHMP followed but focussed on newer ADs (emea 2005).

When considering studies performed to analyse the effects of ADs on suicidality, one should differentiate between several phenomena: suicidal thoughts, suicide attempts and (completed) suicides (Möller 2003). The literature on suicidology, including publications on predictor research, underline the fact that these phenomena can only represent to a limited degree a single basic concept –suicidality– even though they may appear sequentially in the rare patient who commits suicide. The risk factors for the individual phenomena are not wholly consistent. For example, simple sociodemographic data such as age and sex are of different relevance for suicide attempts and suicides: women and younger people have a greater risk of attempted suicide, whereas men and older people are more likely to commit suicide (Möller 2003). There are also findings indicating that ADs might have a different, even opposing influence on different phenomena of suicidality (Möller 2006a, 2006b). For example, the risk for suicide attempts might increase while the risk for completed suicide might decrease. Given this background, it does not appear meaningful to assess suicidal phenomena as an outcome, by using a quasi ordinal scale which ranks suicide at

the upper, suicidal thoughts at the lower end, with suicide attempts in between.

Thus, when analysing the effects of AD on suicidality the differentiation between at least some of the different phenomena of suicidality, e.g. suicidal ideation, suicide attempt, suicide, should be considered. Furthermore, attempts should be made to disentangle drug effects on suicidality itself from effects on drive, auto-aggression and impulsive behaviour, which can themselves influence suicidal behaviour. Finally, major predictors/risk factors for suicidality should be taken into account.

The results of randomised controlled trials, especially when placebo controlled, would seem to be the best basis for making statements about the suicide risk of ADs. However, there is only a low rate of suicidal behaviour in these studies, partly due to selection against patients with an expressed risk. Suicidal ideation is somewhat more frequent and therefore differences between two treatment groups are more likely to become apparent. Generally, the results of such control group studies have to be evaluated critically under consideration of the methodological pitfalls inherent in the design of such trials. For example, most studies do not include patients with high suicidality and therefore do not provide data for the most relevant risk groups. The opposite is true: special risk conditions such as comorbidity, including comorbidity with accentuated personality traits, or even personality disorders, are mostly exclusion criteria in such trials, especially in phase III studies. These comorbidity conditions can increase the risk of suicidality itself, either

directly through increased impulsivity or via paradoxical drug effects. The exclusion of suicidal patients and patients with special risks lowers the basal rate of suicidal phenomena, and this reduces the likelihood of detecting a difference in suicidal phenomena between the experimental groups. Furthermore, doctors pay careful attention to the early recognition of suicidal crises and intervene early in such cases, e.g. with additional medication or psychotherapeutic approaches, which also significantly reduces the chance to delineate a drug effect on suicidal behaviour. It should also be considered that any drug effects on suicidal behaviour might be of such a small size that they do not reach statistical significance in a trial powered, like all phase III studies, for the primary efficacy criterion of an AD trial, i.e. the reduction of depressive symptoms and not for detecting differences in suicidal ideation or suicidal behaviour.

Additional methods of obtaining evidence are thereafter required in order to obtain at least a complementary view; these include different kinds of epidemiological analyses, naturalistic follow-up studies, evaluation of complex interventions and also clinical experience with single cases. However, the specific limitations of each of these approaches have to be carefully considered.

Several pooled analyses comparing industry datasets of individual ADs, mostly SSRIs, demonstrated a greater average reduction of the suicidal thoughts score with SSRIs, as well as comparator drugs like TCAs, compared to placebo. In addition, the categories 'worsening of

pre-existing suicidal thoughts' or 'new emergence of suicidal thoughts' were less frequent in the SSRI or TCA groups than in the placebo groups. These generally found no increased risk of suicidal behaviour. Several meta-analyses on large datasets of novel ADs from national drug authorities which took the suicide attempt rate or suicide rate as the outcome criterion failed to demonstrate an increased risk of suicidal behaviour during treatment with SSRIs or ADs in general. Only the meta-analysis by Fergusson et al (2005) based on a dataset from a Cochrane register, found a significantly increased risk of suicide attempts for SSRIs compared to placebo, but not different from TCAs. Apparently, age plays an important role, as was demonstrated in the very comprehensive and methodologically highly sophisticated meta-analysis, which had been performed in the context of the respective FDA memorandum (FDA Public Health Advisory 2004). Younger adults (and children) appear to have an increased risk for suicidality in general and suicidal behaviour in particular under treatment with ADs. This levels out at the age of about 25–30 for suicidality and at the age of about 40 for suicidal behaviour, whereupon the risk is even reduced. This fits the respective findings from child/adolescent psychiatry well. A meta-analysis by the FDA of the AD studies in children or adolescents found an increase of suicidal thoughts and suicide attempts but not suicide (FDA Public Health Advisory 2004, Hammad et al 2006). The FDA stated that this does not appear to be specific to the SSRIs.

Pharmacoepidemiological studies that applied sophisticated statistical methods to investigate the association between the prescription risks for TCAs/SSRIs and suicide rates generally found no increased risk of suicide with ADs in general, and in particular no increase with SSRIs. The opposite is true: they generally found that a higher prescription rate of ADs, mostly SSRIs, was associated with a reduction of suicide rate. Thus if SSRIs or ADs in general do have a suicidality-inducing effect, this does not appear to translate into an increased risk of suicide; the opposite is the case, i.e. an increased prescription of ADs, preferentially SSRIs, generally leads to a reduction of suicide risk.

It is difficult to summarise the somewhat inconsistent results of the case-control and other types of clinical cohort studies. Relevant confounders like differential prescribing to patients perceived to be sicker and/or at greater risk of suicidal behaviour were not taken into account in all of these studies. When they were considered in the statistical analysis, any indications of greater risk associated with SSRIs or ADs in general could no longer be demonstrated or their size was reduced. Altogether, these data have to be interpreted very carefully and cannot be seen as proof in one or the other direction.

The issue of differences in the fatal toxicity of ADs is of relevance for the discussions about potential harmful effects of ADs in terms of suicidality. There is clear evidence that most modern ADs, especially the SSRIs, have a lower fatal toxicity risk than the TCAs when a patient uses them to attempt suicide. In everyday

clinical practice, the discussion about the possible risks of the SSRIs or ADs in general should not result in clinicians forgetting the benefits of these drugs, especially their lower fatal toxicity profile. This is a great advantage, especially in patients with severe suicidality where the choice of a less toxic AD helps to reduce the risk of fatality if the patient should misuse the AD for a suicide attempt.

## Conclusion

Taking into consideration this principal risk of ADs inducing suicidality, it should not be forgotten that the symptoms of the acute depressive episode and the risk of relapse (Volz et al 2006) require an effective drug treatment that simultaneously reduces suicidal thoughts. An overcritical position which places much more importance on the risk of inducing suicidality than on the efficacy of ADs (Kirsch et al. 2002) should be avoided. One should remember that psychosocial interventions, which are often suggested as an alternative, might be ineffective under certain circumstances or even induce suicidality themselves (Möller 2003). Short-term (Möller 2006a) and especially long-term data underline the beneficial effects of ADs on suicidality and suicidal behaviour (Angst et al 2005).

Of course, particularly at the start of treatment patients are often labile and it is theoretically possible that in single cases ADs, probably depending on their specific pharmacological and pharmacodynamic characteristics and in interaction with a patient's special predisposing characteristics such as personality

traits, comorbidity etc., can induce or enhance suicidal thoughts or even reduce the threshold level for attempting or committing suicide. It is a question of good clinical practice to monitor every patient carefully, especially at the start of a drug treatment, and to try to avoid any kind of risk. In case of agitation, akathisia, sleep disturbances or other symptoms or drug side effects that may potentially induce or enhance suicidality, a sedating or sleep-inducing comedication should be administered. It is also of greatest importance to offer the patient substantial supportive

psychotherapy. Finally, it should not be forgotten that depressive symptoms and suicidal thoughts can fluctuate over the course of a day or over longer time periods. It is often difficult to follow these fluctuations carefully enough on an out-patient basis, so that inpatient treatment might be a better option for patients at an especially high risk. Treatment with ADs under inpatient conditions seems to be quite safe in terms of emergence or worsening of suicidality (Möller & WPA Section on Pharmacopsychiatry 2008, Tandon et al 2008).

## References

- Angst J, Angst F, Gerber-Werder R, Gamma A (2005). Suicide in 406 mood-disorder patients with and without long-term medication: a 40 to 44 years' follow-up. *Arch Suicide Res* 9:279–300
- emea (2005). European Medicines Agency finalises review of antidepressants in children and adolescents. [www.emea.eu.int/pdfs/human/press/pr/12891805en.pdf](http://www.emea.eu.int/pdfs/human/press/pr/12891805en.pdf)
- FDA Public Health Advisory (2004). Suicidality in children and adolescents being treated with antidepressant medications. [www.fda.gov/cder/drug/antidepressants/SSRIPHA200410.htm](http://www.fda.gov/cder/drug/antidepressants/SSRIPHA200410.htm)
- Fergusson D, Doucette S, Glass KC, Shapiro S, Healy D, Hebert P (2005). Association between suicide attempts and selective serotonin reuptake inhibitors: systematic review of randomised controlled trials. *British Medical Journal* 330:396
- Hammad TA, Laughren T, Racosin J (2006). Suicidality in pediatric patients treated with antidepressant drugs. *Arch Gen Psychiatry* 63:332–339
- Kahn RS, Fleischhacker WW, Boter H, Davidson M, Vergouwe Y, Keet IP et al (2008). Effectiveness of antipsychotic drugs in first-episode schizophrenia and schizophreniform disorder: an open randomised clinical trial. *Lancet* 371:1085–1097
- Kapur S, Remington G (2001). Atypical antipsychotics: new directions and new challenges in the treatment of schizophrenia. *Annu Rev Med* 52:503–517
- Kirsch I, Moore TJ, Scoboria A, Nicholls SS (2002). *The emperor's new drugs: an analysis of antidepressant medication data submitted to the US Food and Drug Administration. Prevention and treatment*. Article 23. Posted 15 Jul 2002. [www.journals.apa.org/prevention/volume5/pre0050023a.html](http://www.journals.apa.org/prevention/volume5/pre0050023a.html). 5.
- Lieberman JA, Stroup TS, McEvoy JP, Swartz MS, Rosenheck RA, Perkins DO et al (2005). Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 353:1209–1223
- Möller HJ (2000). Definition, psychopharmacological basis and clinical evaluation of novel/atypical neuroleptics: methodological issues and clinical consequences. *World J Biol Psychiatry* 1:75–91

- Möller HJ (2003). Suicide, suicidality and suicide prevention in affective disorders. *Acta Psychiatrica Scandinavica Supplementum* 418:73–80
- Möller HJ (2004). SSRIs: Are the accusations justified? *World J Biol Psychiatry* 5:174–175
- Möller HJ (2006a). Evidence for beneficial effects of antidepressants on suicidality in depressive patients: A systematic review. *European Archives of Psychiatry and Clinical Neuroscience* 256: 329–343
- Möller HJ (2006b). Is there evidence for negative effects of antidepressants on suicidality in depressive patients? A systematic review. *European Archives of Psychiatry and Clinical Neuroscience* 256: 476–496
- Möller HJ (2008a). Do effectiveness (“real world”) studies on antipsychotics tell us the real truth? *Eur Arch Psychiatry Clin Neurosci* 258:257–270
- Möller HJ, WPA Section on Pharmacopsychiatry (2008). Do SSRIs or antidepressants in general increase suicidality? *Eur Arch Psychiatry Clin Neurosci* 258(Suppl 3):3–23
- Schooler N (2007). The efficacy and safety of conventional and atypical antipsychotics in first-episode schizophrenia: A review of the literature. *Clin Schizophr Relat Psychosis* 1:27–42
- Tandon R, Targum SD, Nasrallah HA, Ross R. 2006. Strategies for maximizing clinical effectiveness in the treatment of schizophrenia. *J Psychiatr Pract* 12: 348–363
- Tandon R, Belmaker RH, Gattaz WF, Lopez-Ibor JJ, Jr, Okasha A, Singh B et al (2008). World Psychiatric Association Pharmacopsychiatry Section statement on comparative effectiveness of antipsychotics in the treatment of schizophrenia. *Schizophr Res* 100:20–38)
- Volz HP, Baghai TC, Möller HJ (2006). Drug treatment of depression in the 2000s – an overview of achievements in the last ten years and future possibilities. *World J Biol Psychiatry* 7:198–222
- 

**Hans-Juergen Möller**, Professor of Psychiatry, Chairman of the Department of Psychiatry, Ludwig-Maximilian University, Nussbaumstrasse 7, 80 336 Munich, Germany  
**E-mail:** hans-juergen.moeller@med.uni-muenchen.de



# **Psycho-Oncology**



# **New Frontiers and Challenges of Psychiatry in Oncology and Palliative Care**

---

**Luigi Grassi, Michelle Riba**

Section on Psycho-Oncology and Palliative Care, World Psychiatric Association

## **Introduction**

Throughout the world, cancer is one of the most prevalent medical disorders . It is estimated that the incidence of cancer will increase by 50% by the year 2020, with 16 million new cases in that year. At the same time, extensive screening campaigns and earlier diagnoses have increased survival, with several million people being cured or living with cancer for many years (<http://www.who.int/cancer/en/>).

In this context, evaluating and understanding the multiple psychosocial aspects and concomitants of cancer and its treatment has become a mandatory part of oncology and palliative care. Although the psychosocial dimensions of cancer have been explored in the literature since the 1950s, it is only over the past 25 years that this area has de-

veloped into the specific subspecialty of psycho-oncology (Holland 2002).

Psycho-oncology addresses a range of psychosocial, behavioral, spiritual and existential dimensions involved in the diagnosis and treatment of cancer. The aim of this integrated care is that all cancer patients and their families receive optimal psycho-social care at all stages of disease and survivorship ([www.worldpsychiatricassociation/sections/oncology](http://www.worldpsychiatricassociation/sections/oncology); [www.ipos-society.org](http://www.ipos-society.org)).

Due to the multidisciplinary nature of psycho-oncology, many new opportunities are becoming apparent, both in terms of research and clinical care, for mental health professionals working in the field of medicine and specifically oncology and palliative care (Grassi et al 2005). The area is really vast, from the mental health implications in prevention and screening (e.g. genetic counselling, high-risk behavior); to psychoneuroimmunol-

ogy; from family implications and grief (including traumatic grief); to cancer health professionals burnout (Chaturvedi & Venkateswaran 2008) (table 1).

In this chapter we will present the most innovative topics of cancer and palliative care in which psychiatry is involved, namely the area of screening of psychosocial morbidity; the debated theme of psychiatric nosology and its application in oncology; the specific role of psychiatry in palliative care; the implications of psycho-oncology in mentally ill patients; and the new trend in psychopharmacology applied to oncology and palliative care.

## Psychosocial morbidity in cancer: screening of emotional distress

A noteworthy improvement in the psychosocial approach to cancer which has recently taken place in many countries has been to create a standard for the screening of emotional distress in oncology settings. Unlike other areas of medicine, cancer clinicians seem to be aware of the importance of having a clear vision of their patients' psychological status by monitoring it through comprehensive, even if simple, methods. In 1997, within the National Comprehensive Cancer Network (NCCN) the panel on Distress Man-

**Table 1.** Examples of innovative areas regarding the involvement of psychiatry and mental health in oncology and palliative care.

---

### Biological assessment

- Neuroimaging in oncology
- Biological markers of depression (e.g., genetic polymorphism)

### Psychiatric assessment

- Improvement of nosological systems relative to psychiatric diagnosis and psychosocial morbidity
- Complicated grief and consensus on the different phenomenological conditions

### Optimal care

- Screening campaigns and early detection of cancer and emotional distress among all the segments of the populations, including mentally ill people
- Combined intervention (biopsychosocial) as a right of all cancer patients and their families

### Psychoneuroimmunology

- Cytokines and depression
- Immunity and stress-related biological changes associated with cancer prognosis
- Psychobiological correlates of complicated bereavement

### Psychopharmacology

- Effects (including side-effects) and efficacy of psychotropic drugs in psychosocial disorders
  - Effects of psychotropic drugs on non-psychiatric dimensions (e.g. pain)
  - Interaction of psychotropic drugs with chemotherapeutic agents or other drugs (e.g. hormones, aromatase inhibitors)
-

agement developed the first set of clinical practice standards and guidelines for psycho-social distress. Updates have been made almost every year (NCCN Clinical Practice Guidelines in Oncology™ Distress Management VI 2008) ([http://www.nccn.org/professionals/physician\\_gls/f\\_guidelines.asp](http://www.nccn.org/professionals/physician_gls/f_guidelines.asp))

According to the NCCN, distress has been very broadly defined as “a multifactorial, unpleasant, emotional experience of a psychological (cognitive, behavioural, emotional), social and/or spiritual nature that may interfere with the patient’s ability to cope effectively with cancer, its physical symptoms and its treatment. Distress extends along a continuum, ranging from common normal feelings of vulnerability, sadness and fears to problems that can become disabling, such as depression, anxiety, panic, social isolation and existential and spiritual crisis”.

The screening instrument for distress, the Distress Thermometer (DT), developed by the NCCN Panel and the accompanying ‘Problem List’ represents a useful tool to identify the causes of patients’ distress (psychological, social, physical, spiritual).

Over the last few years, a number of studies have been conducted throughout the world on the DT with positive effects on both recognition of distress and referral of cancer patients for counselling or mental health intervention. It has been suggested that distress should be routinely investigated as the sixth “vital sign” alongside with temperature, blood pressure, pulse, respiratory rate, and pain, for

early recognition of emotional problems (Holland & Bultz 2007).

This screening policy can also make referral more specific, since it has been demonstrated that routine psychological intervention is not helpful for patients with low or no distress, while, at the same time, patients with psychosocial problems or frank psychiatric morbidity are frequently not recognized as such and not properly referred for intervention. The use of the DT may also help health care professionals in becoming more aware and acquainted with the concept of emotional distress and able to provide open communication regarding possible psychological, spiritual, and interpersonal problems that their patients may report. However, it should be clarified that ultra-short methods have to be considered only as a first-stage screen to rule out cases of maladaptive response or depression and cannot be used alone to make a diagnosis. It is important to receive further information gathered only through more structured interviews and clinical examination (Mitchell 2007).

### **ICD and DSM psychiatric nosological systems: the need for further conceptualization in oncology and palliative care**

A second challenging area is represented by the classification of psychosocial and psychiatric disorders secondary to cancer. By using the current nosological system to classify mental disorders, such as the International Classification of Disease (10th edition) and the Diagnos-

tic and Statistical Manual of Mental Disorders (IV edition), several studies have shown that 30–40% of cancer patients meet the criteria for a psychiatric diagnosis, mainly adjustment disorders, mood disorders (e.g. major depression), anxiety disorders, somatoform disorders and sexual disorders (see Grassi et al 2005 for a review).

Some problems have been raised however in the usefulness of rigid categorical criteria in oncology, especially when the criteria appear difficult to follow or not applicable in clinical practice.

### *Depressive disorders and adjustment disorders*

With regard to depressive disorders, many symptoms, such as loss of appetite, loss of weight, insomnia, loss of interest and cognitive impairment, fatigue and loss of energy may be a consequence of cancer or cancer treatment rather than depression. For the last 25 years, the debate regarding the need to modify the DSM criteria of major depression when applied to cancer, or medical illness in general, has increased with different opinions and conceptualizations and several proposals suggested. Some of the considerations: include all the symptoms irrespective of the fact that these symptoms may or may not be attributable to cancer (inclusive approach); replace somatic symptoms with cognitive-affective items (substitute approach); add some new affective symptoms to the original criteria (alternative approach); exclude somatic symptoms and use only affective symptoms to make the diagnosis (exclusive approach) ([\[als/meetings-ed/core-curriculum/core-curriculum-pres.htm#\]\(http://www.ipos-society.org/professionals/meetings-ed/core-curriculum/core-curriculum-pres.htm#\)\). An agreement on which method is the most specific has not been reached. This problem is particularly complex in patients with advanced stages of cancer, where the need to have a clear-cut framework to assess depression has helped develop guidelines to be followed, thereby augmenting psychiatric nosological systems. The European Palliative Care Collaborative \(EPCRC\) \(<http://www.epcrc.org/>\), funded by the European Union, is about to develop a set of guidelines for the assessment of depression in patients with advanced stages of illness and in palliative care settings. In this respect, the DSM-IV distinction between minor depression, mixed anxiety-depressive disorders, and brief recurrent depressive episodes are not particularly useful in cancer and palliative care settings.](http://www.ipos-society.org/profession-</a></p>
</div>
<div data-bbox=)

Adjustment disorders with depressed or mixed features (anxiety and depression) are characterized by diagnostic criteria that are too vague and imprecise to have any clinical utility.

### *Psychological factors influencing a medical condition*

Lastly, a large area of emotional reactions and other psychosocial factors or dimensions are neglected or oversimplified by both the ICD-10 and the DSM-IV. The former reviews this area in Chapter 21 under the heading “Factors influencing health status and contact with health system” (code Z00-Z99), while the latter dedicates a short summary to this vast area as “Psychological factors affecting a medical condition” under the chap-

ter “Other conditions that may be a focus of clinical attention”. According to the DSM-IV, psychological or behavioral factors that could influence cancer include Axis I disorders, Axis II disorders, psychological symptoms or personality traits that do not meet the full criteria for a specific mental disorder, maladaptive health behaviors, or physiological responses to environmental or social stressors. From the DSM-IV criteria, psychological factors should have a clinically significant effect on the course or outcome of cancer or place the individual at a significantly higher risk for an adverse outcome.

Some problems arise in this classification, however. First, there is an overlapping between psychiatric diagnoses and psychosocial dimensions (Axis I, personality traits and maladaptive coping). Furthermore, no specific explanation is given about how to assess the dimensions mentioned, indicating that more detailed examination of the different psychosocial dimensions involved in medically ill patient is needed. Lastly, it is not always possible to demonstrate direct causality or the mechanisms underlying the relationship between psychological factors and cancer. A different approach, the Diagnostic Criteria for Psychosomatic Research (DCPR) (Fava et al 1995), has been proposed with the aim of evaluating those psychosocial dimensions (e.g., health anxiety, demoralization, alexithymia, thanatophobia), that are not recognized by the DSM system. In fact 30% of cancer patients not receiving a formal DSM-IV psychiatric diagnosis screen positive to many psychosocial dimensions according to the DCPR (Grassi et al 2007).

### **Psychiatry in palliative care: from searching for meaning to the problem of assisted suicide in palliative care**

Spirituality has recently attracted the interest of mental health professionals with a clear awareness that there is need for spiritual meaning for patients (D’Souza & George 2006). For many years, attention to this theme has been focused in cancer patients, indicating the important role of spirituality in palliative care. The impact of the illness and the treatment, the person’s spiritual level the role of both religious affiliation and faith, and the whole set of personal values and meanings of existence have been the object of intense research in oncology and palliative care (Stefanek et al 2005).

Several significant issues emerge regarding this specific area and the importance of helping patients at the end of life to maintain their dignity and to die with dignity (Chochinov 2006). Starting from these premises, spirituality has been shown to protect cancer patients from emotional disorders, especially depression and hopelessness and, on these bases, new approaches have been developed in the area of psychotherapy for patients at the end of life. The model of dignity therapy developed by Chochinov et al (2005) represents an important example of the way in which the end of life may open a significant time for intimacy and close relationship. Dignity therapy has shown the ability to facilitate helping patients by heightening their sense of dignity and of purpose; by helping them to prepare for death; and by helping fam-

ily members during their time of grief. From a different perspective, relying on Victor Frankel's logotherapy, Breitbart et al (2004) have developed a model related to spirituality and meaning-centered psychotherapy. This therapy includes individual or group sessions with patients in an advanced phase of illness and favors the discussion of existential themes in terms of patients' awareness of death and search for meaning and practitioners' promotion of personal agency and responsibility as patients face life-and-death issues.

Another related aspect concerning the role of psychiatry in palliative care regards the problem of physician assisted suicide and euthanasia. Without going into the details of this extremely vast subject, the problem of the patient's request for death and the direct intervention of health care providers (causing the patient's death, as in euthanasia, or providing the patient tools to take his/her own life, as in assisted suicide, PAS) has evident psychiatric implications. From one side, it has been shown that when terminally ill patients receive appropriate and comprehensive care, requests for hastened death seem to be rare. On the other hand, between 6–18% of terminally ill patients express a higher desire for hastened death. Most studies indicate that lower religiosity, reduced functional status, greater physical distress (including pain) and major depression are the most frequent variables associated with a request for PAS in those cases.

These aspects introduce the theme of the role of psychiatry in euthanasia and PAS. The experience of the countries

where euthanasia and/or assisted suicide are not illegal (Belgium, Switzerland, Netherlands, the State of Oregon in the US) have brought attention to the fact that the main task of the psychiatrist is in assessing the competence of the patient, and understanding the validity of the request (usually motivated by the absence of any hope of improvement, pain or other physical suffering, being a burden to others, loss of dignity, and unbearable mental suffering) (Naudts et al 2006). This opens new challenges in the profession and in the responsibilities of the psychiatrist called to evaluate the request of a person who asks to have his/her own death hastened.

### **Psychiatry and oncology: the role for vulnerable sectors of the population**

Significant data are also accumulating in the area concerning the risk of cancer in patients with primary mental disorders. Data regarding the risk of cancer among patients with schizophrenia are still not complete, but it has been demonstrated that the incidence of certain types of cancer (e.g. breast, colon) is higher among patients with schizophrenia than the general population. Bipolar disorders seem not to increase the risk for cancer with no significant difference with respect to the general population. Mortality for natural causes, including cancer, is also higher among patients with schizophrenia and schizoaffective disorders. Regarding affective disorders, many studies note that patients with clinical depression are at higher risk of developing cancer during

their life. Recent data obtained through prospective studies seem to indicate that basic core depressive symptoms, like vital exhaustion, may increase the risk of cancer. Within the population-based National Health and Nutrition Examination Survey (NHANES) I Epidemiologic Follow-up Study involving 10,025 participants, Onilio et al (2006) have shown a higher risk of incidence and mortality for cancer among depressed individuals.

A different, although related perspective regards the role of psychosocial morbidity in influencing the prognosis of cancer patients. While debated in the past with contradictory results, the influence of psychological factors in increasing the risk of recurrence of cancer and in reducing survival is more defined today. A number of methodologically sound prospective studies have recently shown that depression (including hopelessness and “minor” depressive states) are independent factors related to poorer prognosis among cancer patients. Psychoneuroendocrine and psychoimmunological mechanisms are still considered the most significant in explaining the relationships between psychological factors and outcome of cancer (Reiche et al 2005, Ben-Eliyahu et al 2007)

A further important area pertains to the cross-cultural problems in mental health and physical health determined by multi-ethnic and multicultural societies. Since it is important for psychiatry to understand and to treat the suffering of populations of other cultures (Riba 2005), this is of extreme relevance in cancer. Even in high-income countries it seems that patients with severe mental disorders receive suboptimal treatment for cancer;

data on low-income countries are not known, in spite of the high incidence of cancer in those parts of the world.

### **Psychopharmacology: new applications of psychotropic drugs in oncology and palliative care**

The area of cancer has permitted psychiatrists and mental health researchers to better understand the effects of certain psychotropic drugs and to verify the efficacy of other medications that are not routinely used in psychiatry.

Regarding the first issue, psychopharmacological data have accumulated on the effects of some drugs, especially SSRIs, NaSSA and NARIs in acting not only as antidepressants but also in improving several physical symptoms secondary to cancer or cancer treatment. The role of several drugs in reducing hot-flashes caused by treatment-induced menopause or the use of estrogen modulators (e.g. tamoxifen) in breast cancer patients or androgen-deprivation therapy in prostate cancer patients has been shown in several studies. Several data have also accumulated on the efficacy of ADs (e.g. venlafaxine, duloxetine, mirtazapine, paroxetine) in working as adjuvant drugs in the treatment of hot-flashes and pruritus among cancer patients, independent of the action on mood (Grassi & Riba 2008).

As far as the second issue is concerned, data on the use of psychostimulants, such as dextroamphetamine, methylphenidate, and pemoline, in low doses for the treatment of depressive symptoms and fa-

tigue in terminally ill patients have been presented (Breitbart and Alici-Evcimen, 2007). Because of the rapid onset of action, and the positive effect on attention, concentration, psychomotor activity, appetite, weakness and fatigue and opioid-induced sedation these drugs can be fully considered within the armamentarium of psychiatry in palliative care. Recently, modafinil, a memory-improving and mood-brightening drug, has been used to counterbalance fatigue in cancer patients and to treat depression, as a possible alternative to classic psychostimulants, for its low potential abuse, and its relatively safer side-effect profile (Grassi & Riba 2008).

A third area regards the role of new antipsychotics in the treatment of delirium. While haloperidol is still considered the gold standard by many guidelines, many reports are accumulating about the safety of the most recent drugs, including risperidone, quetiapine, olanzapine and aripiprazole. The effects of these compounds in delirium are increasing our knowledge on the mechanisms involved in confusional states as well as on the characteristics of atypical antipsychotics. Since delirium is a common disorder in oncology and palliative care, the possibility to have safer drugs to treat this clinical condition is extremely important for both patients and their families. Again, the role of atypical antipsychotics in terminal sedation is also an area to be explored. This area merits further research (Seitz et al 2007).

## Conclusions

On the basis of what has been delineated, it is clear that psychiatry has an impor-

tant and specific role in the oncology and palliative care. Cancer and its treatment have a tremendous psychological impact and is accompanied by a series of dramatic changes that involve the physical, the emotional, the spiritual, and the interpersonal and social dimensions of the person. This indicates the need for the integration of psychiatry among the disciplines that take care of cancer patients and their families. In the last several decades many new areas have emerged within psycho-oncology in which psychiatry has provided a significant contribution, as we have summarized in this chapter.

First, the need for the improvement of assessment methods (e.g. psychometric instruments, clinical interviews) and for a better conceptualization of psychosocial morbidity in oncology and palliative care represents one of the many areas to which psychiatry should concentrate more attention. Critiques to the rigid application of categorical systems in oncology and palliative care, should be carefully considered by the extensors of the new and revised versions of the ICD and DSM. Current psychiatric disease classifications and diagnostic criteria have important limitations when transferred to medical settings, preventing cancer patients in need of help to receive proper treatment.

Second, in palliative care, many frontiers are open to psychiatry. The challenging area of distinguishing depression from demoralization, hopelessness and "spiritual" pain, the problem of "rational" versus "irrational" (non compos mentis) suicide, the role of new psychotherapeutic strategies at the end of life, are only

some of the aspects involving psychiatry and mental health.

Third, the involvement of mental health in the campaign regarding screening of cancer and improving risk factors, habits and life-style is something not to be delayed any longer. Million of people are diagnosed with cancer very year and a percentage of those are people with mental illness. Mentally ill patients are often marginalized and, especially in low income countries, do not have full access to clinical services and proper treatment. On the other hand, data indicating that patients with depressive disorders and schizophrenia are at a higher risk of developing cancer represent a further issue to be taken into account.

Lastly, many new effects of psychotropic drugs have emerged thanks to their use and application in the context of oncology and palliative care. The efficacy of many compounds with antidepressant properties in the treatment of other symptoms secondary to cancer (e.g. pain, hot-flashes) is a fascinating area to be further developed. New data are now available regarding the interaction of psychotropic drugs with other compounds, such as tamoxifen. The use of atypical antipsy-

chotics in delirium is also a further area of research and clinical application.

For these reasons, a closer interaction between psychiatrists with expertise in oncology and palliative care and other health professionals (e.g. clinical psychologists, nurses, social workers, rehabilitation professionals) involved in the care of cancer patients and their families is extremely important for a further development of psycho-oncology.

According to this, there is strong evidence that providing psycho-oncology services to patients and their families as part of standard regular care reduces the distress and psycho-social morbidity associated with cancer, and fosters a better quality of life during and after cancer treatment. Since quality of life is an important patient-centered indicator of the quality of care in medicine, including psychiatry, improving it through psycho-oncology is an important goal. From a different perspective, the quality of death is also an extremely important area in which psychiatry and mental health, integrated in palliative care, may play a role both for the individual at the end of their life and for the caregivers that have to deal with the difficult task of grief and bereavement.

## References

- Ben-Eliyahu S, Page GG, Schleifer SJ (2007). Stress, NK cells and cancer: Still a promissory note. *Brain Behav Immun* 21:881–887
- Breitbart W, Alici-Evcimen Y (2007). Update on psychotropic medications for cancer-related fatigue. *J Natl Compr Canc Netw* 5:1081–1091
- Breitbart W, Gibson C, Poppito SR, Berg A (2004). Psychotherapeutic interventions at the end of life: a focus on meaning and spirituality. *Can J Psychiatry* 49:366–372
- Chaturvedi SK, Venkateswaran C (2008). New research in psychooncology. *Curr Opin Psychiatry* 21:206–210

- Chochinov HM, Hack T, Hassard T, Kristjanson LJ, McClement S, Harlos M (2005). Dignity therapy: a novel psychotherapeutic intervention for patients near the end of life. *J Clin Oncol* 20:5520–5525
- Chochinov HM (2006). Dying, dignity, and new horizons in palliative end-of-life care. *CA Cancer J Clin* 56:84–103
- D'Souza R, George K (2006). Spirituality, religion and psychiatry: its application to clinical practice. *Australas Psychiatry* 14:408–412
- Fava GA, Freyberger HJ, Bech P, Christodoulou G, Sensky T, Theorell T et al (1995). Diagnostic criteria for use in psychosomatic research. *Psychother Psychosom* 63:1–8
- Grassi L, Holland JC, Johansen C, Koch U, Fawzy F (2005). Psychiatric concomitants of cancer, screening procedures, and training of health care professionals in oncology: the paradigms of psycho-oncology in the psychiatry field. In: Christodoulou GN (ed). *Advances in Psychiatry*. Vol II. World Psychiatric Association (pp 59–66)
- Grassi L, Biancosino B, Marmai L, Rossi E, Sabato S (2007). Psychological Factors Affecting Oncology Conditions. In: Porcelli P, Sonino N eds) *Psychological factors affecting medical conditions. A proposal for new classification for DSM-V*. Basel, Karger Press, 2007
- Grassi L, Riba M. Depressive disorders in cancer. In: Riba M, Grassi L (eds) (2008). *Depressive disorders in physical illness - Module 2*. World Psychiatric Association and International Committee for Prevention and Treatment of Depression. Educational Program on Depressive Disorders (In press)
- Holland JC, Andersen B, Breitbart WS, Dabrowski M, Dudley MM, Fleishman S et al (2007). NCCN Distress management. *J Natl Compr Canc Netw* 5:66–98
- Holland JC, Bultz BD (2007). National comprehensive Cancer Network (NCCN). The NCCN guideline for distress management: a case for making distress the sixth vital sign. *J Natl Compr Canc Netw* 5:3–7
- Holland JC (2002). History of psycho-oncology: overcoming attitudinal and conceptual barriers. *Psychosom Med* 64:206–221
- Naudts K, Ducatelle C, Kovacs J, Laurens K, van den Eynde F, van Heeringen C (2006). Euthanasia: the role of the psychiatrist. *Br J Psychiatry* 188:405–409
- Onitilo AA, Nietert PJ, Egede LE (2006). Effect of depression on all-cause mortality in adults with cancer and differential effects by cancer site. *Gen Hosp Psychiatry* 28:396–402
- Reiche EM, Morimoto HK, Nunes SM (2005). Stress and depression-induced immune dysfunction: implications for the development and progression of cancer. *Int Rev Psychiatry* 17:515–527
- Riba M (2005). Presidential address. *Am J Psychiatry* 162:2040–2044
- Seitz DP, Gill SS, van Zyl LT (2007). Antipsychotics in the treatment of delirium: a systematic review. *J Clin Psychiatry* 68:11–21
- Stefanek M, McDonald PG, Hess SA (2005). Religion, spirituality and cancer: Current status and methodological challenges *Psycho-Oncology* 14:450–463

---

**Luigi Grassi**, Professor and Chair of Psychiatry, Section of Psychiatry, University of Ferrara, Corso Giovecca 203, 44 100 Ferrara, Italy  
**E-mail:** luigi.grassi@unife.it

# **Special Population Sectors**



# Assessment of Social and Emotional Wellbeing in Indigenous People

**Aleksandar Janca, Jane Ventouras,  
Victoria Burbank, Jonathan Laugharne**

Section on Measurement Instruments in Psychiatric Care, World Psychiatric Association

## Introduction

Poor social and emotional wellbeing (SEWB) within the Indigenous population is regarded as frequent, disabling and responsible for a massive socio-economic burden upon families, communities, and the Australian public (Hunter 2002). The current regimens of care for this population are often regarded as difficult and ineffective. Some recent research has been directed to the difficulties that arise in the identification and treatment of Australian Indigenous people with SEWB problems (Eley et al 2006). However, this literature needs to be further developed as there remain serious clinical difficulties and a dearth of diagnostic tools and treatment programs able to effectively address Indigenous SEWB problems.

The neglect of Indigenous populations' mental well being was highlighted by the World Health Organisation (WHO) in an international overview that revealed a limited and indeterminate literature about Indigenous mental health (Cohen 1999). WHO's focus upon mental illness

in its 2001 World Health Report (World Health Organisation 2001) emphasised the global need to promote mental health, prevent mental and neurological disorders, and ensure provision of appropriate care – with particular focus on vulnerable groups such as Indigenous peoples. Indigenous Australians are such a group; one about whom there is relatively little mental health related knowledge. The lack of epidemiological data on, and appropriate treatment for Indigenous mental illness was highlighted over a decade ago in “Ways Forward: The national consultancy report on Indigenous and Torres Strait Islander mental health” (Swan & Raphael 1995). The authors recommended that an Indigenous component be included in the “National Survey of Mental Health and Well Being” (Australian Bureau of Statistics 1997) being conducted at the time; however, a number of valid concerns –including the unavailability of an appropriate assessment method– led to the exclusion of this component from the final survey (Andrews et al 1999). A SEWB component was finally included

in the 2004–2005 “Australian Bureau of Statistics National Aboriginal and Torres Strait Islander Health Survey” (Australian Bureau of Statistics 2006). Preliminary results from this survey report feelings indicative of poor mental health in 7–9% of Indigenous Australians (Australian Bureau of Statistics 2006).

The Indigenous concept of SEWB is distinct from the Western concept of mental health. SEWB problems and mental illness problems do interact and influence each other; yet, Indigenous people believe those enduring good SEWB can still experience mental illness and, conversely, people with chronic mental illness can function at a high level with adequate support (Social Health Reference Group 2004). There is much to suggest that SEWB are dependent upon the health of the individual, family, and community (Burgess et al 2005, Hunter & Milroy, 2006). Health, including mental health, is governed by an individual’s or group’s ability to realise aspirations, to satisfy needs, and to cope with the environment, and should be considered in the context of economic, social, and emotional well being (World Health Organisation 2001). Indigenous people have been affected by displacement, forced assimilation, social and economic inequality, racism, and cultural and personal loss (Swan & Raphael 1995). It has been argued that SEWB problems and mental illness among Australia’s Indigenous populations can arise from experiences such as legislated removal of children, unresolved grief and loss, family breakdown, cultural dislocation and social disadvantage; resulting problems include self-harm, anxiety, de-

pression and psychotic disorders. Mental illness among Indigenous Australians is often associated with psychosocial issues such as substance abuse, which often exacerbate the problems of domestic violence and poverty (Brown 2001).

Kirmayer et al (2003) discussed the importance of social solutions to mental health problems amongst Canadian Aboriginals and described the “family and community as the primary locus of injury and source of restoration and renewal” in the prevention and treatment of mental health problems and promotion of mental health. In the Australian context, health professionals are increasingly recognising the implications of social, cultural and historical factors in the development and management of SEWB problems for Indigenous peoples (Brown 2001, Eley et al 2006 Hunter 1997, Vicary & Westerman 2004). A range of culturally-appropriate models and approaches have been proposed, such as generally encouraging the Indigenous expression of anger, sorrow, and shame (Brown 2001) and specifically blending Western and Indigenous psychologies and involving cultural consultants and/or an Indigenous reference group for cases in which the practitioner is non-Indigenous (Vicary & Westerman 2004).

### **Development of a culturally appropriate assessment approach to Indigenous SEWB**

The complexity of socio-cultural and historical factors causing and/or influencing the SEWB of Indigenous Australia means standard assessment tools do not provide sufficient insight into intricate function-

ing of SEWB in this population. The need for a culturally-specific assessment instrument was revealed over a decade ago when –as referred to above– the an Indigenous component was omitted from the “National Survey of Mental Health and Wellbeing” (Australian Bureau of Statistics 1997) because it was thought that the survey methods would not be acceptable to and the assessment procedure not culturally appropriate for evaluating SEWB problems in Indigenous Australians (Andrews et al 1999). Since this time, only one tool has been designed specifically for the Indigenous Australian population: “The Westerman Aboriginal Symptom Checklist – Youth (WASC-Y)” (Westerman 2003). While its production is commemorated it must be acknowledged that its validation is not documented, the tool itself is not easily accessed by potential users and –most importantly– the instrument is designed specifically to measure suicide risk in Indigenous youths and, while this is a crucial concern, tools to measure the spectrum of Indigenous SEWB problems are required (Kowal et al 2007).

The central objective of our work was to produce a tool specially designed for the assessment of SEWB problems in Indigenous Australians. It would be based on the knowledge of individuals with first-hand experience of Indigenous SEWB problems, and would only use health terminology familiar to this population. The result would be a culturally appropriate tool that is reliable, sensitive and suitable for collection of data in both clinical and research settings.

Having commenced in 1999, our work on the development of this instrument

has been both meticulous and comprehensive. It commenced with an exploration of the feasibility and appropriateness of the project. A number of personal consultations were held with Indigenous and non-Indigenous mental health workers in urban, remote and rural parts of Western Australia. These coincided with detailed presentations of the project’s objectives, method and expected outcomes to a number of senior Indigenous community leaders, including Pat Dodson. Similarly, we informed the World Health Organisation of our project as we acknowledged the importance placed on Indigenous mental health by this institution and the potential benefits our work could afford many Indigenous populations around the world.

An extensive literature review was then performed to collect information on assessing mental health problems in Indigenous Australians, including ways of conducting interviews and eliciting information on symptoms and signs with these patients (Brown 2001, Cawte 1972, Davidson 1995, Donovan & Spark 1997, Hunter 2002, Vicary & Andrews 2001, Westerman 2004). Importantly, the significance and ethical correctness of our work has been tracked throughout via the evaluation of the project with reference to the National Health and Medical Research Council’s guidelines for Indigenous health research (National Health and Medical Research Council 2003).

An Indigenous Reference Group was established prior to the commencement of any practical activities. This Committee was comprised of senior Indigenous leaders, members of the study sites communities participating in the study, and rep-

representatives of the Office of Aboriginal Health and Health Department of Western Australia. These individuals advised on the political, cultural, ethical and scientific aspects of the proposed method and its application in the field. The Group also helped to guide the research so that the many Indigenous perspectives collected ultimately drew together with the mental health paradigms that frame the project.

The study data was collected during ten open-ended key informant interviews (up to two hours in duration) and three focus group discussions. The sample consisted of males and females aged between 21 and 51 years who identified as Indigenous health and mental health professionals, Indigenous community members, Indigenous laypersons and Indigenous students from metropolitan, regional and remote areas of Western Australia. The collected data included opinions, attitudes, beliefs and experiences of Indigenous people with regard to their perception of mental health and mental disorders. From this material, we developed a glossary comprising a comprehensive list of definitions of terms, concepts, symptoms, signs and conditions important for understanding Indigenous SEWB. More than thirty definitions were established, ranging from Indigenous (e.g. Karung) to English-derived words (e.g. community). These terms were organised into an Indigenous Social and Emotional Wellbeing Glossary that specified a number of culture-specific terms and concepts. The array of these terms and concepts was then used as a guiding framework for the development and evaluation of an Indigenous SEWB assessment paradigm.

## **Proposal for an Indigenous mental health screening instrument**

The practical outcome of this extensive project is a 10-item screener for Indigenous SEWB related health and mental health issues entitled "Aboriginal Here and Now Assessment". Distantly analogous with the purpose of other mental health screening instruments, this tool aims to screen for the general spectrum of SEWB in a brief yet accurate format. The severity of the problem is assessed across 10 domains: (i) general feeling, (ii) physical health, (iii) anxiety, (iv) depression, (v) suicide risk, (vi) substance use, (vii) psychotic experiences, (viii) functioning, (ix) contextual issues and (x) resilience. Each domain is explored with here and now prompt words and/or their local equivalents (figure 1). The interviewer records the narrative comments and/or examples given by the respondent, and asks her/him to indicate the perceived severity of the problem using the visual and numerical rating scale given in the right margin of the instrument (figure 2). With this information and using his/her own clinical judgement, the interviewer then assigns a rating (0=no problem; 1=mild problem; 2=moderate problem; 3=severe problem) for that domain.

## **Comment**

The impact of Indigenous SEWB and mental illness problems extends beyond personal suffering: it has serious social and economic consequences for the family, community, and the wider Australian

**4. Depression**

	0	1	2	3
Feeling of grief, loss and despair; “sorry” feelings; “jealousing”				
Narrative: .....				
.....				
.....				

**Figure 1.** Example of a domain in the aboriginal here and now assessment screener.



**Figure 2.** Visual and numerical rating scale in the aboriginal here and now assessment screener.

society. Our work provides foundational knowledge for the improvement of mental health evaluation in Indigenous Australia, and is likely to inform assessment for similar groups internationally.

Central to our research has been our findings on the Indigenous concept of time and how its conflict with the Western perception dramatically hinders the accurate assessment and successful management of mental health problems in Indigenous patients. Unlike the Western Judeo-Christian concept of time –which is mono-durational and chronological– Indigenous Australians adopt a circular or cyclic model. In this understanding, time is seen as static with an individual at its centre and surrounded by concentric time circles upon which events are placed according to their relative importance to the individual and his/her community (Janca & Bullen 2003). Subse-

quently, Aboriginal people may not see the importance of being able to separate past and present on a longitudinal calendar axis but would rather use an event/time orientation framework.

The next project phase will involve the critical assessment of the Aboriginal Here and Now Assessment screener by key stake-holders. We anticipate seeking the advice of Indigenous community leaders and laypersons, and academics and (mental) health professionals, experts in Indigenous mental health matters (i.e. whether they be Indigenous or non-Indigenous). Their recommendations will be used to revise the instrument prior to its psychometric testing, which will be conducted in various settings in metropolitan, remote and rural parts of Australia and other countries with Indigenous populations. This international project will be carried in the

context of the plan of work of our WPA reference of WHO Collaborating Centre for Research and Training in Mental Health, Perth, Australia.

## References

- Andrews G, Hall W, Teeson M, Henderson S (1999). *The mental health of Australians*. Canberra, Commonwealth department of health and aged care, Mental Health Branch
- Australian bureau of statistics (1997). *National survey of mental health and wellbeing of adults*. Cat. No. 4327.0. Canberra, ABS
- Australian bureau of statistics (2006). *National aboriginal and torres strait islander health survey 2004–2005*. Cat. No. 4715.0. Canberra, ABS
- Bishop B, Colquhoun S, Johnson G (2005). Psychological Sense of Community: An Australian Aboriginal Experience. *Journal of Community Psychology* 34:1–7
- Brown R (2001). Australian Indigenous mental health. *Australian and New Zealand Journal of Mental Health Nursing* 10:33–41
- Burgess CP, Johnston FH, Bowman DM, Whitehead PJ (2005). Healthy country: Healthy people? Exploring the health benefits of indigenous natural resource management. *Australian and New Zealand Journal of Public Health* 29:117–122
- Caute J (1972). *Cruel, poor and brutal nations: The assessment of mental health in an Australian aboriginal community by short-stay psychiatric field team methods*. Honolulu, University of Hawaii Press
- Cohen A (1999). *The mental health of indigenous peoples: an international overview*. Geneva, World Health Organisation, Department of Mental Health
- Davidson G (2005). Cognitive assessment of indigenous Australians: towards a multiaxial model. *Australian Psychologist* 30:30–34
- Donovan R, Spark R (1997). Towards guidelines for survey research in remote Aboriginal communities. *Australian and New Zealand Journal of Public Health* 21:89–95
- Eley D, Hunter K, Young L, Baker P, Hunter E, Hannah D (2006). Tools and methodologies for investigating the mental health needs of Indigenous patients: it's about communication. *Australasian Psychiatry* 14:33–37
- Hunter E (1997). Double talk: changing and conflicting constructions of indigenous mental health. *Australian and New Zealand Journal of Psychiatry* 31:820–827
- Hunter E (2002). “Best intentions” lives on: untoward health outcomes of some contemporary initiatives in Indigenous affairs. *Australian and New Zealand Journal of Psychiatry* 36:575–584
- Hunter E, Milroy H (2006). Aboriginal and Torres Strait Islander Suicide in Context. *Archives of Suicide Research* 10:141–157
- Janca A, Bullen C (2003). The Aboriginal concept of time and its mental health implications. *Australasian Psychiatry* 11:S40–S44
- Kirmayer L, Simpson C, Cargo M (2003). Healing traditions, culture, community and mental health promotion with Canadian Aboriginal peoples. *Australasian Psychiatry* 11:S15–S21

- Kowal E, Gunthorpe W, Bailie R (2007). Measuring emotional and social wellbeing in Aboriginal and Torres Strait Islander populations: an analysis of a Negative Life Events Scale. *International Journal of Equity in Health* 6:18
- National health and medical research council (2003). *Values and ethics: guidelines for ethical conduct in aboriginal and torres strait islander health research*. Canberra, NHMRC
- Swan P, Raphael B (1995). *Ways forward: national consultancy report on Aboriginal and Torres Strait Islander mental health*. Canberra, Australian Govt. Publishing Service
- Vicary D, Andrews H (2001). A model of therapeutic intervention with indigenous Australians. *Australian and New Zealand Journal of Public Health* 25:349–351
- Vicary D, Westerman T (2001). That's just the way he is: some implications of Aboriginal mental health beliefs. *Australian e-Journal for the Advancement of Mental Health* 3:1–10
- Westerman T (2003). *The Westerman Aboriginal Symptom Checklist – Youth (WASC-Y)*. A measure to identify Aboriginal youth (aged 13–17) at risk of suicidal behaviours, depression, anxiety and the effects of culture on risk status. Perth, Indigenous Psychological Services
- Westerman T (2004). Engagement of indigenous clients in mental health services: What role do cultural differences play? *Australian e-Journal for the Advancement of Mental Health* 3:1–7
- World Health Organisation (2001). *World health report 2001: Mental health: New Understanding*, New Hope. Geneva, World Health Organisation
- 

**Aleksandar Janca**, Professor of Psychiatry. The University of Western Australia, School of Psychiatry and Clinical Neurosciences, 50 Murray Street, Perth WA 6000, Australia  
**E-mail:** [jancaa@meddent.uwa.edu.au](mailto:jancaa@meddent.uwa.edu.au)



# Research Advances in the Relationship Between Immigration and Psychiatric Disorders

---

**Robert Kohn, Ronald M. Wintrob**

Section of Transcultural Psychiatry, World Psychiatric Association

Throughout the last half of the 19th century and most of the 20th century, there were two great flow patterns of voluntary migrants in the world: (1) people from rural areas migrating to urban, industrial areas in their own and neighboring countries, motivated mainly by job opportunities in the industrializing cities and (2) migration from European and Asian countries to countries in North and South America, Southern Africa, Australia and New Zealand. There were also waves of involuntary migrants who left the regions and countries of their upbringing because of discrimination, persecution, revolution and war, but followed similar paths of migration to industrialized countries.

Between 1990 and 2005 the total number of migrants in the world, consisting of immigrants, temporary migrants, refugees, and asylum seekers increased 30%, from 155 million to 191 million people, comprising 3% of the world's population. In 2005, 33% of the world's migrant popu-

lation were living in Europe, 28% in Asia, 23% in North America and 9% in Africa.

The possible causal relationship between immigration and mental illness has been the subject of intensive research and debate since the pioneering studies in the 1930's by Ødegaard and Malzberg. Does immigration itself have an influence on mental health status? Is the increase or decrease in psychopathology noted among immigrants a result of the immigration process and the stresses of acculturation, is it a result of a selection bias, or is it a reflection of psychopathology that developed in the immigrant's country of origin? These issues are of theoretical as well as practical importance, and continue to be actively debated.

## **Affective disorders and anxiety disorders**

Numerous studies have been carried out in the United States since the 1980's

examining the rate of psychiatric diagnoses among immigrants. Most of these studies found that first-generation immigrants had lower rates of disorders, e.g. The National Epidemiologic Survey on Alcohol and Related Conditions (NEAS-RC) (Grant et al 2004), the Los Angeles site of the Epidemiological Catchment Area study (ECA) (Burnam et al 1987), The Mexican American Prevalence and Services Survey (MAPSS) (Vega et al. 1998), and the National Comorbidity Survey (NCS) (Breslau & Chang 2006). These studies raised important questions as to why socialization into American culture increases immigrants' susceptibility to psychiatric disorders.

Over the last several years there have been three major studies conducted in the United States that have examined the mental health of immigrant populations compared with non-immigrants. The National Survey of American Life (NSAL) examined the rates of disorders among Caribbean black immigrants to those who were second and third generation born in the United States (Williams et al 2007). First-generation Caribbean black immigrants had lower rates of psychiatric disorders compared to those of the second generation, who were born in the United States. Among these immigrants, increasing years of residency in the United States was associated with an increased risk for psychiatric disorders. Increasing generations lived in the United States was associated with increased risk for disorder; third generation Caribbean American blacks had the highest rates.

Immigration was also found to play a role in the mental health of Asian Amer-

ican immigrants in the National Latino and Asian American Study (NLAAS) (Takeuchi et al 2007). Asian women born in Asia were less likely than those born in the United States to have a lifetime psychiatric diagnosis. Second-generation Asian American women were at a higher risk for a psychiatric diagnosis than the first-generation. Among Asian American men generational differences in rates of psychiatric disorder were not noted. Interestingly, Asian American men who were more proficient in English had lower rates of psychiatric disorders. English-language proficiency may be a proxy for the ability of an immigrant to interact and function effectively in the majority community and to thereby expand opportunities in educational, occupational and social spheres of activity, and by doing so, to decrease their level of acculturative stress.

In the analysis of Hispanic American immigrants, the NLAAS had findings similar to the earlier MAPSS (Alegria et al 2007). Immigrant Hispanic American men and women had lower rates of substance use disorders and overall psychiatric disorders compared to Hispanics Americans born in the United States. The more proficient in English, the more they were bi-culturally adapted, the higher were the rates of psychiatric disorders. Both second and third-generation Hispanic Americans had higher overall rates of psychiatric disorders than the first-generation subjects. Increased family cultural conflict and family burden were associated with increased risk for depressive and anxiety disorders.

The third study, the National Comorbidity Study – Replication (NCS-R), reported the risk of psychiatric disorders among all immigrants compared to all individuals in the study born in the United States. The investigators found that immigrants had a lower lifetime risk of having a psychiatric disorder compared to those born in the United States. This risk was inversely related to age at immigration, and directly related to the duration of residence in the United States (Breslau et al 2007). These findings suggest that both early age of immigration and the immigrants' duration of living in the United States contribute to increased risk of psychiatric disorders among them, as they attempt to resolve the acculturative stress inherent in their effort to adapt to American society.

Two studies have been conducted to examine rates of psychiatric disorders among immigrants compared to individuals who did not emigrate from their country of origin. Both studies compared Mexican Americans in the United States to Mexicans living in Mexico, using psychiatric epidemiological surveys conducted around the same time, using similar methodologies, although by different investigators. The two studies have somewhat contrasting results. The first study, MAPSS, found lifetime prevalence of psychiatric disorders to be lowest among immigrants residing 1–12 years in the United States (Vega et al 1998). The MAPSS found intermediate rates among residents of Mexico City and the highest rates among immigrants who have been living in the United States for 13 or more years. The results of this study

were interpreted as demonstrating selective migration of people with good mental health, but that this advantage reverses with time, possibly as a consequence of acculturative stress.

The second study was a comparison between Mexican American immigrants from the NCS-R and Mexicans living in Mexico, from the Mexican National Comorbidity Survey. Unlike the earlier study, immigrants to the United States from Mexico were found to have significantly higher lifetime and 12-month prevalence rates of mood and anxiety disorders than the Mexican sample. The NCS-R study found that pre-existing anxiety disorders predicted immigration. Immigration predicted subsequent onset of anxiety and mood disorders and persistence of anxiety disorders. The results were inconsistent with the “healthy immigrant hypothesis”; that mentally healthy people immigrate. The findings were partially consistent with the “acculturative stress hypothesis”. In addition, the NCS-R found that the elevated risk among immigrants in the United States was more pronounced for those immigrants who came to the United States as children, compared with those who arrived later in life.

The National Survey of Mental Health and Well-Being conducted in Australia using the CIDI also found lower rates of psychiatric disorders among immigrants compared to Australian born subjects (Andrews et al 1999). Those born in non-English speaking countries had lower rates than those born in English speaking countries. The authors attributed the finding to “the healthy migrant effect”, as

mentally healthy migrants are more likely to be accepted as immigrants and are more likely to immigrate.

The Canadian Community Health Survey used the Composite International Diagnostic Interview – Short Form for Major Depression in 25 metropolitan areas across Canada (Ali et al 2004). The overall rate of depression in the year prior to the interview was 9.2%, but among recent immigrants it was significantly lower 5.8%. Recently arrived immigrants, less than ten years in the country, had the lowest rates while long-term immigrants had rates similar to people born in Canada. Immigrants from Asia had the lowest rates of depression, followed by those from Africa and South and Central America. Immigrants from North America (USA and Mexico) and Europe had rates similar to those of individuals born in Canada. The inability to speak English or French, being unemployed, and a sense of not belonging to the local community did not increase the risk for depression among the immigrants.

Two studies, one conducted in England (Weich et al 2004) and the other in Israel (Mirsky et al 2008) examining depressive and anxiety disorders among immigrants were not consistent with the findings from other countries for lower rates among immigrant groups. The British Ethnic Minority Psychiatric Illness Rates in the Community study (EMPIRIC) used the Revised Clinical Interview Schedule (CIS-R) to make a current ICD-10 diagnosis. Compared to white English-born subjects, Indian and Pakistani women had significantly higher rates of common mental disorders. The

Israeli World Mental Health Survey using the CIDI found that immigrants from the former Soviet Union had increased rates for common mental disorders, in contrast to Israeli-born individuals. The investigators suggested that this finding was consistent with the migration-morbidity hypothesis; that immigration is associated with acculturative stress that generates psychological distress. Unlike other countries, Israel has an open immigration policy, inferring that the lower rates noted in studies conducted in the United States could be a result of selective migration.

## **Immigration and schizophrenia**

Ødegaard showed that the rate of first admissions for schizophrenia among Norwegian immigrants to the United States was twice as high as that for native-born Americans and for Norwegians living in Norway. Ødegaard attributed this difference largely to “social selection”, an inference that is still actively debated. Since Ødegaard’s observations in the 1930s, other studies have produced robust findings that support social selection factors in the etiology of schizophrenia. Other researchers, however, increasingly have argued for “social causation” factors.

Much of the basis of the argument for the social causation hypothesis derives from studies that found higher rates of schizophrenia and lower rates of less severe psychiatric disorders among West Indian immigrants to the United Kingdom. Subsequent studies have substantiated this finding of an increased risk of schizophrenia among immigrants, espe-

cially among African Caribbean immigrants to the United Kingdom (Fearon et al 2006), as well as among Surinamese, Caribbean, and Moroccan immigrants to the Netherlands, and among immigrants to Denmark and Sweden. In the United Kingdom, it was also noted that second-generation African Caribbean immigrants had significantly higher admission rates for schizophrenia than both their first-generation and white English-born counterparts, whereas rates of the disorder in their countries of origin in the English-speaking Caribbean were not unduly high. Those and other studies identified in a meta-analysis found an increased risk for schizophrenia among both first and second-generation immigrants, with risk being higher among second-generation immigrants, and that immigrants from developing countries, as compared with those from developed countries, were at a higher risk (Cantor-Graae & Selten 2005). These findings have implicated the social environment as the source for a number of putative factors for schizophrenia, including racial discrimination.

### **Refugees, mental health and post-traumatic stress disorder**

Unlike those who emigrate voluntarily, often for primarily economic reasons, refugee populations have been highly traumatized prior to migration and are at higher risk for psychiatric disorders. Among Southeast Asian refugees, pre-migration trauma was a significant factor in predicting psychological distress even five years after immigration to the United

States (Chung & Kagawa-Singer 1993). Even two decades after resettlement in the United States, Cambodian immigrants have been found to have extremely high rates of post-traumatic stress disorder (62%), and major depression (51%) (Marshall et al 2005). A dose response relationship has been noted, with increasing degree of exposure to trauma, both pre-migration and post-migration, leading to an increased likelihood of a current psychiatric disorder.

In a study of Iraqi asylum seekers to The Netherlands, the longer the period of asylum seeking the higher the risk for DSM-IV psychiatric disorders: in particular anxiety, depressive and somatoform disorders, but not post-traumatic stress disorder (Laban et al 2004). A study conducted in Toronto, Canada, found a slightly higher lifetime prevalence of depression among Ethiopian immigrants and refugees, 9.8%, compared to the general population, 7.3% (Fenta et al 2004). The risk factors for depression in the immigrants included younger age, experience of pre-migration trauma, refugee camp internment, and post-migration stressful events.

One of the largest studies on refugees was conducted in Australia (Silove et al 2007). This study involved a sample of 1161 refugee Vietnamese resettled in Australia for 11 years, compared to an Australian-born sample of 7961. The prevalence of PTSD for both groups was similar; however, a lifetime diagnosis of any mental disorder was present in 50% of Vietnamese and only 19% of Australian-born subjects. Trauma exposure was

the most important predictor for having a psychiatric disorder.

The pre-migration life of refugees from war-torn developing countries ill prepares them to adapt to the realities of life in the countries to which they migrate. In addition, host countries such as the United States have had limited effectiveness in promoting long-term health and well-being of their refugee populations.

## Conclusions

Recent studies suggest that first generation immigrants may be at decreased risk for psychiatric disorders other than schizophrenia. However, second and

third generation immigrants may be at increased risk for psychiatric disorders. Unlike voluntary immigrants, refugees are, at least in the short term, at increased risk for post-traumatic stress and depressive disorders. Increased trauma exposure both pre and post-migration is associated with increased risk for psychiatric disorders among refugees. Numerous risk factors for psychiatric disorders among immigrants have been suggested. The migration experience itself may impact mental health, as well as the resettlement phase; which raises issues of the impact of acculturative stress and adaptation to the unfamiliar host country institutions and ways of doing things.

## References

- Alegria M, Mulvaney-Day N, Torres M, Polo A, Cao Z, Canino G (2007). Prevalence of psychiatric disorders across Latino subgroups. *Am J Public Health* 97:68–75
- Ali JS, McDermott S, Gravel RG (2004). Recent research on immigrant health from Statistics Canada's population surveys. *Can J Public Health* 95:109–113
- Andrews G, Hall W, Teeson M, Henderson S (1999). The mental health of australians. Canberra, Mental Health Branch, Commonwealth Department of Health and Aged Care
- Breslau J, Aguilar-Gaxiola S, Borges G, Kendler KS, Su M, Kessler RC (2007). Risk for psychiatric disorder among immigrants and their US-born descendants: evidence from the National Comorbidity Survey Replication. *J Nerv Ment Dis* 195:189–195
- Breslau J, Chang DF (2006). Psychiatric disorders among foreign-born and US-born Asian Americans in a US national survey. *Soc Psychiatry Psychiatr Epidemiol* 41:943–950
- Breslau J, Kendler KS, Su M, Gaxiola-Aguilar S, Kessler RC (2005). Lifetime risk and persistence of psychiatric disorders across ethnic groups in the United States. *Psychol Med* 35:317–327
- Burnam M, Hough R, Escobar J, Karno M, Timbers DM, Telles CA et al (1987). Six-month prevalence of specific psychiatric disorders among Mexican American and non-Hispanic whites in Los Angeles. *Arch Gen Psychiatry* 44:687–694
- Cantor-Graae E, Selten JP (2005). Schizophrenia and migration: A meta-analysis and review. *Am J Psychiatry* 162:12–24
- Chung, RC, Kagawa-Singer M (1993). Predictors of psychological distress among Southeast Asian refugees. *Soc Sci Med* 36:631–639

- Fearon P, Kirkbride JB, Morgan C, Dazzan P, Morgan K, Lloyd T et al (2006). AESOP Study Group. Incidence of schizophrenia and other psychoses in ethnic minority groups: results from the MRC AESOP Study. *Psychol Med* 36:1541–1050
- Fenta H, Hyman I, Noh S (2004). Determinants of depression among Ethiopian immigrants and refugees in Toronto. *J Nerv Ment Dis* 192:363–372
- Grant BF, Stinson FS, Hasin DS, Dawson DA, Chou SP, Anderson K (2004). Immigration and lifetime prevalence of DSM-IV psychiatric disorders among Mexican Americans and non-Hispanic whites in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Arch Gen Psychiatry* 61:1226–1233
- Laban CJ, Gernaat HB, Komproe IH, Schreuders BA, De Jong JT (2004). Impact of a long asylum procedure on the prevalence of psychiatric disorders in Iraqi asylum seekers in The Netherlands. *J Nerv Ment Dis* 192:843–851
- Marshall GN, Schell TL, Elliott MN, Berthold SM, Chun CA (2005). Mental health of Cambodian refugees 2 decades after resettlement in the United States. *JAMA* 294:571–579
- Mirsky J, Kohn R, Levav I, Grinshpoon A, Ponizovsky AM (2008). Psychological distress and common mental disorders among immigrants: results from the Israeli-based component of the World Mental Health Survey. *J Clin Psychiatry* 69:1715–1720
- Silove D, Steel Z, Bauman A, Chey T, McFarlane A (2007). Trauma, PTSD and the longer-term mental health burden amongst Vietnamese refugees: a comparison with the Australian-born population. *Soc Psychiatry Psychiatr Epidemiol* 42:467–476
- Takeuchi DT, Zane N, Hong S, Chae DH, Gong F, Gee GC et al (2007). Immigration-related factors and mental disorders among Asian Americans. *Am J Public Health* 97:84–90
- Vega WA, Kolody B, Aguilar-Gaxiola S, Alderate E, Catalano R, Carveo-Anduaga J (1998). Lifetime prevalence of DSM-III-R psychiatric disorders among urban and rural Mexican Americans in California. *Arch Gen Psychiatry* 55:771–778
- Weich S, Nazroo J, Sproston K, McManus S, Blanchard M, Erens B et al (2004). Common mental disorders and ethnicity in England: the EMPIRIC Study. *Psychol Med* 34:1543–1551
- Williams DR, Haile R, González HM, Neighbors H, Baser R, Jackson JS (2007). The mental health of Black Caribbean immigrants: results from the National Survey of American Life. *Am J Public Health* 97:52–59

---

**Robert Kohn**, MD, Miriam Hospital, Department of Psychiatry, 164 Summit Ave., Fain Building, Suite 2B, Providence, RI, USA  
**E-mail:** robert\_kohn@brown.edu



# Advances in Old Age Psychiatry

---

**Carlos Augusto de Mendonca Lima, Vincent Camus,  
Nicoleta Tataru, Edmond Chiu**

Section of Old Age Psychiatry, World Psychiatric Association

## Introduction

The ageing of the world population is one of the highest challenges that mankind has to face in this beginning of the XXIst century. In this context, there is an increase of the number of old persons with mental health problems and the promotion of old age psychiatry as a subspecialty has emerged as a potential response to deal with this problem. According to WHO-WPA 1996 the development of this subspecialty has fostered research which offers hope for better treatment and outlook and provides the opportunity for training students in all health and social care related disciplines.

The present chapter is an attempt to summarize some significant advances in the field of Old Age Psychiatry that occurred during the period 2004–2007. Limiting the review to only 20 references has been a huge challenge for representing such an extraordinary scientific production in the field, and there is a major risk that important contributions could

have been missed. The following methodology was used to select of the references:

- A list of journals in the field of Psychiatry, Mental Health and Old Age Psychiatry was chosen: (i) Acta Psychiatrica Scandinavica, (ii) Aging & Mental Health, (iii) American Journal of Geriatric Psychiatry, (iv) American Journal of Psychiatry, (v) Archives of General Psychiatry, (vi) Australian and NZ Journal of Psychiatry, (v) British Journal of Psychiatry, (vi) Canadian Journal of Psychiatry, (vii) European Archives of Psychiatry and Clinical Neurosciences, (viii) International Journal of Geriatric Psychiatry, (ix) International Psychogeriatrics, (x) Journal of Clinical Psychiatry and (xi) Psychogeriatrics.
- All articles concerning topics related to old age psychiatry were identified (1,707 articles).
- A list of “Top 100” articles was made by the main author according to (i) the potential relevance in terms of public

health, (ii) the methodology used, (iii) the fact that the article was produced with the cooperation of different teams (consortium, specific international co-operation projects, etc.).

- A final list of “Top 20” articles was so chosen by the other authors. Articles were classified by subject and their respective abstracts are summarized as follows.

### **Advances in dementia**

Dementia is a priority in public mental health. The disorder represents a source of suffering and reduction of quality of life not only for the patient but also for the family and it represents also a significant source of burden for the community as a whole. There are today several therapeutic strategies to reduce the dementia impact on someone’s life but many barriers can make the access to them difficult. The European Dementia Consensus Network (Waldemar et al 2007) analyzed the existing barriers to diagnosis and treatment of patients with dementia in the European context. These barriers are manifold; they are present at all levels of society among different countries in Europe. The authors proposed: (i) multi-level and multifaceted strategies in order to improve diagnosis and treatment; (ii) multidisciplinary approach and close collaboration between GPs and specialized memory clinics as the ideal model for early diagnosis and early global therapeutic interventions; (iii) that all healthcare professionals should be trained in dementia issues and updated practice guidelines be provided as a framework for standards of

care; (iv) culture-sensitive strategies to promote public knowledge and destigmatize dementia and (v) that policy makers and authorities should be made aware of the benefits of early access to diagnosis and treatment.

The definitive diagnosis of Alzheimer’s disease (AD) still today can only be made by autopsy. Any attempt to improve the accuracy of the clinical diagnosis of this disorder –and to exclude the diagnosis of other dementias– is an important advance with clinical and research implications. Foy et al (2007) constructed a computer algorithm to generate a diagnosis of AD, Dementia with Lewy Bodies (DLB), frontotemporal dementia (FTD), vascular dementia or to flag the case as needing a clinical review. The diagnosis generated in life by the algorithm in a prospective, longitudinal study was compared to definitive diagnosis at post mortem in 43 patients. The positive predictive value of the algorithm was greater than 95%. AD was diagnosed by the algorithm and at post mortem in 36 of the cases. Two cases with FTD were wrongly diagnosed as having AD by the algorithm, five cases were flagged as needing a clinical review due to concomitant medical conditions of whom four had AD and one, who had been diagnosed clinically as having AD, was diagnosed on post mortem with corticobasal degeneration. The authors concluded that a structured interview and a computerised algorithm is as effective at identifying AD as highly trained and skilled clinicians.

Genetic modifications play an important role in the origin of neurodegenerative disorders. Their identification could

improve diagnostic accuracy and help in the development of therapeutic strategies. The apolipoprotein E (*APOE*) e4 allele is a well-established risk factor for late-onset AD, but initial genome scans using microsatellite markers in late-onset AD failed to identify this locus on chromosome 19. Coon et al (2007) demonstrated that more precise identification of loci that are associated with complex, multi-genic genetic disorders can be achieved using ultra-high-density whole-genome associations. The authors realized an individualized genome-wide association study using 502,627 SNPs performed in 1086 histopathologically verified AD cases and controls to determine the Odds Ratio (OR) associated with genes predisposing to Alzheimer's disease. As predicted, ultra-high-density SNP genotyping, in contrast to traditional microsatellite-based genome screening approaches, precisely identified the *APOE* locus as having a significant association with late-onset AD. The study provides empirical support for the suggestion that the *APOE* locus is the major susceptibility gene for late-onset AD in the human genome. It also supports the feasibility of the ultra-high-density whole-genome association approach to the study of AD and other heritable phenotypes. These whole-genome association studies show great potential to identify additional genes that contribute to the risk of AD.

Patients with AD have a great inter-individual variability in what concerns the expression of their symptoms: as important efforts were done to make the diagnosis of AD as early as possible, it would be an advance to recognize which

are the AD preclinical symptoms besides their potential inter-individual variability. Following theoretical models of neuropsychological processes before AD onset, Rapp & Reischies (2005) examined the predictive value of attention and executive function in the preclinical phase of AD in old age. They studied the cognitive performance of 187 initially normal participants of the Berlin Aging Study, a community-based representative sample of Berlin citizens aged 70 to 103, over a period of four years. Tests of attention and executive function and of learning and recall functions were administered at baseline. Diagnosis of AD was made according to NINCDS-ADRDA criteria. After four years, 15 participants had developed AD. Tests of attention and executive function discriminated best between nonconverters and incident AD cases. A similar pattern was found in survival analyses; attention and executive function tests, together with tests of learning and recall, significantly predicted incident AD over and above age, gender, and education. These results support theoretical models of attention and executive function in the preclinical phase of AD in old age.

Neuropsychiatric symptoms in dementia are frequently associated with significant burden for the family. Steinberg et al (2006) investigated the probability of individual neuropsychiatric symptoms in dementia patients as a function of eight risk factors in the context of the Cache County Study (an ongoing population-based study of the epidemiology of dementia) the risk factors for conversion from "Cognitive Impairment, No

Dementia” (CIND) to dementia, and the progression of dementia. The authors administered the Neuropsychiatric Inventory (NPI) to 328 dementia patients at baseline. Approximately 18 months later, they re-administered the NPI to 184 participants available for follow-up. Generalized estimating equation methods were used to model the probability of individual neuropsychiatric symptoms as a function of: gender, age, education, dementia type and severity, *APOE* status, time of observation, and general medical health. The authors concluded that gender, age, dementia severity, *APOE* 4, dementia diagnosis, time of observation and general medical health appear to influence the occurrence of individual neuropsychiatric symptoms.

Both pharmacological and non-pharmacological strategies are useful for the treatment of the neuropsychiatric symptoms of dementia. Several trials were done to assess the benefits of drugs for these symptoms. The impact of non-pharmacological strategies has been studied less frequently. Livingston et al (2005) systematically reviewed the literature on psychological approaches to treating these symptoms. A total of 1632 studies were identified, and 162 satisfied the inclusion criteria for the review. Only behavior management therapies, specific types of caregiver and residential care staff education and possibly cognitive stimulation appear to have lasting effectiveness for the management of dementia-associated neuropsychiatric symptoms. Lack of evidence regarding other therapies is not necessarily evidence of lack of efficacy. Finally, the authors con-

sidered that their conclusions are limited because of the paucity of high-quality research.

Atypical antipsychotic medications are widely used to treat the neuropsychiatric symptoms of dementia, in particular delusions, aggression, and agitation. Several clinical trials have not shown efficacy, but there have been concerns about adverse events. Schneider et al (2006) assessed the evidence for efficacy and adverse effects of atypical antipsychotics for people with dementia. Fifteen trials including 16 comparisons of atypical antipsychotics with placebo met the selection criteria. A total of 3353 patients were randomized to drug and 1757 to placebo. Adverse effects were mainly somnolence and urinary tract infection or incontinence across drugs, and extrapyramidal symptoms or abnormal gait with risperidone or olanzapine. Cognitive test scores worsened with drugs. There was no evidence for increased injury, falls, or syncope. There was a significant risk for cerebrovascular events, especially with risperidone. Small statistical effect sizes on symptom rating scales support the evidence for the efficacy of aripiprazole and risperidone. Incomplete reporting restricts estimates of response rates and clinical significance. Dropouts and adverse events further limit effectiveness. Atypicals should be considered within the context of medical need and the efficacy and safety of alternatives.

Psychiatric morbidity in old age frequently coexists with physical illness and is likely to be complicated by it. In the context of the same Cache County Study, Lyketsos et al (2005) investigated medi-

cal comorbidity in persons with dementia and CIND. As part of the study's first incidence wave, persons with dementia (N=149), Cognitive Impaired Not Dementia CIND (N=225) or without cognitive impairment (N=321) were identified and studied. The participants received comprehensive clinical evaluations and were rated on the General Medical Health Rating (GMHR), a global measure of seriousness of medical comorbidity. There were few differences in number or type of comorbid medical conditions between persons with CIND and dementia, but persons with dementia were prescribed more medications. Stroke was more common in dementia participants, but other illnesses common in old age were not significantly different across cognitive groups. Medical comorbidity was more serious in both dementia and CIND, such that both groups were less likely to have "little to no" comorbidity. Seriousness of medical comorbidity was significantly associated with worse day-to-day functioning and cognition. The conclusion is that persons with CIND and dementia have more serious medical comorbidity than comparable persons without cognitive impairment. This comorbidity may play a role in the progression of CIND and dementia.

As AD is a neurodegenerative disorder with a progressive symptomatology, Mild Cognitive Impairment (MCI) can be confounded with the early stages of AD. Tabert et al (2006) evaluated the conversion rates to AD in subtypes of MCI and identified neuropsychological measures most predictive of the time to conversion. One hundred forty-eight patients

were followed up semiannually and sixty-three group-matched controls annually. Subtypes of MCI were determined by using demographically adjusted regression norms on neuropsychological tests. At baseline, 108 patients met the criteria for amnesic MCI: 87 had memory plus other cognitive domain deficits and 21 had pure memory deficits. In 3 years, 32 of 64 amnesic- "plus" and 2 of 20 "pure" amnesic patients converted to AD. In 148 patients, the percent savings from immediate to delayed recall on the Selective Reminding Test and the Wechsler Adult Intelligence Scale-Revised Digit Symbol Test were the strongest predictors of time to conversion. From the entire neuropsychological test battery, a stepwise selection procedure retained 2 measures in the final model: total immediate recall on the Selective Reminding Test and Digit Symbol Test coding. The combined predictive accuracy of these 2 measures for conversion by 3 years was 86%. The authors concluded that mild cognitively impaired patients with memory plus other cognitive domain deficits, rather than those with pure amnesic MCI, constituted the high-risk group. Deficits in verbal memory and psychomotor speed/executive function abilities strongly predicted conversion to AD.

In 2004–2005 a debate following the draft guidance of the National Institute for Clinical Excellence (NICE) on the drugs for Alzheimer's disease emerged in the United Kingdom. The draft guidance stated that these drugs should not be given to mildly affected patients of the National Health System (NHS) because of lack of evidence of cost effectiveness in this

group. Several leaders in the field of Old Age Psychiatry contested the methodology used by NICE to assess this cost effectiveness and considered NICE's guidance as wrong and not doing justice to the complex nature of Alzheimer's disease. A consensus meeting was organized by the International Psychogeriatric Association and the WPA Section of Old Age Psychiatry. The consensus statement concerned how to define and measure treatment benefits in dementia (Katona et al 2007). The consensus group recommended the statement of clear, pre-defined diagnostic and severity criteria and outcome measures, including functional and executive capacity, in treatment trials. Outcomes can include effects on people with dementia with regard to cognition, behavioral and psychological symptoms, quality of life, global assessments, and activities of daily living, and must be tailored to the education and culture of the participants. Outcomes can also appropriately encompass effects on caregivers. Treatment goals can be to prevent dementia emerging, or in those with established dementia to slow deterioration, and to postpone, stabilize or improve symptoms. Comparisons between treatment groups should be on the basis of clinically relevant measures with both risk and benefit reported for all participants regardless of whether or not they continue to receive treatment throughout the trial. Characterization of any groups that respond well to treatment has been unsuccessful to date, but may be facilitated in the future by measurement of putative biomarkers. No biomarker is yet satisfactory for determining diagnosis, severity, progression or prediction of response. To provide meaningful data,

economic analyses should use up-to-date, country-specific data. Health economic measures should be incorporated as secondary outcomes in all Phase 3 trials since health systems are concerned with cost-effectiveness as well as with clinical outcome. Health utility measures are not, however, validated satisfactorily in dementia, thus calling into question previous health economic analyses. Traditionally, elderly people have been marginalized in the political process. The growth in the older population across the world, and their potential for increasing political empowerment may lead to a radical re-evaluation of the economics of dementia treatment.

An advance in economics of dementia was made by Jönsson et al (2006) who published a study to estimate the costs of formal and informal care and identify determinants of care costs. Two hundred and seventy-two AD patients and their caregivers were recruited among patients attending regularly at six memory clinics in Sweden, Denmark, Norway and Finland. Total annual costs were on average 172,000 SEK, ranging from 60,700 SEK in mild dementia to 375,000 SEK in severe dementia costs for community care constituted about half of the total costs of care and increased sharply with increasing cognitive impairment. Informal care costs, valued at the opportunity cost of the caregiver's time, make up about a third of total costs and also increased significantly with disease severity. Medical care costs, on the other hand, were not significantly related to disease severity. Regression analysis confirmed a strong association between costs and cognitive function,

between patients as well as within patients over time. There was also a significant influence on costs from behavioural disturbances. Sensitivity analysis showed that the method chosen to value informal care can have considerable impact on results. The authors concluded that the costs of care in patients with AD are high and are related to dementia severity as well as to the presence of behavioural disturbances.

Several teams around the world are working to propose new treatments for AD and there is hope that their efforts will be very positive in few years. But during the period covered by this article, the most significant advance in the pharmacological treatment of AD was the introduction of new drug presentations of existing antidementia preparations. Winblad et al (2007) published the results of a comparison of the efficacy, safety and tolerability of a novel rivastigmine transdermal patch with conventional rivastigmine capsules and placebo in patients with AD. In this 24-week, multicenter, double-blind, double-dummy, placebo and active-controlled trial, patients with probable AD were randomized to one of four treatment groups: 12 mg/day rivastigmine capsules; 10 cm<sup>2</sup> (9.5 mg/24 h) rivastigmine patch; 20 cm<sup>2</sup> (17.4 mg/24 h) rivastigmine patch; or placebo. 1195 AD patients from 21 countries participated in the study. Treatment differences (vs placebo) on the ADAS-Cog at Week 24 in 10 cm<sup>2</sup> patch, 20 cm<sup>2</sup> patch and capsule groups were 1.6 (P=0.005), 2.6 (P<0.001) and 1.6 (P=0.003). Treatment differences on the ADCS-CGIC were 0.3 (P=0.01), 0.2 (P=0.054) and 0.3 (P=0.009). Comparison between the 10 cm<sup>2</sup> patch and the

capsule revealed non-inferiority. Rates of nausea in the 10 cm<sup>2</sup> patch and capsule groups were 7.2% and 23.1%, respectively; rates of vomiting were 6.2% and 17.0%, respectively. Moderate or severe skin irritation occurred in 10% patients across the four patch sizes (5, 10, 15 and 20 cm<sup>2</sup>). In conclusion, the target dose of 10 cm<sup>2</sup> rivastigmine patch provides efficacy similar to the highest doses of capsules with a superior tolerability profile.

### Advances in depression

Depressive symptoms and syndromes in later life are widespread. To compare the epidemiology of depressive disorders among different countries and cultures may contribute to the advance in the development of better mental health policies and strategies to care for people with depression. Castro-Costa et al (2007) used the EURO-D to describe the national variation in depression symptoms and syndrome prevalence across ten European countries. It was administered to cross-sectional nationally representative samples of non-institutionalised persons aged 50 years (n=22.777). The prevalence of all symptoms was higher in the Latin ethno-lingual group of countries, especially symptoms related to motivation. Women scored higher on affective suffering; older people and those with impaired verbal fluency scored higher on motivation. The prevalence of individual EURO-D symptoms and of probable depression (cut-off score  $\geq 4$ ) varied consistently between countries. Standardising for effects of age, gender, education and cognitive function suggested that these

compositional factors did not account for the observed variation.

Associations between physical health and depression are consistent across cultures among adults up to 65 years of age. Depression is an important risk factor to reduce the life expectancy but, on the other hand, the impact of physical health on depression in old age is much more substantial and may depend on sociocultural factors. Braam et al (2005) have examined cross-national differences in the association between physical health and depressive symptoms in elderly people across western Europe. Fourteen community-based studies on depression in later life in nine western European countries contributed to a total study sample of 22,570 respondents aged 65 years and older. Measures were harmonised for depressive symptoms (EURO-D scale), functional limitations and chronic physical conditions. In the majority of the participating patients, the association of depressive symptoms with functional disability was stronger than with chronic physical conditions. Associations were slightly more pronounced in the UK and Ireland. The authors concluded that the association between physical health and depressive symptoms in later life is consistent across Western Europe.

The high frequency of cognitive symptoms in depression in old age has motivated several studies to better understand the mutual causes, consequences and influence between mood and cognition. Bogner et al (2007) in the context of a collaborative consortium (the PROSPECT study) have described the influence

of domains of cognition on remission and response of depression in an intervention trial among older primary care patients. Twenty primary care practices were randomly assigned to Usual Care or to an Intervention consisting of a depression care manager offering algorithm-based care for depression. In all, 599 adults, 60 years and older, with a depression diagnosis, were included in these analyses. The intervention was associated with improved remission and response rates, regardless of cognitive impairment. Response inhibition as measured by the Stroop Color-Word test appeared to significantly modify the intervention versus usual care difference in remission and response at 4 months. Patients in the poorest performance quartile at baseline on the Stroop Color-Word test in the Intervention Condition were more likely to achieve remission of depression at 4 months than comparable patients in Usual Care. Depressed older adults in primary care with executive dysfunction have low remission and response rates when receiving usual care but benefit from depression care management.

Several reports have pointed to the link between brain vascular disorders and mood disorders in late life. Both white matter hyperintensities (WMH) and lacunar infarcts have been associated with the development of depression in older subjects, although the relative importance of the two and the influence of lesion location and concomitant vascular disease are unclear. O'Brien et al (2006) have investigated the relationship between location and burden of WMH and lacunes on depressive features in older people.

In an pan-European multicenter (LADIS) study of 626 older subjects, the authors examined the relationship between regional magnetic resonance imaging white matter hyperintensities, number of lacunar infarcts, depressive symptoms as assessed by the 15-item geriatric depression scale (GDS), cognitive status (Mini-Mental Status Examination), hypertension, and self-perceived health quality of life (QoL). The authors found depressive symptoms to be correlated with WMH rating in the frontal and temporal but not occipitoparietal region. Basal ganglia lacunes were only weakly correlated with GDS, and lacunes in other regions showed no association. In an ordinal logistic regression model, temporal WMH in the absence of hypertension independently predicted GDS, whereas neither history of stroke nor number of lacunar infarcts did. The authors concluded that the results suggest that in this population of nondisabled older people, WMH has a greater influence on depressive symptoms than infarcts.

Versluis et al (2006) have also investigated the relation between WMH and depressive symptoms in elderly subjects at risk of cardiovascular disease. In the Dutch sample of the PROSPER cohort, 527 non-demented elderly, all aged 70 years or older, received a cranial MRI scan and the 15-item Geriatric Depression Scale, at baseline and 33 months (SD 1.6) later. The presence of WMH at baseline was not related to baseline depressive symptoms nor to the development of depressive symptoms during follow-up. Moreover, no association was found between progression of white matter le-

sion volume and progression of depressive symptoms. They concluded that this longitudinal study does not confirm the involvement of cerebrovascular disease expressed as MRI white matter hyperintensities in the development of depressive symptoms in elderly subjects.

Another contribution to the advancement of this debate was the study of Brodaty et al (2007) who have investigated the frequency and correlates of depression at 3 and 15 months after stroke. A total of 164 consecutive eligible stroke patients and 100 comparison subjects received extensive medical, psychiatric, and neuropsychological assessments; a subset also received magnetic resonance imaging scans. Major or minor depression was present in 12.0% of stroke patients at index assessment and in 20.7% at follow-up which included 18 new cases. By follow-up, stroke patients with depression had significantly greater impairment of functional ability and global cognition than nondepressed stroke patients or comparison subjects. Depression was not associated with age, intellectual decline prior to stroke or side or severity of stroke. Patients who experienced a TIA or stroke during the follow-up, who had developed dementia by three months or who were not living with a relative or partner were more likely to be depressed at follow-up. Dementia at 3 months predicted depression, but the reverse did not hold. The authors concluded that depression may be less frequent after stroke than previously reported and is related to cumulative vascular brain pathology rather than laterality and severity of single strokes.

### Advance in suicide

Suicide is highly prevalent in old age but several recent reports from several countries suggest the absence of this increase in suicides rates. Shah (2007) made a cross-national study examining the relationship between suicide rates and age. The relationship between suicide rates and age was examined by ascertaining suicide rates in both sexes in seven age-bands, more specifically 16–24 years, 25–34 years, 35–44 years, 45–54 years, 55–64 years, 65–74 years and 75+ years, from the World Health Organization website for all the listed countries ( $N = 62$ ). The main findings were: (i) there was a significant increase in suicide rates with increasing age in males and females in 25 and 27 countries respectively; (ii) there was no significant increase in suicide rates with increasing age in males and females in 31 and 29 countries respectively; (iii) suicide rates were the highest in the younger age-bands in countries without a significant increase in male suicides rates with increasing age; (iv) in countries without a significant increase in the suicide rate with increasing age in both sexes, females only and males only demonstrated regional clustering; and, (v) in a small number of countries, suicide rates declined with increasing age. Shah concluded that potential explanations for regional and cross-national variations in the relationship between suicide rates and age require further study.

### Advance in anxiety

Anxiety symptoms and anxiety disorders are highly prevalent among elder-

ly people, although this topic is infrequently the subject of systematic research in this age group. One important limitation is the lack of a widely accepted instrument to measure dimensional anxiety in both normal old people and old people with mental health problems. Pachana et al (2007) developed and tested, a short scale to measure anxiety in older people. The authors generated a large number of potential items de novo and by reference to existing anxiety scales, and then reduced the number of items to 60 through consultation with a reference group consisting of psychologists, psychiatrists and normal elderly people. They then tested the psychometric properties of these 60 items in 452 normal old people and 46 patients attending a psychogeriatric service. They were able to reduce the number of items to 20. They chose a 1-week perspective and a dichotomous response scale. Cronbach's  $\alpha$  for the 20-item Geriatric Anxiety Inventory (GAI) was 0.91 among normal elderly people and 0.93 in the psychogeriatric sample. Concurrent validity with a variety of other measures was demonstrated in both the normal sample and the psychogeriatric sample. Inter-rater and test-retest reliability were found to be excellent. The receiver operating characteristic analysis indicated a cut-point of 10/11 for the detection of DSM-IV Generalized Anxiety Disorder (GAD) in the psychogeriatric sample, with 83% of patients correctly classified with a specificity of 84% and a sensitivity of 75%. So, the GAI is a new 20-item self-report or nurse-administered scale that measures dimensional anxiety in elderly people. Initial clinical testing indicates that it is able to discrim-

inate between those with and without any anxiety disorder and between those with and without DSM-IV GAD.

## Concluding comments

Much has been achieved in Old Age Psychiatry in the last triennium. The combined efforts of committed clini-

cians, clinician researchers and laboratory scientists have delivered to the field and to our patients considerable benefits in the understanding and management of mental disorders of late life. It can be predicted that the next Triennium will be another very exciting period and will see further advances in our discipline.

## References

- Braam W, Prince MJ, Beekman ATF, Delespaul P, Dewey ME, Geerlings SW et al (2005). Physical health and depressive symptoms in older Europeans. Results from EURODEP. *The British Journal of Psychiatry* 187:35–42
- Bogner HR, Bruce ML, Reynolds III ChF, Mulsant BH, Cary MS, Morales K et al (2007). The PROSPECT Group. The effects of memory, attention, and executive dysfunction on outcomes of depression in a primary care intervention trial: the PROSPECT study. *International Journal of Geriatric Psychiatry* 22:922–929
- Brodaty H, Withall A, Altendorf A, Sachdev PS (2007). Rates of depression at 3 and 15 months poststroke and their relationship with cognitive decline: the Sydney stroke study. *Am J Geriatr Psychiatry* 15:477–486
- Castro-Costa E, Dewey M, Stewart, Banerjee S, Huppert F, de Mendonça Lima CA et al (2007). Prevalence of depressive symptoms and syndromes in later life in ten European countries. The SHARE study. *The British Journal of Psychiatry* 191:393–401
- Coon KD, Myers AJ, Craig DW, Webster JA, Pearson JV, Lince DH et al (2007). A high-density whole-genome association study reveals that APOE is the major susceptibility gene for sporadic late-onset Alzheimer's Disease. *J Clin Psychiatry* 68:613–618
- Foy CML, Nicholas H, Hollingworth P, Boothby H, Willams J, Brown RG et al (2007). Diagnosing Alzheimer's disease – non-clinicians and computerised algorithms together are as accurate as the best clinical practice. *International Journal of Geriatric Psychiatry* 22:1154–1163
- Jönsson L, Jönhagen ME, Kilander L, Soininen H, Hallikainen M, Waldemar G et al (2006). Determinants of costs of care for patients with Alzheimer's disease. *International Journal of Geriatric Psychiatry* 21:449–459
- Katona C, Livingston G, Cooper C, Ames D, Brodaty H, Chiu E and on behalf of the Consensus Group (2007). International Psychogeriatric Association consensus statement on defining and measuring treatment benefits in dementia. *International Psychogeriatrics* 19:345–354
- Livingston G, Johnston K, Katona C, Paton J, Lyketsos CG and Old Age Task Force of the World Federation of Biological Psychiatry (2005). Systematic review of psychological approaches to the management of neuropsychiatric symptoms of dementia. *Am J Psychiatry* 162:1996–2021
- Lyketsos CG, Toone L, Tschanz J, Rabins PV, Steinberg M, Onyike CU et al (2005). The Cache County Study Group. Population-based study of medical comorbidity in early dementia and

- “Cognitive impairment, no dementia (CIND)”: Association with functional and cognitive impairment: the Cache county study. *Am J Geriatr Psychiatry* 13:656–664
- O’Brien JT, Firbank MJ, Krishnan MS, van Straaten ECW, van der Flier WM, Petrovic K et al (2006) on behalf of the LADIS Group. White matter hyperintensities rather than lacunar infarcts are associated with depressive Symptoms in Older People: The LADIS Study. *Am J Geriatr Psychiatry* 14:834–841
- Pachana NA, Byrne GJ, Siddle H, Koloski N, Harley E, Arnold E (2007). Development and validation of the geriatric anxiety inventory. *International Psychogeriatrics* 19:103–114
- Rapp MA, Reischies FM (2005). Attention and executive control predict alzheimer disease in late life: results from the Berlin aging study (BASE). *Am J Geriatr Psychiatry* 13:134–141
- Schneider LS, Dagerman K, Insel PS (2006). Efficacy and adverse effects of atypical antipsychotics for dementia: meta-analysis of randomized, placebo-Controlled Trials. *Am J Geriatr Psychiatry* 14:191–210
- Shah A (2007). The relationship between suicide rates and age: an analysis of multinational data from the World Health Organization. *International Psychogeriatrics* 19:1141–1152
- Steinberg M, Corcoran C, Tschanz JT, Huber C, Welsh-Bohmer K, Norton MC et al (2006). Risk factors for neuropsychiatric symptoms in dementia: the Cache County Study. *International Journal of Geriatric Psychiatry* 21:824–830
- Tabert MH, Manly JJ, Liu X, Pelton GH, Rosenblum S, Jacobs M et al (2006). Neuropsychological prediction of conversion to alzheimer disease in patients with mild cognitive impairment. *Arch Gen Psychiatry* 63:916–924
- Versluis CE, van der Mast RC, van Buchem MA, Bollen ELEM, Blauw GJ, Eekhof JAH et al (2006) on behalf of the PROSPER study group. Progression of cerebral white matter lesions is not associated with development of depressive symptoms in elderly subjects at risk of cardiovascular disease. The PROSPER Study. *International Journal of Geriatric Psychiatry* 21:375–381
- Waldemar G, Phung KTT, Burns A, Georges J, Hansen FR, Iliffe S et al (2007) on behalf of the European Dementia Consensus Network (EDCON). Access to diagnostic evaluation and treatment for dementia in Europe. *International Journal of Geriatric Psychiatry* 22:47–54
- Winblad B, Cummings J, Andreasen N, Grossberg G, Onofrj M, Sadowsky C et al (2007). A six-month double-blind, randomized, placebo-controlled study of a transdermal patch in Alzheimer’s disease – rivastigmine patch versus capsule. *International Journal of Geriatric Psychiatry* 22: 456–467
- World Health Organization & World Psychiatric Association. *Psychiatry of the Elderly*. WHO, Geneva, 1996. WHO/MNH/MND/96.7

---

**Carlos Augusto de Mendonca Lima**, Professor of Psychiatry, Instituto de Psiquiatria, Universidade Federal de Rio de Janeiro, Brasil  
**E-mail:** climasj@yahoo.com

# Prevention



# Positive Health Aspects as Preventive Factors Against Chronification in Persons with Severe Mental Illness

---

**Margit Schmolke**

Section of Preventive Psychiatry, World Psychiatric Association

## Introduction

This paper will outline positive health aspects which may serve as preventive factors in persons diagnosed with a severe mental illness. Firstly, some basic perspectives of prevention and health promotion will be outlined. Secondly, it will introduce briefly into the current discussion on positive health in medicine and psychiatry. Thirdly, selected results of a qualitative study on positive health aspects in patients experiencing schizophrenia will be presented. And finally, some key elements of the recovery concept will show how it can convey basic therapeutic optimism and hope within the mental health care.

## Prevention and health promotion perspectives

The main goal of prevention is considered to prevent diseases in general or at least to alleviate the chronic course of mental illnesses in the framework of sec-

ondary and tertiary prevention. While *primary intervention* aims at the prevention of illnesses at all, the main goal of *secondary prevention* involves among others:

- The early detection in order to reduce prevalence rates of illnesses
- The prompt resolution of emerging pathological conditions in order to prevent exacerbation, chronification and incurability of an illness.

Interventions are to step into the emerging process of an illness by early detection and adequate treatment. *Tertiary prevention* aims at the prevention or delay of relapses and reduction of secondary damages due to the illness for the individual and his/her social environment. Interventions are the prophylaxis of relapses and the development of coping strategies within the field of rehabilitation.

In recent years, there is an interesting discussion within the mental health field if the traditional disease-oriented

prevention of mental illnesses should be complemented by a more comprehensive view. Instead of being restricted to minimizing risks or resolving illnesses and disabilities, positive health oriented care or “salutogenic” (Antonovsky 1987) clinical care focuses on lifting as much as possible the level of the health status of a person. These health oriented activities are now often mentioned as examples of health promotion (e.g., WHO 1986, Schmolke & Lecic-Tosovsky 2003) which include activities such as:

- Activating a person’s personal and social resources and protective factors
- Enhancement of the health of the whole individual in his/her social context
- Empowering social participation.

### *Mental health promotion*

Mental health promotion in a WHO definition is an umbrella term that covers a variety of strategies, all aimed at having positive effects on mental health. Among them are encouragement of individual resources and skills as well as improvements in the socio-economic environment (WHO 1999). Mental health promotion is also strongly connected to concepts such as “recovery processes”, “sense of hope”, and “empowerment” (National Mental Health Association). According to the Department of Health in the UK (2001), mental health promotion has a wide range of health and social benefits, such as improved physical health, increased emotional resilience, greater social inclusion and participation, and

higher productivity. New conceptual developments, promotion activities, clinical interventions, and policy statements on mental health promotion have been published in the book of the World Health Organization (WHO) in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne (Herrman et al 2005).

The recently published Consensus Statement on Psychiatric Prevention of the Section “Preventive Psychiatry” of the World Psychiatric Association (WPA) is very much in line with these newer developments towards positive health. It includes among others positive attitudes, health promotion interventions as well as endeavours towards strengthening positive mental health.

“Conventional, illness based treatment should be broadened to a comprehensive, multidimensional approach to mental health and mental disorders. This includes the enhancement of positive attitudes and reduction of prevailing scepticism regarding the possibility of prevention and cure. Combining illness-focused treatment with health promotion interventions and strengthening positive mental health such as life skills, would decrease psychological distress, enhance quality of life, i.e. self-esteem, mastery of one’s life, life satisfaction, competence and psychological adjustment. It would break the spiral of stress, increase psychobiological immunity, and reduce inpatient treatment and stigmatisation of people with mental illnesses. (...) It is of utmost importance for prevention, promotion and treatment to be continuously led by demysti-

fication of mental disorders, investment into healthy potentials of the population and of people at risk. This includes the investment in healthy potentials of patients, as well as by focusing on health rather than disease” (Lecic-Tosevski et al 2003, p 307).

In the following, an example of a successful treatment approach will illustrate the preventive focus on early psychosis in young persons: Within the well-known Scandinavian Need-Adapted Approach, Yrjö Alanen (1997) and his colleagues formulate the concept of prevention and early intervention concerning psychotic disorders. Untreated psychosis should be avoided by early intervention and detection of first episode psychosis and prodromal cases in order to reduce the risk of symptom development, negative family attitude and stigmatization. This includes an ethical aspect of early diagnosis and intervention with the claim: Psychological support instead of drug treatment for young persons! This means that all possible psychotherapeutic interventions should be applied instead of treating the young person with first episode psychosis with heavy and long-term drugs. If psychopharmacological treatment is needed at all, the therapist should give medicaments just in low doses and for the time period necessary. Therapy meetings in the need-adapted approach include patient, family and treatment team with listening to the patient at the same level, which diminishes labeling him as a hopelessly ill person. The continuity of the treatment team over a long period is given high priority in this clinically effective approach.

## **Positive health in medicine and psychiatry**

In the last two decades, we can observe increasing interest, research activities and publications on positive health in general and positive mental health in particular. In their research projects, the Scandinavian general practitioners Hanne Hollnagel and Kirsti Malterud focus their interest on positive health factors in medical consultation, based on Antonovsky’s concept of salutogenesis (Antonovsky 1987). They state that many general practitioners work on the basis of a prophylactic model stating that people become ill if strains over a longer period become too great in proportion to resources. In patient consultations, however, most of the time is spent on strains and risk factors. They deal with the main questions: Do we focus enough on the person’s resources, on the things that strengthen health and the power of resistance, on the positive health factors? (Hollnagel & Malterud 1995)

In psychiatry, psychiatric nursing and clinical psychology as well, the focus of interest has been put more and more on the patients’ positive health aspects and their resilience which can be understood as buffering functions against the impact of illness on a person (e.g., Magyary 2002, Geanellos 2005, Seeman 1989, Aro, 1994, Wolff 1995, Burbiel & Schmolke 2007). Resilience and protective factors against psychological risks associated with adversity have been investigated, for example by the well-known resilience researcher Sir Michael Rutter (1987).

Positive health is also integrated in the newest Institutional Program on Psychiatry for the Person (IPPP) of the World Psychiatric Association by its past-president Juan Mezzich. It includes the following perspective: "... affirming the whole person of the patient within his context as the center and goal of clinical care and health promotion, at both individual and community levels. This involves the articulation of science and humanism to optimize attention to the ill and positive health aspects of the person." (Mezzich 2007, p 1) Furthermore, Mezzich (2005) formulates implications of positive health for a comprehensive diagnosis and care.

### **Positive health factors in persons experiencing schizophrenia**

In our own qualitative research project on health protective resources of persons with the diagnosis of schizophrenia at the University of Leipzig, Germany, a multitude of positive health and protective factors could be found by means of the analysis of several interviews (Schmolke 2001). Illustratively, within the domain of "social resources", the following main themes could be found:

- *Need to be part of the society and to be needed by others.* The study participants did not want to be just "passive recipients" of help but expressed their need to contribute actively in order to be useful to others and to be needed in society.
  - *Emotional well-being by active social interactions (e.g., friends, peer group).*
- Most participants had social contacts to peers and friends who were not mentally ill. Through the active interactions they were able to enhance their emotional well-being.
- *Supportive relationship between patient and therapist.* The participants appreciated if their psychiatrists not only prescribed drugs and concentrated on their symptoms but had additional time to talk about their needs and problems in daily life. It was also important for them if the psychiatrist was open for their individual wishes concerning medication (e.g., type, dosage, termination).
  - *Need for distance from sick (peer) environment.* Some time after discharge from hospital, several participants were seeking distance from peer environment in patient clubs in order not to be involved again in the sphere of illness. They did not want to burden themselves with the problems of other ex-patients.
  - *Protective partner relationship.* Partner relationships contributed a lot to support and understanding and protected against loneliness. Not only the participants received support, but they themselves felt the need and were also able to give emotional support to their partners.
  - *Social support through and strong bonds with family.* The family was experienced as an important network and source of emotional and practical support. However, if the relationships had been exclusive and too close, there was no space for own development and an

independent life. Consequently, conflicts and risk of chronification of the illness were the consequences.

- *Sense in life through interpersonal relationships and to be important for others.* Many participants evaluated highly the meaning of their diverse relationships and their need to help significant others, e.g. in the education of their child, in taking care of an older relative, or having certain tasks in a living community.

These examples demonstrate that psychiatric patients have a deeply rooted need for social contacts and that isolation is detrimental to cure and healing. The results of this study also show that the effort in psychiatry to complement the illness-focused and deficit-oriented perspective by a positive health perspective is of high clinical importance. This does not mean that the needs and suffering of patients with a severe mental illness are underestimated or played down. On the contrary, a positive health perspective claims for an attitude of clinicians to take patients seriously as whole persons with both their illness and problems and their intact areas of functioning, potentials, and strengths.

## Recovery perspectives

In line with the new development of focusing more on positive aspects of mental health is the concept of recovery that has emerged and been formulated from persons with experiences of psychiatric illnesses. In recent years, persons with mental health problems themselves have become activists and advocates for their

own clinical care towards a non-hierarchical relationship between clinicians and persons with a psychiatric disorder. They want to participate actively in their treatment process and claim to be taken seriously as persons first (not as “schizophrenic” or “borderlines”) and as whole persons. These recent developments are expressed in the empowerment and recovery movement which has developed active networks mainly in the United States, United Kingdom, New Zealand and Australia (e.g., Coleman 1999, Glover 2005, Deegan 2005, Slade 2007).

Some key elements of the recovery concept have been described by Simon Bradstreet (2005) from the Scottish Recovery Network:

- *Hope:* There is no recovery without hope. And there is no change without the belief that a better life is possible and attainable
- *Meaningfulness and purpose:* People find meaning in different areas of life, e.g. by spirituality, interpersonal relationships or community connections
- *Potential for change:* From pessimistic view of (chronic) mental illness towards an understanding of episodes of illness as developmental and learning experiences
- *Control:* Subjective experience to gain control again over one’s life
- *Active participation:* From being a passive recipient of support towards taking over active responsibility
- *Holistic approach and social inclusion:* Inclusion of all elements of interest for the quality of life of a person, e.g. enjoying good health and well-being in-

fluenced by broad social, environmental and individual factors

- *Environment*: External factors such as stigma and discrimination, occupation and education, housing, social exclusion have a strong impact on recovery
- *Optimistic and realistic approach*: Recovery is not a linear process. There are times in which the recovery process is slowed down by the illness
- *Creative dealing with risks*: Dealing with risks in creative ways instead of risk management as the key task in therapeutic or rehabilitation efforts so far.

According to William Anthony (1993), one of the pioneers in recovery-oriented mental health care systems in the United States, recovery includes a satisfactory, active and hopeful life also with the restrictions of one's illness. It is the development of a new meaning and purpose in life while the person grows beyond the disastrous effects of his/her psychiatric illness.

## Conclusions

In summary, we can say that the scientific findings about positive health so far have broad and important consequences for prevention, health promotion, and treatment. Preventive interventions could be regarded as a natural extension

of the research of positive health factors. It is much better to increase capacities to do well despite adversity and to foster the existing persons' strengths and their inherent resilience than to treat individuals after maladjustment has crystallized (Albee & Gullotta 1997). Although the historical task of prevention is focused exclusively on reducing risk factors for disorder, more recent studies have shown that the most powerful effects tend to come from reducing risks and increasing protection (Pollard et al 1999). Therefore, primary prevention additionally could take over the task of paying attention to the strengths, capabilities and protective (personal and social) factors of a person, while secondary and tertiary prevention could focus their interventions on complementing their disease and risk orientation with a positive health dimension, i.e. strengthening or reactivating a patient's resilience in order to reduce her/his restrictions and disability connected to the illness. Such a broader and more optimistic perspective would help to prevent and/or diminish exacerbation, chronification, and incurability of severe mental illnesses and to develop a less pessimistic understanding of relapses. For this, we need both the professionals' perspectives and those of the persons who experience the illness and therefore are the experts. Let's go on in this direction!

## References

- Alanen YO (1997). *Schizophrenia. Its origins and need-adapted treatment*. London, Karnac Books
- Albee GW, Gullotta TP (1997). Primary prevention's evolution. In: Albee GW, TP Gullotta TP (eds) *Primary prevention works*. Thousand Oaks, CA, Sage, pp 3–22

- Antonovsky A (1987). *Unraveling the mystery of health. How people manage stress and stay well.* San Francisco, Jossey-Bass
- Anthony W (1993). Recovery from mental illness. The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal* 16:11–23
- Aro H (1994). Risk and protective factors in depression: a developmental perspective. *Acta Psychiatr Scand* 377(Suppl):59–64
- Bradstreet S (2005). Elements of recovery: International learning and the scottish context. [www.scottishRecovery.net](http://www.scottishRecovery.net) (Internet, visited on July 7, 2005)
- Burbiel I, Schmolke M (2007). The concept of health in Dynamic Psychiatry. *Dyn Psychiat* 40: 306–317
- Coleman R (1999). *Recovery - an alien concept.* Gloucester, UK, Handsell Publishing
- Deegan P (2005). Recovery as a journey of the heart. In: Davidson L, Harding C, Spaniol L (eds) *Recovery from severe mental illnesses: research evidence and implications for practice.* Vol. 1. Boston, Center for Psychiatric Rehabilitation, Trustees of Boston University (pp 57–68)
- Geanellos R (2005). Adversity as opportunity: living with schizophrenia and developing a resilient self. *International Journal of Mental Health Nursing* 14:7–15
- Glover H (2005). Recovery based service delivery: are we ready to transform the words into a paradigm shift? *Australian e-Journal for the Advancement of Mental Health (AeJAMH)* 4:1–4  
Internet: [www.auseinet.com/journal/vol4iss3/glovereditorial.pdf](http://www.auseinet.com/journal/vol4iss3/glovereditorial.pdf)
- Hollnagel M, Malterud K (1995). Shifting attention from objective risk factors to patients' self-assessed health resources: a clinical model for general practice. *Fam Pract* 12:423–429
- Herrman H, Saxena S, Moodie R (2005). *Promoting Mental Health. Concepts, Emerging Evidence, Practice.* Geneva, WHO
- Lecic-Tosevski D, Christodoulou GN, Herrman H et al (2003). WPA Consensus Statement on Psychiatric Prevention. *Dyn Psychiat* 36:307–315
- Magyary D (2002). Positive mental health: a turn of the century perspective. *Issues in Mental Health Nursing* 23:331–349
- Mezzich JE (2005). Positive health: conceptual place, dimensions and implications. *Psychopathology* 38: 177–179
- Mezzich JE (2007). Psychiatry for the Person: articulating medicine's science and humanism. *World Psychiatry* 6:1–3
- National Mental Health Association (NMHA). Key Elements of Model Programs and Replication Sites. [www.nmha.org](http://www.nmha.org)
- Pollard JA, Hawkins JD & Arthur MW (1999). Risk and protection: Are both necessary to understand diverse behavioural outcomes in adolescence? *Social Work Research* 23:145–158
- Rutter M (1987). Psychosocial resilience and protective mechanisms. *Am J Orthopsychiatry* 57: 316–331
- Schmolke M (2001). *Gesundheitsressourcen im Lebensalltag schizophrener Menschen. Eine empirische Untersuchung.* (Health protective resources in daily life of schizophrenic patients. An empirical study). Bonn, Psychiatrie-Verlag
- Schmolke M, Lecic-Tosevski D (eds) (2003). Health Promotion. An Integral Component of Effective Clinical Care. Thematic issue. *Dyn Psychiat* 36: 221–319

- Seeman J (1989). Toward a model of positive health. *Am Psychol* 44:1099–1109
- Slade M (2007). Recovery, psychosis and psychiatry: research is better than rhetoric. *Acta Psychiatr Scand* 116:81–83
- WHO (1986). Ottawa Charter of Health Promotion. Geneva, WHO
- WHO (1999). Strengthening mental health promotion. Fact Sheet No 220, April 1999, revised November 2001
- Wolff S (1995). The concept of resilience. *Aust N Z J Psychiatry* 29:565–574
- 

**Margit Schmolke** PhD, Psychological Psychotherapist, Psychoanalyst. Co-Chair, Group Psychotherapy Training, German Academy for Psychoanalysis (DAP), Munich, Germany  
**E-mail:** margitschmolke@aol.com

# **Psychiatric Education**



# Psychiatric Training of the Primary Care Physician

---

**Rodolfo Fahrer**

Section of Medicine, Psychiatry and Primary Care, World Psychiatric Association

In order to solve psychosocial and psychiatric needs of the general population, new criteria and methods are required. It is essential to develop new diagnostic and therapeutic strategies, based on the application of new scientific advances and on the new health programs.

This implies a change in medical education to train physicians with a biopsychosocial approach, physicians that may use their scientific knowledge on behalf of individuals, and develop a professional integrated identity. This can only be achieved through the transformation of the professional personality, not just with information and the transmission of theoretical knowledge, but by means of an identification process with the teacher.

Educational interventions including training courses and the dissemination of protocols and guidelines alone is not enough. It is necessary to make changes in the organization of care combining education and guidelines with approaches from chronic disease management, including systematic follow-up, improved community linkages, and better links with specialist services.

The importance of training Primary Care physicians about mental health has been recognized by the WPA over the last decade with the production of a number of education programs, and a growing literature from around the world on interventions in primary care. [STORM package on training in suicide assessment and management developed in Manchester – a training manual by Vikram Patel (2003) entitled “Where there is no Psychiatrist” – a training package for primary care workers for the acquisition of skills launched at the WPA Meeting in Yokohama by Prof. Sir David Goldberg and Dr Gask, etc].

In some countries, methods for training primary care physicians to acquire mental health skills include:

Brief lecture presentations using overhead projection or slides

Discussion-triggered by videotaped example interviews

Modeling of new skills by watching videos

Role-play in pairs or trios (with the third person as observer)

Video feedback one-to-one or in a group setting

In all countries, under the auspices of the WPA, there has been an attempt to standardize undergraduate psychiatric training and improve its quality. However, the teaching of psychiatry varies considerably across the world and even between medical schools in developed countries. Following the core curriculum for undergraduate training in psychiatry (World Psychiatric Association, 1998) produced by the WPA and the World Federation for Medical Education, there is now a recognition that many patients in the community, specially those seen in general practice and in general practice settings, will have some degree of psychological distress. Therefore, the primary health physician must have an adequate basis for a large number of different specialties.

Compared with the past, Primary Care physicians spend a lot more time out in the community with other mental health professionals and also have the opportunity to learn about psychiatry during their primary care attachments; this, however, depends on the skill and interest of the primary care doctor to whom they are attached.

Training opportunities vary, but specific psychiatric training essentially takes place in three main settings: during an attachment in psychiatry as part of a vocational training scheme; during trainee appointment, and over CME Programs.

For a successful model of therapeutic strategy it is necessary for the Primary Care physician to be trained in the initial psychopharmacological and psychotherapeutic treatment of the principal psycho-

social and psychiatric problems of the patients.

In our Department of Mental Health at the University Hospital, Buenos Aires, for years we have been working closely together with Primary Health physicians in psychiatric training programs. These Programs have a special modality of integrating theory with clinical practice.

The trend has been towards active teaching processes and this seems to be the right direction. Doing is better than watching. Experience is always necessary (many times is better than a few). Close supervision and careful constant feedback are essential.

The general integrated "working together" programs can only be effective if the psychiatrist involved is sufficiently motivated as a leader who knows the problems, has a clear medical attitude and is able to transmit his enthusiasm for something which he certainly finds both interesting and stimulating.

We also developed several specific teaching programs with the modality of "working together", in clinical or research programs with different Departments of the Teaching Hospital: Primary Care, Surgery, Internal Medicine, Pediatrics. This teaching modality is only possible if the Psychiatrist works in the general Hospital in an integrated way.

In our experience, the training of the Primary Care physician to improve his psychiatric knowledge is a goal that will not be achieved by just including lectures on the subject in undergraduate or postgraduate medical training.

This job of training and re-training is the responsibility of the psychiatrist. The latter must have sound training in clinical psychiatry, psychotherapy, psychopharmacology and social dynamics, experience in the scientific method and teaching skills; he should be capable of proper integration with multidisciplinary teams and have a high “common sense” level.

This topic, the interaction of psychiatrists with PCPs, is very important and has global mental health implications.

It is a fact that there are not enough psychiatrists to provide for the mental health needs of the world’s population. A recent WHO survey of anxiety, mood and substance disorders conducted with 84,850 adults in 17 countries concluded that there is “a disturbingly high level of unmet need for mental health treatment worldwide”.

The countries participating in the survey included low-income countries like Nigeria, low middle-income countries like Columbia and Ukraine, high middle-income countries like Mexico and Lebanon and high income countries like France, Germany, Japan, Israel, New Zealand and the United States.

This study demonstrated that: Although the problem of access and treatment of mental health disorders was worse in poorer countries, it was evident in even the richest nations.

And that there is a disturbingly high level of unmet need for mental health treatment worldwide.

Given the current state of the workforce available to diagnose and treat mental illness, it is evident that there is in suf-

ficient number of psychiatrists to handle the ever growing patient needs. The increased involvement of PCPs in diagnosing and treating patients with mental illness is necessary.

During 2007, we conducted a Survey Study of Psychiatrists consulting with Primary Care Physicians. The goal of this study was to evaluate their opinions about Primary Care Physicians being involved in the care of psychiatric patients.

In addition, the survey elicited information on their opinions concerning working with PCPs in the care of psychiatric patients.

### *Survey results*

Forty-four general hospital psychiatrists completed this survey. There was a Spanish and English version available.

The mean age of the survey sample was 37 years old and 53% were men.

- 63% reported having a private practice
- 43% said they consulted with PCPs 10-30% of their work time.
- 2% claimed to spend 51–70% of their time consulting with PCPs.
- 86% agreed that PCPs should be directly involved in the care of psychiatric patients.
- 89% agreed that psychiatrists should be available to consult in PCP offices.
- 93% reported that the most effective way to treat patients with psychopathology was teamwork between the PCP and psychiatrist. 100% agreed that PCP training should include a psychiatric clerkship.

### Survey conclusions

Despite being a small sample size, the results of this survey revealed consistent and interesting findings.

The responding general hospital psychiatrists all agreed on the need for collaboration with PCPs and the need for psychiatrists to be available in PCP offices.

They also agreed on the need to have more formal psychiatric training for PCPs during their residency.

These results ratify our work for many years in the Department of Mental Health, University Hospital, training the psychiatrist to become the Primary Care

physician's trainer with the modality of "working together".

This methodology implies that the teaching and learning process must take place within the framework of daily medical practice.

In summary: The psychiatric training of the Primary Care physician must be based on the principles of clinical learning in medicine

- Active teaching processes
- "Doing is better than watching"
- Experience is always necessary
- "Many times is better than a few"
- Close supervision and careful constant feedback are essential.

### References

- Fahrer R (1999). Psychiatric training for the primary care physician. The role of a consultation-liaison psychiatrist: a proposal. *New trends in experimental and clinical psychiatry. Edizioni Internazionali* 15:79–82
- Fahrer R (2007). *Survey Study of Psychiatrists consulting with Primary Care Physicians*. WPA Section on Medicine, Psychiatry and Primary Care
- Gask L, Croft J (2000). Methods of working with primary care. *Adv Psychiatr Treat* 6:442–449
- Odejide AO, Morakinyo JJ, Oshiname FO et al (2002). Integrating mental health into primary care in Nigeria. *Seishin Shinkeigaku Zasshi* 104:802–809
- Okasha A (1997). The future of medical education and teaching: a psychiatric perspective. *Am J Psychiatr* 154(Suppl 6):77–85
- Vikram P (2003). *Where there is no psychiatrist: A Mental Health Care Manual*. London, UK: Gaskell
- WHO survey of anxiety, mood and substance disorders. In: Levin A (ed) 2007. *Inadequate MH care plagues nations in all parts of the world*. Psych News, 14
- World Psychiatric Association and World Federation for Medical Education (1998). *Core curriculum in psychiatry for medical students*. New York, NY. World Psychiatric Association & World Federation of Medical Education
- World Psychiatric Association (2002). Institutional program on the core training curriculum for psychiatry. Yokohama, Japan, World Psychiatric Association

---

**Rodolfo Fahrer**, Professor of Psychiatry, Department of Psychiatry, University Hospital, School of Medicine, University of Buenos Aires 1425, Argentina  
**E-mail:** fahrer@ciudad.com.ar

# **Mental Health Economics**



# **Advances in Mental Health Economics Research**

---

**Samuel H. Zuvekas, Ella Rytik**

Section on Mental Health Economics, World Psychiatric Association

Mental health economics research encompasses a broad array of topics. Research topics of current interest in the field include: assessing the economic burden of mental disorders; the economic evaluation of mental health treatments and supportive interventions through cost-benefit, cost-effectiveness, and cost-utility studies; economic evaluations of psychotropic medications; the financing of mental health services in both the public and private sectors; and geographic variation in mental treatment use and costs. Interest in cross-national comparisons of mental health treatment systems and financing also continues to grow, especially with the recent development of more formal assessment methodologies (Saxena et al 2007, Zechmeister 2006).

The WPA Section on Mental Health Economics encourages interdisciplinary research between psychiatrists, economists and other professionals in the mental health sector in order to enable a common language and scientific background between those who finance, those who

provide, and those who use services for mental and addictive disorders throughout the world. The specific goals of the section are to: (1) promote the development of high quality interdisciplinary research; (2) provide clinicians scientific information on mental health economics to be used for decision making and advocating for the needs of the mental health sector; and (3) developing communication networks to disseminate scientific research to those who finance, provide and use services for mental and addictive disorders. Mental health economics research introduces key data to inform decisions about mental health policy and treatment, especially in countries with large bodies of research studies, such as the United States. In particular, this research provides the information needed for clinicians, other mental health professionals, service providers and policymakers to adequately identify the financial needs of the mental health sector and the treatments that best maximize health benefits. It helps these same decision-makers

develop and reform financing systems to support comprehensive, community-based treatment, taking into account the complex array of clinical and social services needed for reducing the family and social burden when severe mental disorders are managed in the community.

The Section encourages the growth of mental health economics research by sponsoring regional (e.g., Cairo 2000, Bucharest 2001) and global research conferences (e.g., Chicago 2000, Venice 2003, 2005, 2007, 2009), the official journal of the Section, *The Journal of Mental Health Policy and Economics*, and, more recently, the development of a new training and mentorship program. The Journal is the first in Medicine focused on the relationships between health policy and economics at the specialty level. To further stimulate research and support excellence in the field, the *Journal* established the *Adam Smith Award in Mental Health Policy and Economics Research* aimed at recognizing the best, most relevant articles published by *The Journal of Mental Health Policy and Economics*. The third biennial prize was awarded in March 2007 (Halsteinli, Kittelsen and Magnussen 2005).

A key goal of the Section on Mental Health Economics is to support and increase research capacity throughout the World. Those countries with the best developed research in the field, notably the USA, UK, Canada, and the Netherlands, all received substantial investments in research by their governments and private institutions over the past several decades. The regional meetings organized by the section (Cairo 2000, Bucharest 2001) not only provided a forum for existing re-

searchers in other regions, but enhanced opportunities for training new researchers through educational courses provided by internationally recognized authorities from Western Europe and the USA. Building on the success of these courses in developing research capacity, the section developed a new training and formal mentorship program in mental health economics which began in 2006. The first edition of the postgraduate classroom training program was held in Venice in July 2006 with 14 participants from 13 different countries (Australia, Brasil, Germany, Iran, Lithuania, New Zealand, Norway, Poland, Portugal, Romania, Spain, Switzerland, and the US). The second training is planned to begin in July 2008. Further information is available at [www.icmpe.org](http://www.icmpe.org).

We summarize important recent advances in mental health economics in the published literature by topic area below.

### **Assessing the burden of mental disorders**

The World Health Organization's (WHO) Global Burden of Diseases project ranks several mental and addictive disorders high among all diseases in terms of mortality and morbidity burden as measured by disability-adjusted life-years (DALYs). But mental disorders impose many other economic and social costs on individuals, their family members, and countries as a whole. Cost-of-illness studies seek to quantify all of the costs associated with a disorder in monetary terms to provide national and sub-national policymakers throughout the world with key information to better tar-

get resources into prevention and treatment of mental disorders. A key finding of cost-of-illness studies is that non-treatment costs substantially exceed the direct costs of treating mental disorders. Most of these non-treatment costs result from the reduced or complete inability to work by patients and, to a lesser extent, their relatives or other caregivers. For example, a recent study in the Netherlands found that productivity losses accounted for 85 percent of the total costs of anxiety, mood and alcohol disorders (Smit et al 2006). Similarly, a study of the cost of schizophrenia in England (Mangalore and Knapp 2007) found that lost productivity of schizophrenia patients accounted for 38 percent of all costs compared to 13.5 percent for health and social care and 16 percent for institutional care. These productivity losses can be especially large for mental disorders, which often strike individuals early during their employment careers (or even before they have begun) compared to many other chronic conditions, such as heart disease, which tend to come later in life.

Through these cost-of-illness and related studies, public policy-makers and employers have become increasingly aware that the economic costs of not financing treatment of mental disorders are substantial. Rapid advances in the methodologies for conducting cost-of-illness studies have also improved the precision of these estimates and provided policy-makers with more extensive information about which sectors and on which groups these costs fall. In particular, the spread of large national psychiatric epidemiology and morbidity surveys has not only pro-

vided better information about the prevalence and incidence of disorders in many countries, but in combining socio-demographic and economic information with psychiatric measures, has provided a rigorous foundation for estimating many of the costs of these disorders (Mangalore & Knapp 2007, Smit et al 2006). Better data from public systems providing social and support services have also facilitated a more complete picture of the true costs of mental disorders, especially severe and persistent disorders such as schizophrenia (Mangalore & Knapp 2007).

Better data and methodologies have also led to increased awareness of the especially large costs associated with those dually diagnosed with mental and addictive disorders, and the implications of this for the organization, delivery and financing of treatment. The treatments for mental and addictive disorders are often separated, reducing the effectiveness of treating dually diagnosed patients and increasing societal costs. A recent study points to the especially large social costs for those dually-diagnosed individuals who also have a physical disorder such as HIV/AIDS (Conover et al. 2006). Direct treatment costs approach \$50,000 (2002 USD) per year for this group, two to three times the average cost of treating an individual with HIV/AIDS alone. The authors point out that integrated health care for this triply diagnosed group would be potentially even more costly, but that these costs may be offset by the large potential productivity gains and reductions in public support that improved treatment might bring to these individuals.

## **Economic evaluations: cost-benefit, cost-effectiveness and cost-utility studies**

Cost-of-illness studies quantify well the large social and economic burden imposed by mental disorders, but they cannot tell us which interventions should be used to reduce this burden. A major goal of mental health economics research is to quantify for clinicians, providers and policy-makers which treatments provide the best health outcomes in relationship with their costs. If it is relevant to investigate possible underfunding of mental health services due to chronic funding problems in government budgets for psychiatric services and limited social awareness of the burden of mental disorders, it is equally important to make sure that scarce resources are spent well. Governments and others that pay for mental health prevention and treatment are increasingly demanding that researchers not only establish that treatments are effective, but that they are cost-effective. As a consequence, economic components have become more central to randomized control trials and other rigorous methods for evaluating mental health interventions.

Early economic evaluations were central to demonstrating to policy-makers that patients with severe and chronic mental illnesses could be more effectively treated in the community compared to institutions, especially when all the relevant economic and social costs, not just direct treatment costs, were considered. Today, cost-effectiveness and other economic evaluations are applied to an increasingly wide range of new and promising interventions in the community, and also

in populations not previously considered. Individuals with mood and anxiety disorders are increasingly being treated in primary care settings, but many are also concerned about the ability of primary care providers to recognize and treat these disorders. Collaborative care models offer the potential to substantially improve care but are also likely more costly, creating reluctance to pay for these interventions. A recent large scale cost-effectiveness trial of a collaborative care model for treatment of late-life depression found, however, large gains in terms of depression-free days relative to the incremental costs of the intervention (Katon et al 2005). Similarly, Wells et al (2007) report success of a quality improvement program for the treatment of sub-threshold depression in primary care settings in terms of quality-adjusted life years (QALYs).

The treatment of mental disorders in developing countries is especially challenging. In these highly resource-constrained environments, it is especially important not only to develop cheap, effective interventions but to demonstrate their cost-effectiveness so that they are adopted in practice. For example, a study of a primary care treatment program in Chile found substantial gains in improving depression-free days with very small incremental costs (Araya et al 2006). The authors note that the intervention could serve not only as a model in other developing countries, but potentially developed countries, as well.

Economic evaluation methods have been applied similarly to many other treatment models and quality improvement interventions, and methods continue to improve. A number of new studies

(see for example, Cook et al 2005) confirm the effectiveness of supported employment models. French and colleagues (2007) evaluated the cost-effectiveness of four different interventions for adolescents with a substance use disorder, an area where little is known both about effectiveness and cost-effectiveness. They find wide variations in both cost and clinical outcomes across the four interventions, and crucially over time. That is, cost-effectiveness was very sensitive to length of trial and when outcomes were measured, a general problem in control trials where follow-up periods are limited. They provide a number of conceptual recommendations for improving cost-effectiveness trials, especially in their target group of adolescents.

Mental health disorders continue to pose substantial challenges for conducting economic evaluations of treatments and interventions. Tools for assessing patient preferences for treatments and outcomes that are well-developed for use in economic evaluations of other types of medical treatments are problematic because these disorders either impair (for example, schizophrenia or dementia) or otherwise affect cognitive processes (for example, anxiety or mood disorders). Recent methodological work has focused on developing new assessment instruments, as well as a better understanding of the performance of existing widely used instruments.

### **Economic analysis of pharmaceuticals**

While economic evaluations of psychosocial interventions continue to

grow, most cost-effectiveness, cost-utility and cost-benefit analyses continue to focus on pharmaceutical interventions. This reflects, in part, the dominance of pharmaceuticals in current treatment, but also the need to demonstrate cost-effectiveness in many countries for either drug approval or to be covered under public health insurance systems. Newer generation antipsychotics, antidepressants, and other medications have been widely perceived, until very recently, as more effective with fewer side effects than older medications. But the newer medications are often substantially more expensive than older generic medications, so that the gains in terms of clinical outcomes and reduced side-effects must be substantial in order to be cost-effective. In addition, a number of studies have called into question the perceived superiority of SSRI and other newer antidepressants, as well as atypical antipsychotics, with substantial implications for governments and other payers in terms of which medications they will be willing to pay for and under what circumstances. We note, in particular, two recent large-scale publicly funded economic evaluations of second generation vs first generation antipsychotics, The Cost Utility of the Latest Antipsychotic Drugs in Schizophrenia Study or CULASS 1 (Jones et al 2006) and the economic component of the Clinical Antipsychotic Trials of Intervention Effectiveness or CATIE investigation (Rosenheck et al 2006). The CULASS 1 study suggested greater improvements in quality of life and symptoms with first-generation medications with the same overall treatment costs for

patients requiring a treatment change, while the CATIE study found perphenazine was equally effective in the measured outcomes with lower overall costs. That is, both studies found first-generation were more cost-effective than second generation antipsychotics, at least in some clinical situations. However, substantial additional research is under way to clarify, from both a clinical and economic perspective, the appropriate choices of medications under different circumstances.

Economic issues regarding pharmaceuticals extend far beyond formal cost-effectiveness and cost-utility trials of medications. Recent advances also focus on the role of promotional activities of pharmaceutical manufacturers and financing and reimbursement policies on the rapid growth of medication use across the world. Meyerhoefer and Zuvekas (2008) find evidence that direct-to-consumer advertising in the US (through television, radio, and print media) increases the likelihood that individuals initiate treatment with antidepressants, particularly when their out-of-pocket costs are low, but is not associated with better compliance. They also draw on economic theory in their analyses to confirm the widely held belief that these drug advertisements, while potentially increasing awareness of the availability of treatment for mental disorders, convey little information to consumers about the appropriateness of specific medications. This is important because physicians report feeling pressure to prescribe medications when requested by patients, and there is evidence that these requests do affect prescribing behavior.

Recent mental health economic analyses also examine the role that patient cost-sharing plays in both the initiation and choice of medication treatments. For example, a study of ADHD medications in the U.S. (Huskamp et al 2005) found that increased patient co-payments led to significantly greater out-of-pocket expenses for families of children with ADHD and a decreased probability of using these medications. This raises concerns that increasing patient cost-sharing to constrain costs can have adverse health outcomes. There are also a large number of studies underway in the United States examining the impact of Medicare prescription drug coverage (the Medicare Part D benefit) in 2006 on the elderly and disabled individuals covered by that program. The implementation of this benefit also switched responsibility for drug coverage for disabled individuals who are also covered by the state-based Medicaid program to the federal Medicare program. This substantial change in the structure and financing of prescription drug coverage for a significant number of people with severe and chronic mental disorders has raised a number of concerns about the quality and continuity of treatment. Preliminary studies have already been published, but more definitive studies await the release of data from the US government on this new program.

### **Cost and financing of mental health services**

The financing of mental health treatment remains a critical focus of research because, ultimately, financing determi-

nes who gets what types of treatments and how much. At the macro level, the WHO's Project Atlas continues to document the share of each country's governmental resources devoted to the treatment of mental and addictive disorders. Project Atlas further demonstrates large gaps between the burden imposed by psychiatric disorders and the share of health budgets allocated to these disorders, and substantial variation between and within regions of the world. A related WHO project, WHO-Assessment Instrument for Mental Health Systems, WHO-AIMS (Saxena et al 2007) is designed to provide middle and low income countries with a tool for planning mental health policy and monitoring ongoing progress using a systematic instrument. This potentially represents a significant development because these countries generally lack the relatively well developed information systems used in rich countries for planning mental health treatment. For example, the U.S. has developed a parallel system to the National Health Expenditure Accounts reported to the OECD specific to mental health and substance abuse treatment expenditures (Mark et al 2007). However, it should also be noted that even these rich countries often lack adequate data on how mental health treatment resources are allocated because of the complex financing arrangement between many treatment sectors (including social services) and at different governmental levels (Zechmeister & Osterle 2006). The more regular collection of large-scale household psychiatric epidemiologic surveys in many countries and the creative ways in which researchers and policymakers are currently using

these survey data alone and in conjunction with large administrative datasets holds considerable promise for helping to fill this information gap. The renewed interest in using spatial methods to understand geographic variation in mental health treatment use and costs (see for example, Edlund, Belin & Tang 2006, Moscone & Knapp 2005) also holds significant promise. These methods can be used to examine how local mental health policies are related to local spending levels and treatment gaps (Moscone & Knapp 2005).

At the more micro level, much mental health economics research continues to examine specific policies regarding mental health treatment delivery and financing and how they affect treatment. For example, a study of outpatient clinics in Norway found that, using state of the art Data Envelopment Analysis econometric techniques, government policies to increase the supply of psychiatric services to children and young people were successful increasing the productivity of these clinics (Haslsteinli, Kittelsen, and Magnussen 2005). The authors suggest that stronger financial incentives will be needed in the future to maintain productivity increases, especially because of competing incentives to provide somatic care at these clinics. In the United States, research continues to focus on the design of health insurance coverage and implications of patient cost-sharing on access to treatment and the out-of-pocket burden of psychiatric disorders. Previous mental health economics research was instrumental in leading many states in the late 1990s to put in place requirements that mental disorders be covered

in the same way as other medical disorders, or ‘parity.’ These studies all suggested that parity would cost employers and governments little. More definitive evidence came recently from a landmark analysis of mental health parity among the more than 8 million members covered under the US government employee health benefit program, utilizing a sophisticated quasi-experimental design (Goldman et al 2006).

## Conclusion

The field of mental health economics continues to grow and develop, and to

provide information critical to clinicians, providers and policy-makers in their decision-making. Recently published research points to the continued vitality of the field and the important contributions it makes. Most importantly, research capacity continues to grow rapidly throughout the World, providing a strong basis for further development of the field.

---

*The views expressed in this paper are those of the authors and no official endorsement by the Agency for Healthcare Research and Quality or the US Department of Health and Human Services is intended or should be inferred.*

## References

- Araya R, Flynn T, Rojas G, Fritsch R, Simon G (2006). Cost-Effectiveness of a Primary Care Treatment Program for Depression in Low-Income Women in Santiago, Chile. *American Journal of Psychiatry* 163:1379–1387
- Beaston-Blaakman A, Shepard D, Horgan C, Ritter G (2007). Organizational and Client Determinants of Cost in Outpatient Substance Abuse Treatment. *Journal of Mental Health Policy and Economics* 10:3–13
- Conover CJ, Arno P, Weaver M, Ang A, Ettner SL (2006). Income and Employment of People Living with Combined HIV/AIDS, Chronic Mental Illness, and Substance Abuse Disorders. *Journal of Mental Health Policy and Economics* 9:71–86
- Cook JA, Leff SH, Blyler CR, Gold PB, Goldberg RW, Mueser KT et al (2005). Results of a multisite randomized trial of supported employment interventions for individuals with severe mental illness. *Archives of General Psychiatry* 62:505–512
- Edlund MJ, Belin TR, Tang L (2006) Geographic variation in alcohol, drug and mental health services utilization: what are the sources of the variation? *Journal of Mental Health Policy and Economics* 9:123–132
- French MT, Zavala SK, McCollister KE, Waldron HB, Turner CW, Ozechowski TJ (2007). Cost-Effectiveness Analysis of Four Interventions for Adolescents with a Substance Use Disorder. *Journal of Substance Abuse Treatment* (June 27 2007 Epub ahead of print)
- Goldman HH, Frank RG, Burnam MA, Huskamp HA, Ridgely MS, Normand SL et al (2006). Behavioral health insurance parity for federal employees. *New England Journal of Medicine* 354: 1378–1386
- Halsteinli V, Kittelsen SAC, Magnussen J (2005). Productivity Growth in Norwegian Psychiatric Outpatient Clinics for Children and Youths. *Journal of Mental Health Policy and Economics* 8:183–191

- Huskamp HA, Deverka PA, Epstein AM, Epstein RS, McGuigan KA, Muriel AC et al. Impact of 3-Tier Formularies on Drug Treatment of Attention-Deficit/Hyperactivity Disorder in Children. *Archives of General Psychiatry* 62:435–441
- Jones PB, Barnes TR, Davies L, Dunn G, Lloyd H, Hayhurst KP et al (2006). Randomized Controlled Trial of the Effect on Quality of Life of Second- vs First-Generation Antipsychotic Drugs in Schizophrenia, Cost Utility of the Latest Antipsychotic Drugs in Schizophrenia Study (CUtLASS 1). *Archives of General Psychiatry* 63:1079–1087
- Katon WJ, Schoenbaum M, Fan MY, Callahan CM, Williams J, Hunkeler E et al, for the IMPACT Investigators (2005). Cost-effectiveness of improving primary care treatment of late-life depression. *Archives of General Psychiatry* 62:1313–1320
- Mangalore R, Martin Knapp M (2007). Costs of Schizophrenia in England. *Journal of Mental Health Policy and Economics* 10:23–41
- Mark TL, Levit KR, Buck JA, Coffey RM, Vandivort-Warren R (2007). Mental health treatment expenditure trends 1986–2003. *Psychiatric Services* 58:1041–1048
- Meyerhoefer CD, Zuvekas SH (2008). The shape of demand: what does it tell us about direct-to-consumer marketing of antidepressants? *The BE Journal of Economic Analysis & Policy* 8(2) (Advances), Article 4
- Moscone F, Knapp M (2005). Exploring the spatial pattern of mental health expenditure. *Journal of Mental Health Policy and Economics* 8:205–217
- Rosenheck RA, Leslie DL, Sindelar J, Miller EA, Lin H, Stroup TS et al, for the CATIE Study Investigators (2006). Cost-effectiveness of second-generation antipsychotics and perphenazine in a randomized trial of treatment for chronic schizophrenia. *American Journal of Psychiatry* 163:2080–2089
- Saxena S, Lora A, van Ommeren M, Barrett T, Morris J, Saraceno B (2007). WHO's assessment instrument for mental health systems: collecting essential information for policy and service delivery. *Psychiatric Services* 58:816–821
- Smit F, Cuijpers P, Oostenbrink J, Batelaan N, de Graaf R, Beekman A (2006). Costs of nine common mental disorders: implications for curative and preventive psychiatry. *Journal of Mental Health Policy and Economics* 9:193–200
- Wells KB, Schoenbaum M, Duan N, Miranda J, Tang L, Sherbourne C (2007). Cost-effectiveness of quality improvement programs for patients with subthreshold depression or depressive disorder. *Psychiatric Services* 58:1269–1278
- Zechmeister I, Österle A (2006). Distributional impacts of mental health care financing arrangements: a comparison of the UK, Germany and Austria, August. *Journal of Mental Health Policy and Economics* 9:35–44

---

**Samuel Zuvekas**, Senior Economist, Center for Financing, Access and Cost Trends, US Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850, USA  
**E-mail:** samuel.zuvekas@ahrq.hhs.gov



# **Forensic Psychiatry**



# Practice Guidelines in Forensic Psychiatry

---

**Julio Arboleda-Flórez, Alan Jager, Norbert Konrad,  
José Taborda, Nicoleta Tataru**

Section of Forensic Psychiatry, World Psychiatric Association

Practice Guidelines are not obligatory specifications for practitioners to abide by, but are produced by leaders in a particular field more as suggestions to help practitioners manage their clinical loads. Practitioners are free to divert, but the Guidelines are an aide memoir enjoining the practitioner to divert from them only after a full reasoning that a different approach is necessary and clinically sound in any particular case, hence the Guidelines would not entirely apply to the case. Guidelines demand either to be applied or to be disregarded only after cogent and scientific reasons are provided.

In Forensic Psychiatry whose field of action is so vast there could be a multiplicity of Guidelines, but any one of them for whatever they are or are prepared for will have to contend with the restriction of ethical minefields that are so common in this specialty (Arboleda-Flórez, 2006). Ethical issues are constantly at the forefront of intervention in forensic psychiatry.

Yet, to write about Ethics in a branch of Medicine like Forensic Psychiatry that straddles the lines of multiple systems means that the writer has to enter into the field of values and decisional rules underlining each one of those systems. Many of these values are, on occasions, antithetical, and may even be irreconcilable, and some decisional rules could stand at different poles in the understanding of the meaning of human behaviour. In addition, regarding content, ethics cannot be divorced from the actual operations of the field, which in Forensic Psychiatry, apart from spanning three often inimical systems, health, justice and corrections, also has to deal with matters of legislation and human rights. This paper will first review the interplay of these issues in the field of ethics in forensic psychiatry and, second, review some of the ethical dilemmas facing forensic practitioners.

The scope of Forensic Psychiatry seems daunting to many. In the circumscribed ambit of their practice, Foren-

sic Psychiatrists ought to be concerned about the ethical ramifications of their activities on aspects of Civil Law in relation to the management of wills and contracts or insurance law pertaining to independent medical examinations. In Criminal or Penal Law, Forensic Psychiatrists have to contend with the thorny issues of the ethics of expert testimony, the management of prisoners, in particular, mentally ill offenders and their possible use as subjects of research (Arbole-da-Flórez 2005).

In any of these situations, Forensic Psychiatrists will have to strive for objectivity, reconcile their roles as experts when they are also treaters, and avoid ever becoming agents of the higher bidder, or “hired guns.” Conflicts of interest and dual agency should constantly remind the Forensic Psychiatrist to make an ethical evaluation of the circumstances surrounding a forensic practice and to remember that, despite the conflicts, the duty of a Forensic Psychiatrist is first that of a Physician.

It is in the spirit of these values and ethical implications of their practice that the Executive of the Forensic Section of the World Psychiatric Association decided to embark on the development of Practice Guidelines in some areas of contention. Although plans are to develop them in many areas, up to now, only two have been produced that are presented in this Chapter, one on Independent Medical Examinations led by Dr. Alan Jager and the other on Treatment and Psychiatric Management of Prisoners led by Professor Norbert Konrad.

## **Independent medical examinations**

One major task of Forensic Psychiatry in the interface between law and psychiatry includes being an expert witness. Though almost all forensic psychiatrists write forensic psychiatric reports all over the world, no internationally accepted guidelines exist as yet. The Forensic Psychiatry Section of the World Psychiatric Association has therefore developed a position paper to provide guidelines for the conduct of Independent Medical Examinations (Jager et al, in preparation).

To be considered expert, an independent forensic psychiatrist (IFP) need to be expertly qualified and have current or recent practice experience in the subject area. He or she should be independent, adequately briefed, make a comprehensive assessment and provide a complete, unbiased opinion within his or her area of experience and expertise, within a framework of medical ethics.

Medico-legal assessments carry an inherent potential for conflict and misunderstanding. As a consequence, they must be undertaken within an ethical framework. That ethical framework rests in the training and registration of the Independent Forensic psychiatrist as a medical practitioner. The assessment should therefore be guided by principles of medical ethics espoused by medical associations and psychiatric colleges. The IFP should be satisfied that any request for a medico-legal report is: appropriate, made by an appropriate party; and not liable to breach the principle of duty of care. The IFP should obtain the agreement of the examinee to provide the report to the

requesting body, ensure that the examinee understands the purpose of the report and understands that any relevant information will be included. The IFP should also state whether the assessment is compulsory or not and provide information about possible consequences of non-cooperation. Sufficient information should be gathered and all relevant information should be disclosed. The report must be unbiased and the IFP must not act as an advocate. The IFP should adhere to principles of honesty and make a strenuous effort to achieve objectivity. The report should be provided in a timely manner and the IFP must maintain the confidentiality of the report to the extent possible in a legal context (The Royal Australian and New Zealand College of Psychiatrists 1998).

Independent Forensic Psychiatrists (IFPs) should ensure they have the qualifications and expertise to perform the assessment and provide the expert opinion. The assessment should be undertaken in person and in a setting that provides the greatest practical confidentiality. The IFP should clearly explain the purpose of the consultation and note that it is not a therapeutic consultation and that no help, suggestions, treatment, or even feedback, will be offered, with the exception that intervention is appropriate if the examinee is at immediate and serious medical risk. Examinees may ask to record the interview. They may insist that they be accompanied in the interview. It is the IFPs prerogative to refuse either request. Often a compromise can be reached whereby the examinee is invited to take notes, such as the IP is doing. The consent of the examinee should be sought prior to an interview being re-

corded and a copy of any recording should be offered to the examinee. Interpreters, if they are required, should be professionally trained and consideration should be given to religious, gender and cultural compatibility. Questions should be asked in a way that indicates the IFP is not biased. The use of rapport building in a forensic evaluation is an ethical issue in itself, but will assist information gathering (Resnick 1998).

Details regarding the content of the report are found below in the developed guidelines (Jager et al).

## **Consensus guidelines for independent medical examinations**

### *Preamble*

The Forensic Psychiatry Section of the World Psychiatric Association has developed this position paper to provide guidelines for the conduct of Independent Medical Examinations.

### *General issues*

A psychiatric report may be requested by lawyers representing a plaintiff, lawyers representing a defendant, a judge, an insurer or others. Psychiatric reports are produced either by treating psychiatrists (TPs) or independent forensic psychiatrists (IFPs). These guidelines refer to reports produced by IFPs.

### *Ethics*

1. Medico-legal assessments carry an inherent potential for misunderstanding and conflict.

2. As a consequence, they must be undertaken within an ethical framework. That ethical framework rests in the IFP's training and registration as a medical practitioner.
  3. The assessment should therefore be guided by principles of medical ethics espoused by medical associations and psychiatric colleges.
  4. The IFP should be satisfied that any request for a medico-legal report is: appropriate, made by an appropriate party; and not liable to breach the principle of duty of care.
  5. The IFP should obtain the agreement of the examinee to provide the report to the requesting body, ensure that the examinee understands the purpose of the report and understands that any relevant information will be included.
  6. The IFP should also state whether the assessment is compulsory or not and provide information about possible consequences of non-cooperation.
  7. Sufficient information should be gathered and all relevant information should be disclosed.
  8. The report must be unbiased and the IFP must not act as an advocate.
  9. The IFP should adhere to principles of honesty and make a strenuous effort to achieve objectivity.
  10. The report should be provided in a timely manner and the IFP must maintain the confidentiality of the report to the extent possible in a legal context.
- the assessment and provide the expert opinion.
  2. The assessment should be undertaken in person and in a setting that provides the greatest practical confidentiality.
  3. The IFP should clearly explain the purpose of the consultation and note that it is not a therapeutic consultation and that no help, suggestions, treatment, or even feedback, will be offered, with the exception that intervention is appropriate if the examinee is at immediate and serious medical risk.
  4. Examinees may ask to record the interview. They may insist that they be accompanied in the interview. It is the IFP's prerogative to refuse either request. Often a compromise can be reached whereby the examinee is invited to take notes, such as the IP is doing.
  5. The consent of the examinee should be sought prior to an interview being recorded and a copy of any recording should be offered to the examinee.
  6. If interpreters are required, they should be professionally trained and consideration should be given to religious, gender and cultural compatibility.
  7. Questions should be asked in a way that indicates the IFP is not biased. The use of rapport building in a forensic evaluation is an ethical issue in itself, but will assist information gathering.

#### *Conduct of the examination*

1. IFPs should ensure they have the qualifications and expertise to perform

#### *Content of the report*

The report should be written in plain language. The use of psychiatric terminology should be avoided in an effort to make the information comprehensible for

non-medically trained readers. Fact and opinion should be clearly distinguished. The following information should be included:

1. Qualifications and experience of the IFP.
2. A statement about who commissioned the report.
3. A statement regarding the examinee's consent to the release of information.
4. Demographic data, including the name and date of birth of the examinee, the domestic situation, marital status and number of children.
5. Personal history, including developmental, educational, occupational, sexual and relationship, substance use and forensic history.
6. A description of the examinee's personality, interests, hobbies and coping style.
7. History of the present complaint from the examinee's report and the reports of informants.
8. Past psychiatric history.
9. Family history of psychiatric illness.
10. Medical history.
11. Mental State Examination should include a description of appearance and behaviour; emotional tone; speech; thought stream, form and content; sensory perception; higher mental functioning; insight and judgement.
12. Tests and investigations.
13. A summary and formulation, or synthesis of the case, and diagnosis should be recorded. The formulation takes the form of a biopsychosocial explanation of the presumptive caus-

ative factors in the examinee's condition. Inconsistencies between reported symptoms and observed mental state or physical examination should be noted. A determination of malingering, however, is best left to the decision-making body to make.

14. Finally, an opinion is offered, in relation to questions posed by the requesting body. The report itself should clearly demonstrate how conclusions were reached. Limitations to the examination should be explained in the report and mention made of investigations or other data that are required to reach a concluded opinion.
15. Comments on special issues may be required, including prognosis, management, impairment, disability and legal concepts such as competency.

### *Conclusion*

To be considered expert, an independent forensic psychiatrist need to be expertly qualified and have current or recent practice experience in the subject area. He or she should be independent, adequately briefed, make a comprehensive assessment and provide a complete, unbiased opinion within his or her area of experience and expertise, within a framework of medical ethics.

## **Prison psychiatry**

### *Consensus paper on prison psychiatry*

It is basically a primarily legal philosophical and political problem whether or not mentally disordered persons "belong" in prison. Countries applying the

construct of criminal responsibility or incompetence to stand trial can prevent mentally disordered persons from being imprisoned. Secure confinement can then be ordered in a forensic psychiatric institution, if necessary.

Of course this principle does not prevent people from becoming mentally unwell when put in a prison environment, nor does the presence or a history of mental disorder automatically result in the absence of criminal responsibility (Arboleda-Flórez, in press). The still high prevalence of mental disorders in prisoners has been impressively demonstrated in more recent surveys. In a systematic review of 62 surveys from 12 different western countries including 22790 prisoners (mean age 29 years, 81% men), 3.7% of the men had psychotic illnesses, 10% major depression, and 65% a personality disorder, while 4% of women had psychotic illnesses, 12% major depression, and 42% a personality disorder (Fazel & Danesh 2002). In comparison to the general population, prisoners have an increased risk of suffering from a mental disorder that transcends countries and diagnoses. Psychotic disorders increase the risk of suicide, which as a rule is considerably higher in prisoners than in the general population. Suicide is the leading cause of death in penal institutions, especially during the early stage of confinement.

For mentally disordered prisoners, there is often an increased risk of being victimized, as well as the potential for high rates of decompensation and deterioration.

If one accepts that mentally disordered prisoners should be treated in penal institutions (possibly even hospitalized), then the principle of “equivalence” with therapeutic levels of care in the community, should prevail in the care of incarcerated mentally disordered persons. It is doubtful whether the majority of prisoners with mental disorders receive appropriate care such as that mandated by the European Convention on Human Rights and other international charters.

The United Nations International Resolutions (esp. Standard Minimum Rules for the Treatment of Offenders) (UN 1955), the Council of Europe (esp. Recommendation No R (98) 7 on the Ethical and organizational aspects of health care in prison; Kelk 1999), the World Medical Association (esp. Declaration of Tokyo) (WPA 1975), the World Psychiatric Association (esp. Declaration of Hawaii II) (WPA 1983) as well as the Oath of Athens (International Council of Prison Medical Services 1979) touched prison psychiatry but lack of more detailed guidelines in dealing with mentally disordered prisoners.

In-prison treatment has to address inmate-specific problems and circumstances, including post-release services. This includes both an orientation to the function level and the severity of psychiatric symptoms. The high prevalence of mental disorders speaks in favor of the standardized application of diagnostic screening instruments as a component of the admission procedure in prison.

In accordance with the principle of equivalence, every prisoner suffering

from a mental disorder should receive appropriate treatment equal to the care that such a patient would receive when not in prison. Prisoners suffering from serious mental disorder should be kept and cared for in a hospital facility which is adequately equipped and possesses appropriately trained staff. Inpatient treatment is not restricted to distribution of medication for mentally disordered locked up 23 hours the day in their cell but infers the availability of a multidisciplinary psychiatric team comprising psychiatrists, psychologists, psychotherapists, occupational therapists and counsellors. In those cases where the use of close confinement of mentally disordered patients cannot be avoided, it should be reduced to an absolute minimum and be replaced with one-to-one continuous nursing care as soon as possible.

Consent to medical treatment should also be sought from a patient suffering from a mental disorder insofar as his/her ability to understand is not impaired. Furthermore, obtaining the patient's consent, especially in the case of psychiatric pathology, is essential if a "therapeutic alliance" is to be formed likely to make the patient more committed to the medical treatment offered.

The situation in which a patient, who is able to understand, refuses medical treatment after receiving full, detailed information must also be taken into account. Every patient has a right to refuse treatment or to informed "non-consent" that has a full right to manifest. However, such an attitude may sometimes result from a conflict relating to non-medical issues; this is particularly the case when a

prisoner goes on hunger strike to protest against a judicial or administrative decision. In this type of situation the doctor has to check the state of health of a person in the process that is the source of the deterioration in their health. It is then appropriate to record in great detail in the patient's medical file that he/she is able to understand and has refused treatment after being given detailed information.

The essential principle that should be applied for medical treatment of addicted prisoners and of withdrawal symptoms in prison is that of equivalence with the therapeutic practices in the country concerned. Psychotherapeutic and medico-social programmes developed in prisons should be closely linked to the approach used in the community as a whole with regard to drug-dependant people (drugs, alcohol or medication).

Follow-up treatment for released inmates should be provided for at outside specialised services. It is essential that the prison doctor has ample notice of the forthcoming release of his patient in order that he may arrange an outside appointment with all the supportive services very shortly after leaving prison. It should be ensured that all necessary documentation is dispatched to the providers of such services with the full consent of the patient.

Clarity of roles in prison psychiatry is crucial for practitioners. Cooperation between the different occupational groups in the penal system is certainly necessary and benefits the patients. If, however, confidentiality is not respected, the patient-physician relation-

ship will be even more endangered than it is in the therapy-hostile prison environment.

Opponents of equivalence of standards of care for mentally disordered prisoners argue that prisoners do not deserve it or should not have (even) better care than outside of prison, where they did not use already existing services or were con-

sidered problem patients. Commitment in this area hardly promises politicians votes. However, it should be pointed out that imprisonment imposed by society via the courts establishes a special social responsibility, especially for the health of prisoners, even if psychiatric aid does not primarily or indirectly prevent crime (Konrad et al 2006).

## References

- Arboleda-Flórez J (2006). *Ethics in Forensic Psychiatry: Current Opinion in Psychiatry* 19:544–546
- Arboleda-Flórez J (2005). Theme article. Forensic psychiatry: two masters, one ethics. *Die Psychiatrie* 2:153–157
- Arboleda-Flórez J. *Mental patients in prisons*. World Psychiatry (in press)
- Arboleda-Flórez J, Deynaka C (1999). *Forensic psychiatric evidence*. Toronto, Butterworths
- Fazel S, Danesh J (2002). Serious mental disorders in 23,000 prisoners: a systematic review of 62 surveys. *Lancet* 359:545–550
- International Council of Prison Medical Services (1979). *Oath of Athens*. Athens, Inaugural Meeting
- Jager et al (in preparation)
- Kelk C (1999). Recommendation No. R(98) 7 of the committee of ministers to member states concerning the ethical and organizational aspects of health care in prison. *European Journal of Health Law* 6:265–278
- Konrad N, Arboleda-Flórez J, Jager A, Naudts K, Taborda J, Tataru N (2007). Prison psychiatry: consensus paper. *International Journal of Prisoner Health* 3:1–3
- Resnick P (1998). The psychiatrist as expert witness. APA Annual Meeting Course. Unpublished
- The Royal Australian and New Zealand College of Psychiatrists. Ethical Guidelines for Medico-Legal Reports. RANZCP, Melbourne, 1998
- United Nations (1955). *Standard minimum rules for the treatment of prisoners*. Geneva. 1st United Nations Congress on the Prevention of Crime and the Treatment of Offenders
- World Medical Association (1975). *Declaration of Tokyo*. Tokyo. 29th World Medical Assembly
- World Psychiatric Association (1983). *Declaration of Hawaii II*. Vienna. 7th World Congress of Psychiatry

---

**Julio Arboleda-Flórez**, Professor of Psychiatry, 483 River Ridge Drive, Glenburnie, Ontario KOH 150, Canada  
**E-mail:** Julio.arboleda-florez@queensu.ca

# **Ethics and Values**



# Values Based-Practice and Involuntary Treatment A New Training Programme in the UK

---

**K.W.M. (Bill) Fulford, Malcolm King, Sarah Dewey**

Section of Philosophy and Humanities in Psychiatry, World Psychiatric Association

A recent paper by Glenn Roberts et al (2008) in the Royal College of Psychiatrists' journal *Advances in Psychiatric Treatment* highlighted the need to face up to the fact that the use of involuntary treatment in psychiatry requires, no less than any other area of mental health, a positive approach to good practice.

A values-based approach to the use of involuntary treatment might seem to many almost a contradiction in terms. However, as a contribution to positive practice in this area, values-based practice goes to the heart of what is so problematic clinically about the use of involuntary treatment, namely that such treatment involves a direct conflict of values: by definition, the patient concerned wants one thing (not to be treated) while everyone else wants the opposite (i.e. that the patient accepts treatment).

In this paper we outline the approach of values-based practice and illustrate how this has been used as the basis for a training programme being developed by the Department of Health in the UK to

support implementation of a new Mental Health Act. We illustrate how the main areas of values-based practice (respectively, skills development, policy and service delivery models, links with evidence-based practice, and the central importance of partnership) have contributed to the new training programme. We finish with an example drawn from the training materials for the new Mental Health Act, showing how the approach works in relation to a particular case.

## Values-based practice

As described in detail elsewhere (Fulford 2004), values-based practice is a new approach to balanced decision-making in mental health where complex and conflicting values are involved. Building on work in analytic philosophy (Hare 1952) as applied to concepts of disorder (Fulford 1989), and combining analytic with empirical social science research (Colombo et al 2003), values-based practice represents a strong “philosophy into prac-

“development” within the wider field of the philosophy of psychiatry (Fulford et al 2003). There have also been important developments internationally (Mezzich 2007, Van Staden & Fulford 2007) and particularly through the World Psychiatric Association’s Institutional Program on Psychiatry for the Person (IPPP) (Mezzich & Salloum 2007).

Values-based practice, it is important to emphasise, is only one of a number of new resources from different disciplines that are being developed to support more effective ways of working with values in medicine. In addition to ethics and law, considered in the next section, there have been significant recent developments both in health economics (Brown et al 2005) and decision analysis (Hunink et al 2005). The distinctive contribution of values-based practice, however, is that rather than seeking to prescribe “right values”, it starts from respect for differences of values and relies on “good process” for balanced decision making where values conflict. Values-based practice can thus be thought of as the counterpart for values of evidence-based practice: where evidence-based practice offers a process for working more effectively with complex and conflicting evidence, values-based practice offers a (different although complementary) process for working more effectively with complex and conflicting values.

Ten key elements of the “good process” of values-based practice are summarised as ten pointers in the arrow diagram in figure 1. We will be referring to this diagram, which is taken from the first training manual in values-based

practice, *Whose Values?* (see below, Woodbridge & Fulford 2004), throughout the article.

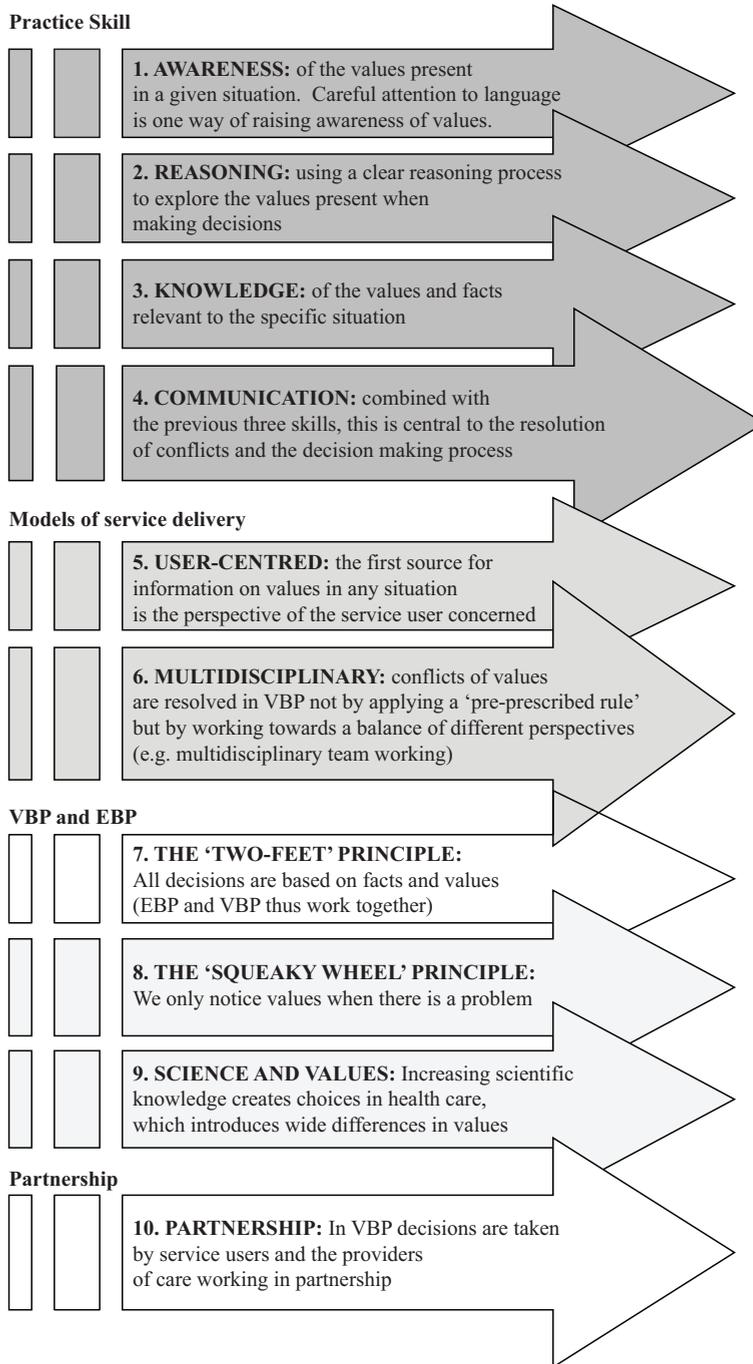
## Values-based practice, ethics and law

There is of course a large and well established literature on the ethical and legal issues raised by the use of involuntary treatment (see for example, several chapters in Bloch et al seminal *Psychiatric Ethics* 1999). Values-based practice is complementary to ethics and law in that its skills-based approach to balanced decision-making operates within a framework of shared values that is defined by ethics and embodied in law. This approach is consistent with recent work in jurisprudence in the closely related area of human rights legislation: one of the UK’s most senior lawyers, Lord Woolf (2002), has written recently about human rights legislation as providing in effect a framework of values within which balanced decisions have to be taken on individual cases.

It is this “framework of values” approach that we adopted in developing the training materials for the new Mental Health Act. The key to the approach, in this case, was a set of Guiding Principles that were developed literally to guide the way the Act is used in practice. The Guiding Principles, as listed in table 1, are set out in the Code of Practice as required by the Act itself.

The way in which the Guiding Principles fit together with the Code of Practice and the Act itself can be summarised thus:

## VALUES-BASED PRACTICE



**Figure 1.** Ten key elements of values-based practice

**Table 1.** List of Guiding Principles in the Code of Practice for the new Mental Health Act

Purpose	Decisions under the Act must be taken with a view to minimising the undesirable effects of mental disorder, by maximising the safety and wellbeing (mental and physical) of patients, promoting their recovery and protecting other people from harm.
Least restrictive alternative	People taking action without a patient’s consent must attempt to keep to a minimum the restrictions they impose on the patient’s liberty, having regard to the purpose for which the restrictions are imposed.
Respect	People taking decisions under the Act must recognise and respect the diverse needs, values and circumstances of each patient, including their race, religion, culture, gender, age, sexual orientation and any disability. They must consider the patient’s views, wishes and feelings (whether expressed at the time or in advance), so far as they are reasonably ascertainable, and follow those wishes wherever practicable and consistent with the purpose of the decision. There must be no unlawful discrimination.
Participation	Patients must be given the opportunity to be involved, as far as is practicable in the circumstances, in planning, developing and reviewing their own treatment and care to help ensure that it is delivered in a way that is as appropriate and effective for them as possible. The involvement of carers, family members and other people who have an interest in the patient’s welfare should be encouraged (unless there are particular reasons to the contrary) and their views taken seriously.
Resources (Effectiveness, efficiency and equity)	People taking decisions under the Act must seek to use the resources available to them and to patients in the most effective, efficient and equitable way, to meet the needs of patients and achieve the purpose for which the decision was taken.

1. The law, in this case the new Mental Health Act, tells us *what to do*.
2. The Code of Practice tells us *how to do it*.
3. The Guiding Principles provide a framework of shared values as the basis for applying the law guided by the Code of Practice *in a balanced way to individual cases*.

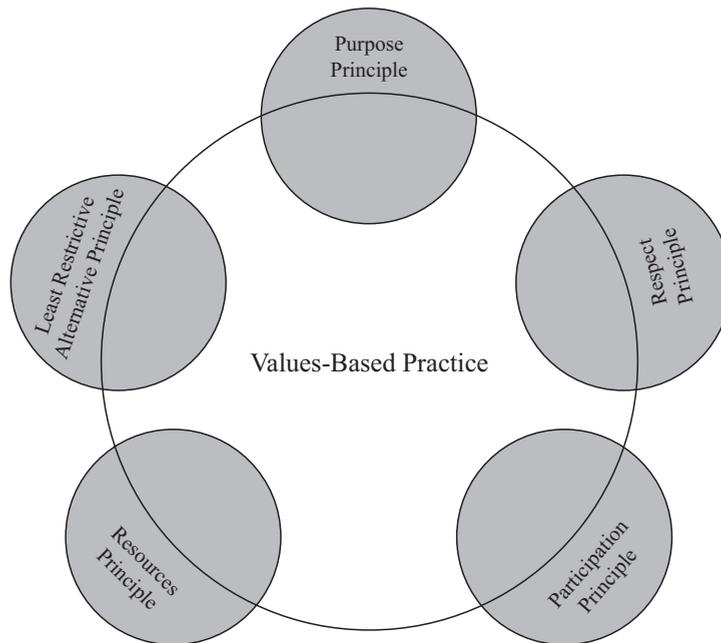
As a framework of shared values, the Guiding Principles have not been produced “out of the blue”. Rather, they rep-

resent an attempt (that has to be approved by parliament) to bring together the many hopes, expectations, concerns and other values that were expressed from a wide variety of different stakeholder perspectives during the long and sometimes contentious process of consultation that led up to the new Act being introduced. Following the approach of Lord Woolf (above), we can thus understand the Guiding Principles as providing a framework of shared values that have to be balanced in applying the Act

in individual cases; and the skills-base of values-based practice, as summarised in Pointers 1 to 4 in figure 1, provides the key to carrying out this process of balancing the values represented by the Guiding Principles in an appropriate way.

The framework of shared values represented by the Guiding Principles is shown diagrammatically in figure 2 (which is reproduced from an early module of the training materials), and the Guiding Principles themselves, as set out in the Code of Practice for the new Act, are given in full in table 1. As figure 2 indicates, the Principles all have equal

weight – this is a “round table” of values. However, when we look in detail at the values reflected in each of the Principles (as set out in table 1), we can see that these will sometimes be in conflict: thus, the Resources Principle, which includes a value of efficient use of resources, may be in conflict with the Principle of Respect (there being a limit to how far resources can be efficiently tailored to individual needs); or again, the Purpose Principle, which includes a value of “protecting other people from harm”, may be in conflict with the Principle of Least Restriction. So, when it comes to applying the law to individual cases, the different Principles, each of which is im-



**Figure 2.** Guiding Principles and Values-Based Practice.

portant in its own right, have to be balanced according to the circumstances of the individual case.

We do not have space to look in detail at how each of the skills areas of values-based practice contribute to making balanced decisions within the framework of values represented by the Guiding Principles. By way of illustration, however, note how: (1) raising awareness of the different values bearing on a particular case will be the key to understanding, for example, what the Respect Principle will mean from the often very different perspectives represented by different cultural groups; (2) similarly, reasoning skills will be essential to exploring ways of reconciling as far as possible such different value perspectives; (3) knowledge of the values likely to be involved in a given case will be essential to interpreting what for example the Guiding Principle of Least Restriction will mean to patients from different backgrounds; and (4) communication skills, for example of negotiation and conflict resolution, will be essential to effective balancing of the Guiding Principles as a whole. We illustrate further how the Guiding Principles may be balanced in the example given at the end of this article.

### **Values-based practice and evidence-based practice**

As Pointers 7 to 9 in figure 1 indicate, an important feature of the process of values-based practice is that it is strongly linked as a full partner with evidence-based practice. This feature of values-based practice has been a key feature of

the programme as a whole in its contributions to policy and service developments reflecting arrows 5 and 6 in figure 1 (see, for example, Department of Health, 2004, 2005 and 2008; and the NIMHE Values Framework (<http://nimhe.csip.org.uk/ValuesBasedPractise>), also published in the Ten ESCs and in *Whose Values?* as above).

The links between values and evidence in values-based practice have been filled out in a particularly strong way in the development of the training materials to support the new Mental Health Act, in that the evidence-base of the training materials has been generated not only by drawing on conventional research sources but also, and centrally, on service user narratives. An example of the importance of conventional research sources in this area is the empirical work by Katie Sheehan in Oxford, looking at the experience of compulsion through both service user and professional perspectives (Sheehan 2007, Sheehan and Burns 2007). The training materials, however, also build directly on service user narratives from people with direct personal experience of different aspects of the impact of involuntary treatment in practice. Some of these narratives have been derived from the work of those involved in the Tribunal system (the Tribunals are responsible for monitoring and reviewing the use of the Act in individual cases): Dora Jonathan, a lawyer with particular experience of the difficulties faced by those from minority cultural groups, helped to develop the first set of examples used in the training materials. In addition, one of us (SD) brought to the

training programme a whole series of service user narratives reflecting a wide range of both positive and negative experiences of involuntary treatment. In addition to being included within the training materials, these narratives have been published in the form of a CD-rom (Care Services Improvement Partnership 2008).

### **A worked example**

In this final section of the article we illustrate how the above resources have been brought together with a worked example from the training manual. Before coming to the article itself, it is important to emphasise that the training materials have been produced to support the trainers responsible in different areas for delivering training in the new Act rather than for unsupported use by individual practitioners or service users. Also, although developed within a values-based approach, and drawing specifically on the role of the Guiding Principles as outlined above, much of the values-based approach is implicit rather than explicit, the details of this being covered elsewhere, in the Ten ESCs, for example, and in *Whose Values?* (both as above). Nonetheless, we hope that this example will illustrate the very down-to-earth way in which a values-based approach to good practice in the use of involuntary treatment works out in practice.

The first part of the example is given in table 2. This reproduces an activity from the Foundation Module of the Training Materials, aimed at illustrat-

ing how the Guiding Principles need to be brought together in a balanced way in an individual case. Before looking at the answers given in table 3, you may want to try answering the three questions in this activity, drawing on your own background and experience, and referring to the list of Guiding Principles given in table 1.

Table 3, then, gives some suggested answers, developed by the training team, for the activity illustrated in table 2. As these answers show, each of the Guiding Principles is relevant in different ways and a values-based approach would then become important in coming to a balanced decision. From your own background and experience, you may well have seen the relevance of the Principles differently. This is important. It is precisely the need for legislation to be applied in a way that is sensitive to the diversity of individual values that is at the heart of the values-based approach.

### **Conclusions**

In this article, we have outlined how the resources of values-based practice have been applied in the development of training materials that will be used to support implementation of a new Mental Health Act in the UK. A particular feature of these training materials, reflecting an important values-based aspect of the new Act itself, is the enhanced significance given to the Guiding Principles. As we have described, these Principles, as provided for in the Act and set out fully in the Code of Practice, form a

**Table 2.** An activity from the training manual.**Activity 7 – Scenario: Carol (1)**

Below is another scenario, read it and then answer the questions in the box below.

*Carol is a 23 year old African-Caribbean woman living in a bed-sit. Her mother has suspected that Carol has been using drugs (heroin). Carol's behaviour has changed significantly and she has been behaving very oddly at different times. When challenged, Carol has always denied any involvement with drugs, but offers no other explanation and does not accept that she has changed in any way. As a result of her mother's concerns, she has been staying at Carol's bed-sit for the past week.*

*For the past two nights Carol's mother has become increasingly concerned as Carol appears not to be sleeping and she has often heard Carol talking as if someone is in the bedroom. Matters came to a head today after she was told by her daughter that she was hearing the 'voice' of an unknown male threatening to harm her. As a consequence Carol is currently hyper vigilant, anxious and feels that she needs to carry a knife for her 'own protection'. She appears paranoid and agitated.*

Carol's mother has contacted their GP to ask for help.

1. Which of the MHA's principles might be most important in this situation?
2. Does Carol fit the definition of 'mental disorder' given in the MHA? (Note: with some exclusions, this is simply 'any disorder or disability of mind'.)
3. Based on your answers to 1 and 2 what action (if any) do you think the GP should take?

**Discussion Points**

*You can get comments responding to the above questions in Appendix 1 (pp 137–138)*

Throughout the exercise, it is really important to think of Carol 'for real'. Imagine that she is your client or patient, or if you are a patient that you are either Carol herself or involved with her as a carer or family member. It is only by working in this way – i.e. imagining yourself in a real-life situation with real decisions to take rather than discussing things in a theoretical way – that you can get a clear sense of how the MHA, the COP and the principles, work together to support best practice in compulsion.

framework of key values within which balanced decisions on the use of involuntary treatment can be made in individual cases. We have also described how values-based practice has to be used as a full partner to evidence-based practice, and in this regard the way in which the training materials build on service user narratives is crucial.

As noted at the start of this article, values-based practice is only one approach to working with complex and conflicting values in healthcare. But we believe that the approach, in starting from a position of respect for the diversity of individual values and relying on good process for balanced decision-making where values conflict, provides a potentially powerful resource

**Table 3.** Suggested possible answers.**Foundation Module Activity 7 – Scenario: Carol (1)***Question 1*

Each principle and how they may relate to Carol is examined here.

1. *Purpose Principle.* Are there safety and wellbeing (mental and physical) considerations relating to both Carol, her mother and public protection from harm?
2. *Least restrictive alternative principle.* In the event of a Mental Health Act Assessment concluding that Carol should go to hospital, any intervention without her consent must attempt to minimise the restrictions placed on her liberty, having regard to the purpose for which they are imposed. What is the reason for hospitalisation and how might the principles steer future actions and intervention? Is there an alternative to admission/section?
3. *Respect principle.* Relevant issues here might be considerations regarding gender, race, and sexual orientation. Is Carol expressing any wishes or feelings (currently or advanced). There must be no unlawful discrimination. Decision makers must recognise and respect her diverse needs, including her race, religion, gender, age and sexual orientation.
4. *Participation principle.* Carol should be involved, as far as is practicable in the circumstances, in planning and developing their own care to help ensure it is delivered in a way that is as appropriate and effective for them as possible. The involvement of her mother as principal carer should be encouraged (unless there are particular reasons to the contrary) and their views taken seriously.
5. *Resources principle.* In the decision regarding how to respond to Carol’s needs, decision-makers must seek to use the resources available to them and to patients in the most effective, efficient and equitable way. They must also consider other people’s perspectives on what is required.

*Question 2*

Regarding the definition of “mental disorder” there does appear to be some evidence of mental illness, but in this case is this enough to convince us that Carol meets the definition of mental disorder? On top of her possible heroin use, she may also be using cannabis and it is this combination that is making her experience paranoia and agitation. The GP would need to undertake further assessment in order to convince him/herself that Carol meets the definition before proceeding with any compulsory powers.

*Question 3*

In the meantime, there are some more immediate concerns in relation to the safety of Carol and the public, particularly with regard to men due to Carol’s insistence on carrying a knife. The priority for the GP must be the safety of Carol and the public. The best course of action, therefore, would be for the GP to seek the opinion of a specialist doctor (duty psychiatrist) or the appropriate organisation responsible for Mental Health Act assessment.

---

for developing a positive approach to good practice in the use of involuntary treatment, an approach that is aimed, no less than in any other aspect of mental health practice, at recovery and development of the skills of self-management.

## References

- Bloch S, Chodoff P, Green SA (1999). *Psychiatric ethics*. 3rd ed. Oxford, Oxford University Press
- Brown MM, Brown GC, Sharma S (2005). *Evidence-based to value-based medicine*. Chicago, American Medical Association Press
- Care Services Improvement Partnership (CSIP) and the National Institute for Mental Health in England (NIMHE) (2008) Workbook to Support Implementation of the Mental Health Act 1983 as Amended by the Mental Health Act 2007. London, Department of Health. See also <http://www.mhact.csip.org.uk/workstreams/the-mental-health-act-amendment-workstreams/training/materials.html>
- Colombo A, Bendelow G, Fulford KWM, Williams S (2003). Evaluating the influence of implicit models of mental disorder on processes of shared decision making within community-based multi-disciplinary teams. *Social Science & Medicine* 56:1557–1570
- Department of Health (2004). *The ten essential shared capabilities: a framework for the whole of the mental health workforce*. London, The Sainsbury Centre for Mental Health, the NHSU (National Health Service University) and the NIMHE (National Institute for Mental Health England)
- Department of Health (2005). New ways of working for psychiatrists: enhancing effective, person-centred services through new ways of working in multidisciplinary and multi-agency contexts. (*Final report “but not the end of the story”*) London, Department of Health
- Department of Health (2008). *Refocusing the care programme approach: policy and positive practice guidance*. London, Department of Health
- Fulford KWM (1989, reprinted 1995 and 1999). *Moral theory and medical practice*. Cambridge, Cambridge University Press
- Fulford KWM (2004). Ten principles of values-based medicine. Ch 14 In: Radden J (ed) *The philosophy of psychiatry: a companion*. New York, Oxford University Press (pp 205–234)
- Fulford KWM, Morris KJ, Sadler JZ, Stanghellin, G (2003). Past improbable, Future possible: the renaissance in philosophy and psychiatry. Chapter 1. In: Fulford KWM, Morris KJ, Sadler JZ, Stanghellini G (eds) *Nature and narrative: an introduction to the new philosophy of psychiatry*. Oxford, Oxford University Press (pps 1–41)
- Hare RM (1952). *The language of morals*. Oxford, Oxford University Press
- Hunink M, Glasziou P, Siegel J, Weeks J, Pliskin J, Elstein A et al (2001). *Decision making in health and medicine: integrating evidence and values*. Cambridge, Cambridge University Press
- Mezzich JE (2007). Psychiatry for the Person: articulating medicine’s science and humanism. Editorial. *World Psychiatry* 6:1–3
- Mezzich JE, Salloum IM (2007). Towards innovative international classification and diagnostic systems: ICD-11 and person-centered integrative diagnosis. Guest Editorial. *Acta Psychiatrica Scandinavica* 116:1–5
- The NIMHE (National Institute for Mental Health in England) Values Framework. Available at: <http://nimhe.csip.org.uk/ValuesBasedPractise>

- Roberts G, Dorkins E, Wooldridge J, Hewis E (2008). *Detained - What's my choice?* A discussion paper 14:172–180. *Advances in Psychiatric Treatment* 14:183–184
- Sheehan KA (2007). *Perceived coercion in mental health care. D. Phil thesis.* University of Oxford, Oxford
- Sheehan KA, Burns T (2007). Learning from experiences: quantitative and qualitative analysis of patient experiences during the inpatient admissions process. *BMC Psychiatry* 7(Suppl 1):S48, S51, S69
- Van Staden CW, Fulford KWM (2007). Hypotheses, neuroscience and real persons: the theme of the 10th International Conference on Philosophy, Psychiatry and Psychology. Lead Guest Editorial. *South African Journal of Psychiatry*, 13:68–71
- Woodbridge K, Fulford KWM (2004). *Whose values? A workbook for values-based practice in mental health care.* Sainsbury Centre for Mental Health, London
- Lord Woolf, lecture to the British Academy, 15/10/02, quoted in Hansard 28/10/02 col 607
- 

**K.W.M. (Bill) Fulford**, D. Phil, FRCP, FRC Psych, Professor of Philosophy and Mental Health, University of Warwick, Fellow of St Cross College; Member of the Philosophy Faculty and Honorary Consultant Psychiatrist, University of Oxford  
**E-mail:** k.w.m.fulford@warwick.ac.uk



# **Religion and Spirituality**



# Religion, Spirituality and Psychiatry

## Reflections and Directions for Thorough Action

---

**Peter J. Verhagen**

Section on Religion, Spirituality and Psychiatry, World Psychiatric Association

### Introduction

There is much to say about religion and spirituality and the interface with psychiatry and (psycho)therapy. In fact it is a field of inquiry and clinical practice that is multifaceted and multilayered. In order to grasp all these facets and layers it seems self-evident to look for what is called an interdisciplinary paradigm, as the psychologists of religion Emmons and Paloutzian have proposed (Paloutzian & Park 2005), or even an interdisciplinary-relational approach aiming at a “relational integration” of psychology and theology, as has been suggested by the theologian LeRon Shults and the psychologist Sandage (LeRon Shults & Sandage 2006). It is very clear that a dialogue and collaboration between psychiatrists, psychologists of religion, and colleagues in neuroscience, cognitive science, philosophy, theology, to name a few disciplines, is essential for future research

and for the improvement of clinical practice and assessment of patients and the disorders they present, with regard to religion and spirituality as determining factors for personal and social well-being and (mental) health.

### No apologetics

In order for progress to occur in this interdisciplinary field of inquiry, a minimum consensus concerning the meaning of core constructs is needed. Now, here the discussion becomes exciting, because, as one thing is very clear from the perspective of religion and spirituality, one cannot settle any kind of consensus as intended here, on purely objective grounds. As soon as one starts to discuss such core constructs as disease, mental health, religiousness and spirituality, all kinds of background issues, assumptions and convictions, come across. One of these assumptions, to name just one, is the rather typical Western idea

that illness is secular (Sadler 2005). Somatic and/or psychic, illnesses have to do with biomedical, causal-mechanical patterns, that are in no way spiritual or religious. However, Islamic understanding of health and illness cannot be understood otherwise than in the context of religious conceptualization. Within a totally different discourse, the anti-Semitic image of “the dirty Jew” was repudiated in the nineteenth and twentieth centuries with the Jewish model of preventive medicine based on the interpretive tradition of Moses and hygiene (Hart 2007).

Anyhow, it means that from a global perspective, it becomes very clear that a discussion like the one we are thinking of here, has much of an interreligious and interspiritual dialogue. Greater awareness of religious and spiritual plurality have heightened the need for such an interreligious and interspiritual dialogue, even with regard to psychiatry, or better: from within the profession itself. In connection with this need, there is overwhelming agreement that training and permanent education should include instruction and guidance on how to handle religious and spiritual issues in assessment and therapy. In the meantime, such a dialogue asks for a new kind of spirituality itself in order not to fall back in any form of outdated exclusivism (Schmidt-Leukel 2007). Psychiatry is not helped forwards by any form of religious apologetics! That is a very difficult but nevertheless worthwhile task.

## Levels of analysis

However, strong as our agreement upon this point of view might be, we are still in need for a proper way of explaining ourselves among our colleagues in such an interdisciplinary dialogue and collaboration: for a proper way of analyzing research findings, and for a proper way of communicating with our patients about their complaints and suffering, and about our assessment and clinical evaluation of what they have told and complained about.

Glas, psychiatrist and philosopher, proposed to make a distinction among different types or levels of knowledge (Glas 1996). It is my conviction that we can use these distinctions very successfully in our interdisciplinary dialogue and collaboration. The difference in these types of knowledge can be explained in several ways. Glas points at a difference in degree of abstraction. However, this difference in degree of abstraction has also to do with the place where the actors interact with each other in a certain way to gain this knowledge, and with the frame that sets the rules for such an interaction in this or that “place” or context.

The first level is the level of everyday experience. It is the level of the story the patient tells about his complaints and symptoms. In that way, it is a story determined by the cultural and religious or spiritual background of the person in question, and his or her idiosyncratic experiences. Of course in such a story, one finds constructs the individual creates with regard to his self and self image, how he or she explains or justifies life ex-

perience and social phenomena concerning health and (mental) illness.

The second level is the clinical level. On this level, something is done to the story told. The mental health professional reconstructs the story into a clinical case, a diagnosis, and a case formulation. The case formulation elaborates on the identified disorder, the discerned patterns in the story of the patient, his social context and the clinician-patient relationship, from a categorical description and classification to a personalized perspective, which furthermore leads to take therapeutic action.

In the DSM-IV-TR, four major themes are proposed for considering the cultural aspects of this patient's case. These elements are known as the cultural identity of the patient, the cultural explanation of the illness, cultural factors related to the psycho-social environment of the patient, and the cultural elements of the relationship between patient and clinician. This seems quite surveyable. However, we are well aware, or perhaps not aware enough, that the list of cultural variables is long: ethnic identity, race, gender and sexual orientation, age, religion and spirituality, migration and country of origin, socio-economic status, acculturation processes, language, dietary influences, education (Committee on Cultural Psychiatry 2002). It is clear from the outset, that these variables shape each other. And in the patient-clinician relationship the cultural variables of both the patient and the clinician interact and shape each other on several levels. We can register three levels: the intrasubjective, the intersubjective and the transsubjective level. Especially

the third level is of interest here. Although this level may remain in the background, it is the scene for a play with at least four partners: the personalities of the patient and the clinician, and the cultural identities of each. In the intersubjective relationships, the relation between the individual and their cultural group, between the individual and the other's cultural group, and the relation between the cultural reference groups play their role. Denial of this interplay would be harmful, the "anthropological syndrome" on the other hand would put the clinician at risk to develop a burn-out (Michel 1996).

Another important aspect of the second, the clinical level, is that clinical knowledge aims at the individual patient in his unique situation and phase of life. This means that in principle no domain or quality of that situation can be excluded from assessment. However, this orientation on uniqueness goes hand in hand with reference to general rules and concepts. A standardized diagnostic formulation needs a complementary idiographic diagnostic formulation (Mezzich et al 2003, 55–57). The one patient is not the other. The way the clinician handles this balance between the unique and the general is not just a matter of clinical orientation, for that orientation is only partly based on theoretical constructs and ideas. It is a kind of skill and expertise that is learned and developed in practice. Therefore, the clinician's attitude and a kind of practical wisdom (prudence) are involved.

So, within the realm of religion and spirituality, on this second level of analysis, clinicians should be able to use

their psychiatric knowledge and experience of human relationships for analyzing a patient's religiousness or spirituality. They should be able to recognize the dynamics of different types of religiousness and spirituality without the anthropological syndrome. They should also be able to identify the deep structure of religiousness and spirituality and the way in which such a personal religiousness and spirituality is formed by upbringing and life experience. And they should be able to use latent opportunities for therapeutic interventions that lie within the patient's religious and spiritual frame of reference (Schreurs 2006).

The third level is called the scientific level. On this level a clinical question or problem is formulated in scientific or research language. In the case of religion and psychiatry disciplines like neurosciences, psychology of religion, social psychology, theology, as mentioned before, are involved in the analysis of affective, cognitive, interpersonal and spiritual processes. All kinds of methodology are involved, e.g. evidence-based medicine. However, from our experience with evidence-based medicine we are all acquainted with the difficulties in translating the clinical material into a scientific discourse, and back again to the everyday experience of the patient.

The fourth level is the philosophical or meta-theoretical level. On this level the basic premises of theoretical models, e.g. the bio-psycho-social-spiritual model, in medicine and psychology are described. The standard work by Fulford is very illuminating within this regard (Fulford et

al 2006). The same holds true for other scientific disciplines, e.g. scientific theology, irrespective of religious tradition. In philosophical theology, propositions and concepts of religious doctrines are elucidated and extended by using standard philosophical means of analysis and argument.

### **WPA consensus statement on religion and spirituality**

Since November 2006, the Special Interest Group Spirituality of the Royal College of Psychiatrists (London) and the WPA Section on Religion, Spirituality and Psychiatry have started working on a consensus statement on Religion, Spirituality and Psychiatry. Our aim with such a position statement is to have the statement accepted by the WPA; it would be a major event if we succeeded in accomplishing that goal. Professor Christopher Cook (Durham, UK), Professor Driss Moussaoui (Casablanca, Morocco), the Section's co-chair, and the Section's secretary play an important role in this process and have made a major contribution in the drafting of the statement thus far. The acceptance of a position statement could have an important function and significance. Spirituality and Religion have often been neglected in clinical and academic psychiatry; however, they are increasingly recognized as important in the understanding of the etiology of psychiatric disorders, in clinical assessment and treatment.

In 1948, the World Health Organization (WHO) defined health as: a state of complete physical, mental and social well-

being and not merely the absence of disease or infirmity. An update of this definition followed in the 1986 WHO “Ottawa Charter for Health Promotion”. It stated that health is a “resource for everyday life, not the objective of living”, and “health is a positive concept emphasizing social and personal resources, as well as physical capacities”. When we look at a definition of mental health, although there is no “official” definition, we see that the concept refers to a human individual’s emotional and psychological well-being in which an individual is able to use his or her cognitive and emotional capabilities, function in society, and meet the ordinary demands of everyday life; feeling capable, being able to handle normal levels of stress, maintaining meaningful and satisfying relationships, being able to recover from difficult situations are signs of healthy functioning. It is immediately clear that all kinds of cultural differences, subjective assessments, different even competing theories, affect the way mental health is defined. Clearly, emotional, physical, and social aspects of every day life must function together to achieve overall health. A rather holistic model of mental health includes five life tasks: essence or spirituality, communication by language, work, love, enjoyment.

Interesting enough, it is in the last sentence that we see spirituality mentioned for the first time as an aspect of healthy life tasks, as an aspect of mental health. Religiousness or spirituality is not *expressis verbis* included in the official and semi-official definition of health. In the meantime there seems to be a (growing?) consensus that it should be. However, it is

not difficult to imagine what kind of political difficulties this would cause in as much as mental health provision is a governmental task. What kind of religiousness or spirituality could be promoted anyway where state and religion are separated or where one religious tradition is state religion? On the other hand, perhaps there is an advantage in being a psychiatrist or a mental health professional to start with. In a religiously plural world, much depends on the skill to start, create and maintain relationships. One of the basic skills of the psychiatrist and therapist is to engage in the relationship with the patient in an encompassing way.

The WPA tries to achieve its purposes in several ways, including by developing consensus statements on issues of relevance to the WPA and psychiatry. A consensus statement on religion, spirituality and psychiatry is in our view such an issue of relevance. Whereas religion and spirituality have often been neglected in clinical and academic psychiatry, they are increasingly recognized as being of importance in the understanding of the etiology of psychiatric disorders, and in the clinical assessment and treatment of patients (Baetz et al 2004). Religion and spirituality offer an interpretive and explanatory tool of thinking, feeling and behaviors that may or may not constitute illness. Religion and spirituality are a pathogenic and pathoplastic agent, are also a protective and therapeutic instrument, and are an element in the management and structuring of clinical services (compare the five functions of culture; Committee on Cultural Psychiatry 2002, Chattopadhyay 2005). The dis-

cussion on the consensus statement and the acceptance of its final version by the WPA is top 1 priority of the Section on Religion, Spirituality and Psychiatry.

### **Pushing back boundaries; an exciting project**

The WPA Section on Religion, Spirituality and Psychiatry took the initiative to start a project that will lead to the publication of a handbook-like volume that will serve the kind of interdisciplinary dialogue we need in clinical care and that will help in distinguishing the levels of analysis or the types of knowledge involved in the study and treatment of mental illness.

Many colleagues from all around the world, among them many WPA officials, started working on this project which reflects their commitment to study the interface of psychiatry and religion. "Pushing back boundaries" is felt as a challenging task and has been formulated as the general theme.

The central part of the book offers a description and analysis of how major world religions look at psychiatric disorders. How do these traditions look at mental or psychic functioning and how do they evaluate and interpret psychic disorders? These are rather general formulations and questions. What does it mean in concreto, in daily practice? Mahayana Buddhism is widely and profoundly immersed in the mental life of East Asian people. Moslems attribute all events in life to God's will and thus the concept of mental illness is influenced by religious

aspects. What do these influences mean to psychiatric thinking and practice and to (the development of) therapy? Table 1 shows the top 10 of organized world religions and figure 1 gives a global impression of the presence of the major religions around the world. Necessarily, we had to confine ourselves. The project will cover Christianity, Islam, and Hinduism, Buddhism in East and South Asia, and Judaism. We are also able to include a chapter on African Religions. Of course, this is a very ambitious program. The authors have enough play room to elaborate to their best knowledge on psychiatry and religious traditions.

This central part including seven chapters is going to be the founding part of the project.

It is preceded by what could be called the prolegomena. When entering an unfamiliar or unknown field or subject one needs to know something like where to begin? There are so many approaches that confusion is inevitable. Why should we (as psychiatrists) think and write about religion, spirituality and psychiatry, anyhow? What has psychiatry to do with religion or spirituality? Why bother? Otherwise it could be said that such an idea is a rather typical Western post-enlightenment idea. On the other hand our claim could be that Western psychiatry has omitted an important realm of human experience ["The constraint of ontological space", Sadler 2005 (p 182)]. So in this section it needs to become clear that there are plausible reasons for doing what we are going to do, and for explor-

WORLD RELIGION MAP

**Table 1.** Top ten organized religions of the world.\*

Statistics of the world's religions are only very rough approximations. Aside from Christianity, few religions, if any, attempt to keep statistical records; and even Protestants and Catholics employ different methods of counting members.

<i>Religion</i>	<i>Members</i>	<i>Percentage (%)</i>
Christianity	2.1 billion	33.0
Islam	1.3 billion	20.1
Hinduism	851 million	13.3
Buddhism	375 million	5.9
Sikhism	25 million	0.4
Judaism	15 million	0.2
Baha'ism	7.5 million	0.1
Confucianism	6.4 million	0.1
Jainism	4.5 million	0.1
Shintoism	2.8 million	0.0

Notes: As of mid-2004. This list includes only organized religions and excludes more loosely defined groups such as Chinese or African traditional religions.

Source: *Encyclopaedia Britannica*

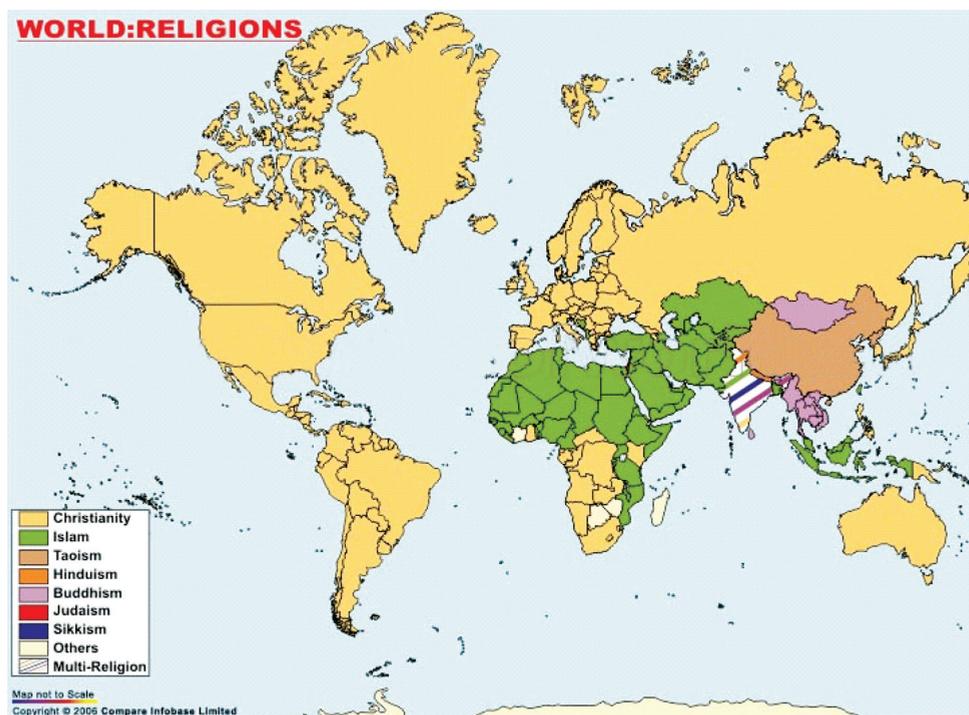
\*Information Please Almanac: Top Ten Organized Religions of the World. Available at <http://www.infoplease.com/ipa/A0904108.html>. Accessed February 21, 2008

ing the hindrances, or for explaining why it should be evident that we bother.

This introductory section contains historical, philosophical, theological and aesthetic viewpoints. Concepts of evil are dealt within various religious traditions throughout the ages and also the issue of how these concepts affect(ed) psychiatric thinking from a historical point of view is discussed. The theme will be approached from a philosophical point of view. Chapters will be included on science and transcendence, and on religion and spirituality as (not just as) human endeavor, in a very sensitive and open-minded way. So, this first section is about (world-)views, assumptions, concepts and (ontological) values, and about relevance! Is it still clear that religious believers and

spiritually minded people live by religious and spiritual stories and statements in accordance with which they interpret their (even pathological) experiences and by which they become enabled to express meanings of a profound and transcendent kind? Is a human propensity for transcendence facultative, or is there a fundamental shortfall, and has man to learn to cope with emptiness? Do we think exclusively in medical psychiatric categories, hiding or masking existential layers? After this first part, follows the announced central part on religions and psychiatry. Again, too ambitious, nevertheless full of starting points for future discussion and research.

The third section is on religion, spirituality and psychopathology. In this part, as-



**Figure 1.** World Religion Map.\*

\*Maps of World.Com: World Religion Map. Available at <http://www.mapsofworld.com/world-religion-map.htm>. Accessed February 23, 2008

assessment/diagnosis and psychopathology are at stake. Discussions, explorations, research data and the like will not be restricted wherever possible to Western thinking or Western populations only, although data from elsewhere might not be available or sufficient. The fourth section is on empirical research exploring the relation between spirituality/religion and mental health. These chapters should inform the readers, if possible and relevant, about phenomenology, epidemiology, research data, explanatory models and theories, wherever evidence-based data are available. It would be important to refer to these data, whenever

necessary. Opinion-based points of view certainly will be presented, explained and discussed. However, also attention will be paid to a more conceptual approach. How do these psychopathological phenomena relate to existential themes? And what does that mean? Are we looking at epiphenomena or what else? In addition, what are the effects of religious practices of fasting and circumcision? A chapter on fundamentalism is necessarily included. Furthermore, it is important to give an account of discussions towards the development of new classification and diagnostic systems, e.g. DSM-V and WPA Program on Psychiatry

for the Person (WPA Report 2008, Cox et al 2007).

Three other parts are added to the foregoing. One concerning Religion and the Brain, one with regard to (psycho) therapy and pastoral care, and a third one on religion, spirituality and training and permanent education. Recent brain research has revealed changes in brain functions concomitant with religious and spiritual experiences. This is anything but surprising. Experiences of whatever nature are predicated upon activation of certain brain circuits. Atheists have taken the neuro-theological data as the ultimate triumph of their viewpoint: religiosity is but a brainstate, nothing more. This is a misconception. Religious needs originate on a psychological level, not in the brain. The brain enables one to generate the corresponding religious feelings. As an analogy: aesthetical feelings are made possible by the brain, they are not caused by the brain but by external stimuli. Neuro-theological data show that man has the capacity to conceive of a transcendental realm and communicate with it. These data do not have to mean the death blow to the deistic idea at all. And although a “God spot”, or “God gene” is being discovered, no conclusions can be drawn whatsoever about the existence of God. In the meantime, that does not mean, despite the fact that repeatable empirical arguments can not prove the existence or non-existence of God, that the claim that God exists is meaningless. It just means that we have to argue on another level of knowledge for or against the existence of God. And in connection with this type of reasoning

more can be said on brain, soul, self and freedom (Oomen 2003, Verhagen 2007).

With regard to training and education, a curriculum should offer sufficient opportunity for teaching trainees to address the existential, religious and spiritual needs of our patients, including:

**Knowledge:** basic knowledge of major belief systems; knowledge about the developmental, experiential, and mental health; consequences of religious experiences.

**Skills:** improvement of interviewing skills; improvement of diagnostic skills with respect to people having all kinds of religious backgrounds; therapeutic skills.

**Attitudes:** systematic reflection on the professional’s own belief system (atheism included) and the influence of it on their functioning; analysis of transference and counter-transference issues; empathy.

All contributors are asked to look at how (if at all) their own faith perspectives influence the way they think about psychiatry and human nature, about the phenomena they are writing about and the way they study and write about these phenomena. What are some of the starting, fundamental premises of their perspective? What are some of their chief concerns within their religious/cultural perspective that would point the reader to certain aspects that should have priority? What aspects of religiousness or spirituality are likely to influence directly the phenomena they are describing for better or for worse?

We certainly hope that this forthcoming volume (Verhagen P et al, *Psychiatry and Religion: Beyond Boundaries*, Ox-

ford, Wiley-Blackwell, forthcoming October 2009) will be the result and final report of a thorough scholarly survey.

## Conclusion

The WPA Section on Religion, Spirituality and Psychiatry wants to push back unnecessary boundaries by reflecting on what is going on in the office of the clinician, or outside in the field, wherever the doctor is doing his job or the patient

is looking for a doctor (levels of analysis). The Section also makes a stand by working towards a consensus statement on Religion and Spirituality which might give direction and handles to our clinical and scientific work. Together with many colleagues from all around the world and from different religious and spiritual “languages” we will present a relevant outlook which is scientifically accounted for. It is our conviction that patients will benefit from it.

## References

- Baetz M, Griffin R, Bowen R, Marcoux G (2004). Spirituality and Psychiatry in Canada: Psychiatric Practice Compared with Patient Expectations. *Canadian Journal of Psychiatry* 49:265–271
- Chattopadhyay S (2005). Integrating spiritual and religious themes in psychiatric management. *The Internet Journal of Mental Health*. 2005; 2: Available at <http://www.ispub.com/ostia/index.php?xmlFilePath=journals/ijmh/vol2n2/religious.xml>. Accessed February 23, 2008
- Committee on Cultural Psychiatry (2002). *Cultural Assessment in Clinical Psychiatry*. Washington, DC: American Psychiatric Publishing
- Cox J, Campbell AV, Fulford KWM (eds) (2007). *Medicine of the person. Faith, science and values in health care provision*. London, Jessica Kingsley Publishers (pp 3–20)
- Fulford KWM, Thornton T, Graham G (2006). *Oxford textbook of philosophy and psychiatry*. Oxford, Oxford University Press
- Glas G (1998). Psyche and Faith – Beyond Professionalism. In: Verhagen PJ, Glas G (eds) *Psyche and faith. Beyond professionalism*. Zoetermeer, Boekencentrum (pp 167–184)
- Hart MB (2007). *The healthy jew. The symbiosis of Judaism and modern medicine*. Cambridge, Cambridge University Press
- Leron Shults F, Sandage SJ (2006). *Transforming spirituality. Integrating theology and psychology*. Grand Rapids, MI, BakerAcademic
- Mezzich JE, Berganza CE, Von Cranach M, Jorge MR, Kastrup MC, Murthy RS et al (2003). Essentials of the World Psychiatric Association’s International Guidelines for Diagnostic Assessment (IGDA). *The British Journal of Psychiatry* 182(Suppl):45
- Michel L (1996). The significance of the patient’s and the therapist’s cultural groups: examples from a student counseling service. *Group Analysis* 29:393–402
- Oomen PMF (2003). On brain, soul, self, and freedom: an essay in bridging neuroscience and faith. *Zygon* 38:377–392

WORLD RELIGION MAP

- Paloutzian RF, Park CL (eds) (2005). *Handbook of the psychology of religion and spirituality*. New York, The Guilford Press (pp 3–20)
- Sadler JZ (2005). *Values and psychiatric diagnosis*. Oxford, Oxford University Press
- Schmidt-Leukel P (2004). A new spirituality for a religiously plural world. *Concilium* 40:62–68
- Schreurs A (2006). Spiritual relationships as an Analytical Instrument in Psychotherapy with Religious Patients. *Philosophy, Psychiatry & Psychology* 13:185–196
- Verhagen PJ. *Sanctifying Personhood; beyond roles, functions, schemas and traits*. *Spirituality and Psychiatry Special Interest Group Newsletter*. 2007; 24. Available at <http://www.rcpsych.ac.uk/college/specialinterestgroups/spirituality/publications/newsletter24.aspx>. Accessed February 23, 2008
- WPA Report from the London Conference on Person-centered Integrative Diagnosis and Psychiatry for the Person. *Electronic Bulletin* 2008, 59. Available at <http://www.wpanet.org/bulletin/eb59.html>. Accessed February 23, 2008
- 

**Peter J. Verhagen**, MD, Secretary of the Dutch Foundation of Religion and Psychiatry GGZ, Meerkanten, P.O. Box 1000, 3850 BA Ermelo, The Netherlands  
**E-mail:** [pverhagen@meerkanten.nl](mailto:pverhagen@meerkanten.nl)



# Stigma



# Stigma and Discrimination

---

**Heather Stuart**

Section on Stigma and Mental Disorders, World Psychiatric Association

## Introduction

Mental health related stigma is now recognized as a key public mental health challenge and a significant contributor to mental disability worldwide. As a result, there has been a groundswell of interest in anti-stigma programming and a number of countries have launched large anti-stigma efforts. Indeed, the last decade has marked the coming of age of a number of large-scale international and national anti-stigma initiatives. For example, the World Psychiatric Association's Global Program to Fight Stigma and Discrimination because of Schizophrenia has celebrated a decade of work (Sartorius & Schulze 2005). National programs have also grown in prominence, often using population-based social marketing and media interventions to increase public awareness of mental illnesses and their treatment (for example: [www.likeminds.org](http://www.likeminds.org); [www.seeme.scotland.org](http://www.seeme.scotland.org); [www.beyondblue.org.au](http://www.beyondblue.org.au); <http://www.rcpsych.ac.uk>; <http://www.rethink.org>; <http://www.whatadifference.org>). Add to this a growing number of regional and local efforts and it is clear that anti-stigma programming is becoming an important cottage industry in many parts of the world.

This chapter will review some of the conceptual and programmatic shifts that have recently emerged and identify future challenges for the field.

## From medical management to recovery

The rise in public health models, which focus on the burden associated with mental illnesses and the social determinants of health and disability, and the corresponding ascendancy of anti-stigma programs signals an important conceptual shift in our understanding of mental disability. Our understanding of mental disabilities is moving away from a largely medical model, which emphasizes severity of symptoms and functional impairments, toward a recovery-based model, which emphasizes personal illness management, empowerment, and overcoming stigma. Though effective interventions exist to promote recovery, most people with a mental illness worldwide do not have access to appropriate care. Even in developed countries, delays in treatment often span more than a decade. In the developing world, access to treatment may be en-

tirely impossible. Inadequate funding for services and treatments, fear of social disapproval and lack of mental health knowledge all bespeak the pernicious effects of stigma. Efforts to lobby for funding commensurate with the burden of disability caused by mental disorders, increases in research dollars not only for bench but for population-based, socio-cultural, and mental health services research, and mental health reforms that emphasize consumer-centered and family-centered care all reflect the growing awareness that stigma, and the social inequities that emanate from stigma, are significant barriers to quality of care and recovery (Hindshaw 2007, Sartorius & Schulze 2005).

The concept of recovery has emerged as an important new paradigm with important implications for the field of public mental health. Recovery is conceptualized as a personal journey that has the aim of reclaiming one's life, validating one's self-worth, improving one's personal capacity, and living a satisfying, hopeful life that goes beyond the symptoms and functional impairments. Recovery means becoming an active participant in managing one's illness and overcoming the challenges posed by one's disability, including overcoming the psycho-social impacts of self-stigma (Jacobson & Curtis 2000). The recovery model is rooted in the personal existential experiences of people with mental illnesses. It is a model that contemplates recovery as an attitude or an orientation to life in meeting the various challenges posed by a disability.

The term *self-stigma* is used to describe the negative personal impacts of public stigma and discrimination on an individ-

ual's feelings of self-worth, self-esteem, and sense of empowerment. It occurs when cultural stereotypes are internalized and used to provide a personal frame of reference. Working from a recovery orientation, researchers have become increasingly interested in methods that may work to reduce self-stigma. Toward this end, they have examined therapeutic strategies, such as cognitive therapy to reframe self-conceptions, and empowerment approaches to promote self-advocacy, with some reportedly good effects. However, because stigma is created and powerfully reinforced at socio-structural and cultural levels, it is not clear whether its effects can be entirely overcome by the coping efforts of its victims. A second risk is that it makes stigma reduction a responsibility of the individual, rather than the cultural group (Corrigan & Calabrese 2006). Despite these caveats, working in partnership with people with mental disabilities and their family members to assist them in dealing with stigma proactively appears to be a promising new avenue. Anthologies of recovery stories are increasingly being used as part of large national anti-stigma initiatives to demonstrate positive images of people with mental illnesses (Roberts & Wolfson 2004).

### **From public perspectives to personal experiences**

Traditional approaches to stigma research have examined public perceptions of mental illness and the mentally ill. In the last 15 years, 33 national attitude surveys and 29 local or regional surveys have

been conducted, 60% in Europe (Angermeyer & Dietrich 2005). In most surveys, members of the lay public have demonstrated poor mental health literacy, being unable to recognize symptoms of mental disorders, and reporting that they are often unsure of where to seek help. People with mental disorders are viewed in negative and stereotypical ways; though the prevalence of negative attributions (such as dangerousness) appears to vary considerably across diagnostic groups. Regardless, there is a clear desire to keep people with a mental disorder at a distance, particularly for social relationships involving closer more intimate personal contacts. Though it is difficult to compare studies across time, it appears that the public's knowledge of mental illness has slightly improved, but their attitudes toward people with mental illnesses have become slightly more negative and fearful. Six population surveys evaluated population based anti-stigma or literacy interventions but with mixed results.

Interest in the perspectives of those who are stigmatized has grown and improvements to their experiences, rather than to the attitudes of the public, are increasingly seen as the appropriate benchmarks for success in anti-stigma efforts. Toward this end, several new scales have emerged in the literature to capture the nature and consequences of stigma from the perspective of those who experience it (e.g., Raguram, Raghu, Vounatsou, Weiss 2004, Ritsher, Otilingam, & Grajales 2003, Stuart, Koller, Milev 2008). These are intended to be used both to target anti-stigma interventions and as a means of evaluating their effects.

## **Best practices in stigma reduction**

In most countries, the funding available for mental health research is incommensurate with the burden of disability associated with these conditions. The World Psychiatric Association's Scientific Section on Stigma and Mental Illness includes over 60 scientists worldwide, who are committed to evidence-based practices in stigma reduction. Since 2005, Stigma Section members have contributed more than 100 peer-reviewed publications to the international medical literature – many of them evaluations of local anti-stigma efforts.

Despite these important efforts, the growing interest in stigma reduction programs has not been paralleled by a similar interest in program evaluation. Indeed few stigma reduction programs are subjected to rigorous evaluation, and the literature in this area, although growing, remains meager. Many promising practices have been identified, but few have been implemented widely enough to assess their broad public health benefits, their sustainability, or their cost-effectiveness.

The World Psychiatric Association's Open-the-Doors global anti-stigma network is working to change this situation. For example, Open-the-Doors partners have implemented more than 200 different program interventions in more than 20 countries. Among the first 15 countries participating in the network, for example, 13 implemented a speaker's bureau where people with a mental illness provided contact-based education to primary or secondary school students (Sar-

torius & Schulze 2005). Evaluation of this approach has shown large and significant changes in students' knowledge and attitude toward people with schizophrenia, which were undiminished in a six month follow-up (Angermeyer and Schulze 2001, Pinfold et al 2003, Pinfold et al 2005, Schulze et al 2003, Stuart 2006). Results are consistent with the literature showing that contact-based approaches are among the most effective in improving knowledge, attitudes, and behavioural intentions.

Studies from a number of countries have demonstrated that health and mental health professionals share many of the same beliefs about people with a mental illness as the lay public does and are a key source of stigma (Schulze 2007). Thirteen countries in the Open-the-Doors Network have targeted educational programs to health or mental health professionals: nine to psychiatrists, seven to general practitioners, and twelve to other health professionals (Sartorius & Schulze 2005). Üçok et al (2006) studied the effects of a single educational session on the attitudes of general practitioners to schizophrenia in Istanbul, Turkey. The educational session reviewed the nature of schizophrenia, treatment options, and the role of the general practitioner. Using a pretest and 3-month post-test design, the authors noted positive changes in all of the 13 survey items but two, with five changes reaching statistical significance. In addition to a general but small attitude shift, large differences were noted in GP's attitudes toward the treatability of schizophrenia and the ability of people with schizophrenia to under-

stand or use medications. In expressing stigmatized views, GP's often referred back to examples they could remember of severely ill patients encountered during their psychiatry residencies. These results highlight the importance of anti-stigma training modules, not only as part of continuing professional education, but as early as medical school. A similar educational program targeted toward medical students showed favourable attitude change, but with some diminution after one month, suggesting that a more consistent and concerted effort is required (Altindag et al 1996).

### Healthy public policy

When stigma is defined narrowly, as a prejudicial attitude that may result in discrimination, anti-stigma efforts tend to target changes in knowledge and attitudes in members of the lay public. Approaches that fit under this model include educational programs designed to improve knowledge and mental health literacy, contact-based programs designed to increase positive interactions between people who have a mental illness and members of the general public, and protest programs designed to change the way in which individuals think or feel. The general aims of these approaches are to improve knowledge and attitudes of targeted individuals with the expectation that behavioural change will be the result (Corrigan 2006).

A broader definition of stigma, which defines stigma as the interaction between individual elements (cognitive, emotional, and behavioural), with social-struc-

tural elements that create inequalities and perpetuate discriminatory treatment for people with disabilities (e.g., Link & Phelan 2001), raises important additional avenues for stigma reduction pertaining to healthy public policies. In addition, a broader conceptualization is consistent with the growing international interest in human rights and social entitlements for people with mental disabilities, as well as the day-to-day experiences of people with a mental disability. This model is also more consistent with a public health approach that recognizes the social determinants of health, illness, and disability, and creates an important role for governments and social institutions in creating and maintaining healthy social environments. Thornicroft (2006) notes that one great advantage to framing the social problems faced by people with mental health problems as ‘disabilities’ is that it recasts the problem as one that is rights-based with associated legal, policy, and procedural avenues for implementing solutions.

Rights-based disability approaches have not yet been widely applied in the area of mental health, though they have been used to good avail in changing social and physical environments to be supportive of people with physical disabilities. Even when legal protections exist, however, they often do not translate into appropriate social rights and entitlements – particularly when violations are entrenched in stigmatized views of the mentally ill (Arboleda-Flórez 2008). Well designed and energetic social advocacy programs designed to change societal structures and institutional practices,

target human rights violations, and eliminate discriminating policies and practices that deny people with mental illnesses access to the legal and social entitlements that other citizens take for granted, have the potential to bring justice to where justice has been denied and improve the conditions of an entire group of mentally ill (Arboleda-Flórez 2005).

### **Future directions**

The growing cottage industry of anti-stigma programming, and the lack of rigorous evaluation of these programs, will remain a major impediment to progress in this field. Not only is it important to evaluate what works, it is also essential to develop plausible theories of change that explain why certain programs or program elements work, then ensure that these findings become part of the body of published evidence that can be used in building best practice models. This will require bridging the gap between scientist and practitioner communities – something that the members of the Scientific Section on Stigma and Mental Illness are working diligently to do.

One of the assumptions underlying the current evidence-based paradigm is that scientific data –not subjective beliefs– will be the yardstick against which program funding is ultimately determined. The implicit promise for evidence-based practice is that it will reduce potentially discriminatory variations in practice and ensure greater overall equity of service delivery. Evidence supporting best practices in stigma reduction will promote confidence among funders and make it

increasingly difficult to defend policies and practices that disadvantage people with a mental illness. Thus, although not usually viewed in this light, another important anti-stigma activity is the production of high quality evidence to support anti-stigma activities.

## Summary

The importance of fighting mental health related stigma and discrimination is permeating public health and professional communities at international, national, and local levels and anti-stigma efforts are appearing with increasing frequency. Whereas early approaches often targeted individual-level changes through broad based educational or personal contact strategies, the paradigm for anti-stigma

activity is increasingly shifting to a disability model that provides a platform for rights-based social advocacy. At the same time, attention has shifted away from the public attitudes, to focus more directly on the experiences of people who are most affected by stigma—people with mental illnesses and their family members. Though evaluation research is growing, it is insufficient to provide a strong evidence base to support anti-stigma programming, particularly social advocacy movements. Nevertheless, there is increasing acceptance that benchmarks for change should be grounded in the day-to-day experiences of people who are stigmatized—their ability to access the social and legal entitlements that other citizens take for granted—as the key yardsticks for successful change.

## References

- Altindag A, Yanik M, Ucok A, Alptekin K, Ozkan M (2006). Effects of an anti-stigma program on medical students' attitudes toward people with schizophrenia. *Psychiatry and Clinical Neurosciences* 60:283–288
- Angermeyer MC, Dietrich S (2006). Public beliefs about and attitudes towards people with mental illness: a review of population studies. *Acta Psychiatrica Scandinavica* 113:163–179
- Angermeyer MC, Schulze B (2001). Reducing the stigma of schizophrenia: understanding the process and options for interventions. *Epidemiol Psychiatr Soc* 10:1–5
- Arboleda-Flórez J (2008). Mental illness and human rights. *Current Opinion in Psychiatry* (in press)
- Arboleda-Flórez J (2005). Stigma and discrimination: an overview. *World Psychiatry* 4:8–10
- Corrigan P (ed) (2006). *On the stigma of mental illness: practical strategies for research and social change*. Washington, American Psychological Association
- Corrigan P, Calabrese JD, (2006). Strategies for assessing and diminishing self-stigma. In: Corrigan P (ed) *On the stigma of mental illness: practical strategies for research and social change*. Washington, American Psychological Association (pp 239–256)
- Hindshaw SP (2007). *The mark of shame. Stigma of mental illness and an agenda for change*. Oxford: Oxford University Press

- Jacobson N, Curtis L (2000). Recovery as a policy for mental health services. *Psychosocial Rehabilitation Journal* 23:333–341
- Link B, Phelan JC (2001). Conceptualizing stigma. *Annu Rev Sociol* 27:363–385
- Pinfold V, Toulmin H, Thornicroft G, Huxley P, Farmer P, Graham T (2003). Reducing psychiatric stigma and discrimination: Evaluation of educational interventions in UK secondary schools. *British Journal of Psychiatry* 182:342–346
- Pinfold V, Stuart H, Thornicroft G, Arboleda-Flórez J (2005). Working with young people: the impact of mental health awareness programs in Schools in the UK and Canada. *World Psychiatry* 4(Suppl 1):48–52
- Raguram R, Raghu TM, Vounatsou P, Weiss MG (2004). Schizophrenia and the cultural epidemiology of stigma in Bangalore India. *Journal of Nervous and Mental Diseases* 192:734–744
- Ritsher JB, Otilingam PG, Grajales M (2003). Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research* 121:31–49
- Roberts G, Wolfson P. (2004) The rediscovery of recovery: open to all. *Advances in Psychiatric Treatment* 10:37–49
- Sartorius N, Schulze H (2005). *Reducing the stigma of mental illness*. A report from a Global Programme of the World Psychiatric Association. Cambridge: Cambridge University Press
- Schulze B (2007). Stigma and mental health professionals. A review of the evidence on an intricate relationship. *International Review of Psychiatry* 19:137–155
- Schulze B, Richter-Werling M, Matschinger H, Angermeyer MC (2003). Crazy? So what! Effects of a school project on students' attitudes towards people with schizophrenia. *Acta Psychiatrica Scandinavica* 107:142–150
- Stuart HL (2006). Reaching Out to High School Youth: The Effectiveness of a Video-Based Anti-Stigma Program. *Canadian Journal of Psychiatry* 51:647–653
- Stuart H, Koller M, Milev R (2008). Inventories to measure the scope and impact of stigma from the perspective of those who are stigmatized – consumers and family versions. In: Arboleda-Flórez J, Sartorius N (eds) *Understanding the stigma of mental illness: theory and interventions* (pp 193–204) Toronto, Wiley & Sons, Ltd
- Thornicroft G (2006). *Shunned*. Oxford, Oxford University Press
- Üçok A, Soygür H, Ataklı C, Kuşcu K, Sartorius N, Dumjan ZÇ, Polat A, Erkoç S (2006). The impact of antistigma education regarding the attitudes of general practitioners regarding schizophrenia. *Psychiatry and Neurosciences* 60:439–443

---

**Heather Stuart**, Professor of Psychology, Department of Community Health and Epidemiology, Queen's University, Kingston, Ontario, K7L 3N6, Canada  
**E-mail:** heather.stuart@queensu.ca



# How to Overcome Psychiatric Stigma Through Art

---

**Hans-Otto Thomashoff, Alexander Kopytin, Ekaterina Sukhanova**

Section on Art and Psychiatry, World Psychiatric Association

## Introduction

After their first recognition at the end of the 19th and at the beginning of the 20th century, the pictures drawn and later also painted by psychiatric patients have gone a long way to become fully accepted as works of art, though often different in style, yet equal in value and appreciation to the art of academic artists. Their liberation from the psychiatric stigma may function as a guideline in our efforts to overcome psychiatric stigma.

The recognition of psychiatric art started with some curious psychiatrists who worked mostly isolated in several countries: Tardieu in France, Lombroso in Italy, Prinzhorn in Germany, Morgenthaler in Switzerland, Guttman and Maclay at the Bethlem Hospital in the United Kingdom, followed after the Second World War by Navratil in Gugging, Austria, Andreoli in Italy, Amici di Tworcki in Poland and many others all over the world. They observed that some of their patients were creatively active, and appreciated both

their unusual stylistic forms and healing effects that sometimes took place as a result of creative activity.

Together with psychiatrists, some artists and art historians like Jean Dubuffet, Max Ernst, Vasily Kandinsky, Salvador Dali, Paul Klee recognized the inspirational power of psychopathological expression. Some of them even let psychopathological expression influence their own artistic creations, which opened a gateway for their consideration as works of art. It finally became an appreciated segment in the widened spectrum of contemporary art with exhibitions, galleries and museums specializing in Outsider Art or *art brut*.

Cultural integration of mental patients' art now has reached a point at which the *oeuvre* of some artists is fully and equally presented within regular museum collections. The special nature of their work's origin is not even mentioned and specified, because it simply is irrelevant to its artistic value. Only the artwork it-

self stands in the center of perception, enabling some artists to be widely appreciated and celebrated despite their condition.

Based on their observation of the therapeutic potential of creative acts, artists like Adrian Hill and Michael Edwards in UK together with psychoanalysts like Margaret Naumburg in the USA began to develop the practice of art therapy which now became a part of mental health services in many countries. Advances in psychoanalysis and art therapy (Calisch 1992, Rubin 1984) as well as neurological and psychological research (Arnheim 1974, Calvin 1996, Gardner 1982, Horowitz 1983, Solso 1994) support the universal nature of image formation and its significant role in cognition in general.

All this can serve as a platform to overcome psychiatric stigma through art. Public presentation of mental patients' art can be one of the avenues in anti-stigma campaigns (see the research report cited below). In addition, as promoted by the World Psychiatric Association and within it its section on Art and Psychiatry, the exhibitions of art lead to a permanent and continuously growing international presence of psychiatric art in the public which further promotes destigmatization. What was considered abnormal becomes a part of everyday life. Also, the aims of the section are to bring together interdisciplinary research from psychiatry, neurobiology, art-history, art-psychology and art-therapy to further understand the basics of creativity in general and through expanding knowledge counteract the negative social stereotypes of mental ill-

ness as well as *crushing* the philosophical basis for stigma.

Today, when we are constantly reminded of the dangers of thinking in exclusive terms, art affords us a model of dialogue in which the other is accepted as an equal conversation partner. Art fosters cooperative communication in which dignity and individuality of a mental health patient may be reaffirmed. At the same time, art allows for critical distance, retrospection, and vast opportunities for individual choice, and thus may be conducive to an improved self-image and self-esteem.

Art without any rules, without any structural elements is impossible. That would come into a contradiction with the nature of artwork as a model and a sign, curtailing the possibility of contact with the outside world. Limitless choices, absence of rules, absolute freedom of limits defined by the system are not the ideal of communication, but its death. Representing *art brut* as total absence of rules and denying all intentionality to an outsider artist is a flawed argument from the point of view both of history of art and history of communication.

Yet, the creation of structure does not yet assure communication. In non-artistic texts/works it is not the language but its content that carries information. Of course this aspect of communication is preserved in art but the whole system acquires a much more complex character. In the process of art perception, the individual and the universal are not only inseparable but impossible without each other and need each other. The more the audience is aware of an existing artistic

model on whose background the given artwork functions, the stronger they perceive the individuality and uniqueness which arises in perceiving artwork as a complex combination of following the norm of the artistic language and the derivation of this norm.

But there, inevitably, a question arises: who is the other? If a conversational partner is approached, certain presentiments, suppositions a priori, etc, then a true meeting is replaced by the projection of the other partner but projecting qualities, experiences, etc of one's own. A real meeting presupposes an inner readiness to meet the absolute other. Stigmatization has its root in turning the Other into an object, that is denying him or her the right to be an independent active partner in the communication process. The psychological basis for stigma is the destruction of communication. It is in cooperative communication that the dignity and individuality of a mental health patient is reaffirmed.

### **Presentation and perception of works of psychiatric art**

Public presentation of any art is a complex social phenomenon strongly linked to the cultural, social and political contexts and relationships between people in a particular society. Russian art historian Sergey Daniel (Daniel 2006) claims that "the existence of a work of art has a dual nature. It has its inner life carrying all the fullness of the creative intention and the depth of meaning, on the one hand... and work of art has its 'social way of life', on the other hand being present-

ed to different audiences and in different environments. After an artist transforms his creative idea into a material form, the audience 'deciphers' the piece of art within its own conscious and subconscious thinking, its taste, mood and interests. Here a 'different degree of closeness and alienation between an audience and a piece of art is possible, ranging from in-depth interpretation to reducing to banality' (p 49).

An anecdote may reveal this: A bathtub which had been filled with grease and other things by Joseph Beuys (1921–1986) was laboriously cleaned by an eager cleaning woman who then faced charges of destroying a highly valuable work of art.

One of the difficulties implied in the perception of art is that meanings of visual images, especially those anchored in early memories and altered states of consciousness tend to be more idiosyncratic, broadly symbolic, and over-determined. These features may lead people from the audience to misinterpret the graphic production of patients and project their own subjective experience and preconceived ideas on it.

The dynamics, which underlie the perception of art can be different, depending on the ways and conditions of exposing art material and certain politics implied in this. As far as destigmatization goals are concerned certain politics with regard to psychiatric patients and mental illness should be considered.

Exhibitions per se can both promote stigmatization and destigmatization. The example of an exhibition which served

as an instrument of purposeful and sanctioned by the political powers discrimination of the mentally ill may be “Entartete Kunst” (“Degenerative Art”) exhibition in Nazi Germany in 1937–1941, where artworks by modernist artists have been displayed together with those by mental patients.

Different ways of exposing mental patients’ works of art can be considered taking into account the mechanisms of counteracting discrimination and self-discrimination (Yastrebov & Mihaylova 2005) assimilation, confrontation, ghettoization and specialization (de Monteflores 1986). C. de Monteflores presents these mechanisms in relation to homophobia and heterosexism. Such mechanisms can be implied in initiatives of representatives of discriminated groups as well as those who mediate their interaction with an aggressive social environment.

The mechanism of assimilation means hiding what makes a person or a group of people different from the rest of the society. Though assimilation may enable survival, it often leads to suppression or losing significant psychological and cultural qualities (way of life, values etc.).

Assimilation in relation to exhibitions that display mental patients’ works of art is expressed through hiding facts about mental illness of an artist and what particular events or inner conditions stimulated his/her creative activity. Any information that can be “suspicious” with regard to mental illness of an artist is “taken out” from his/her personal history. Though hiding information about mental disorder is often determined by

ethical and legal requirements accepted mental health professions a different motivation is obvious in this case.

The mechanism of assimilation can also be expressed through patients’ and their curators’ attempt to hide or suppress difficult emotions and symptoms behind “beautiful pictures” and imitate qualities that are supposed to be typical in works of art created by “normal people”.

Confrontation is expressed through demonstrating what makes a person or a group of people different from others. Though society can be hostile towards those who are different, they fight against stereotypical characteristics projected on them and defend their right to follow their own way of life. They often strive to “transform weaknesses into strengths” and even demonstrate their superiority above their opponents.

As far as art of the mentally ill is concerned, such a mechanism was manifested many times through social and cultural initiatives of mental patients and advocates of their art. For example, the first public exhibition of the Society of Art Brut in 1949 was accompanied by the publication of the Catalogue titled “Art Brut is Better than Art Culture!”.

Confrontation can involve open recognition on the part of an artist that he/she is mentally ill, but at the same time emphasizing the importance of personal stance in the world and that the artist is not “a victim” of mental disorder, but transforms his/her mental difficulties into strengths through creative activity. He/she can also believe that mental diffi-

culties can stimulate creativity or change ways and meaning of artistic expression.

Ghettoization means living and communicating within certain psychological and geographical boundaries. It helps to protect a person or a group of people from an aggressive outer environment, or vice versa, protect society from those who are perceived to be dangerous. The history of psychiatry is abundant with examples of ghettoization. Furthermore, psychiatry as a social institution promoted ghettoization of mental patients. With regard to art of the mentally ill, ghettoization is expressed through establishing “niches of psychiatric art” either by arranging specialized exhibitions, or creating art studios as a kind of closed environments, where the mentally ill can satisfy their creative needs.

Specialization means perceiving oneself as something special or exotic, having certain exclusive qualities or talents, in particular, due to some painful experience. It involves demonstrating one’s belonging to a group of “the selected” or “the banished”. Though specialization has certain similarity with confrontation, yet, those who go this way don’t fight for their social rights. They even see certain advantages in their existing position.

As far as art of the mentally ill is concerned, specialization is expressed through emphasizing its “exotic” features and even consciously imitating them, either on the part of mental patients themselves, or on the part of advocates of their art, in order to create certain effects in the audience and to sell such art in direct or metaphorical sense of this word.

Advantages of the above-described various mechanisms to counteract discrimination and self-discrimination with regard to mental patients seem to be relative. Though different ways of presenting art of mental patients in the society associated with these mechanisms can to a certain degree, diminish stigmatization and its psychological effects on patients destigmatization is a complex task which needs complex means.

In order to explore the discriminating attitudes with regard to mental patients and their art as well as destigmatizing effects as a result of presenting their art to the public in specific ways, the Section of Art and Psychiatry conducted a special study which took place throughout the last two years. Certain ways of interaction between the people from the audience and artistic production of patients were introduced in this study. Those who attended the exhibitions were invited to take part in the seminar which included not only presenting information about art of mental patients, but creatively responding to the productions presented at the exhibition as well. They were asked to produce written narratives based on the artwork of their choice.

## **Method**

### *Participants*

The study of the attitude towards mental patients and their art as well as whether interactive exhibitions can lead to destigmatization has been carried out in several Russian cities (St. Petersburg, Yaroslavl, Novgorod, Kaliningrad, Ekaterinburg) and in Minsk. The total number of people

who attended interactive exhibitions and accompanying seminar about art of mental patients is 250. Their age varied from 20 to 50. Most of them (63%) had higher professional education (teachers, psychologists, doctors); 20% were university students; 17% were public school or college graduates. There were 211 women and 39 men among them.

### *Instrumentation*

120 persons have been interviewed with the questionnaire ("Myths and facts about people who are ill with schizophrenia"), which was developed by the World Psychiatric Association to assess stigmatizing attitude towards patients. The questionnaire includes such questions as "Have you heard or read something about schizophrenia in the last 6 months?", "Are you somehow concerned with problems associated with schizophrenia?", "To what degree the following statements about people who are ill with schizophrenia are correct?" (the list of possible answers was presented in the questionnaire).

130 persons attended interactive exhibitions and seminars about the art of mental patients. They were given another two questionnaires. One of them was "Myths and facts about people who are mentally ill and their art" developed on the basis of the previous questionnaire and supplemented with several questions in order to assess people's opinion about art of the mentally ill and their creative abilities. The questionnaire included in particular such statements as "Mentally ill people can be interesting, creative, outstanding persons", "Creative productions (works of

art, poetry, music etc.) by mental patients may be harmful to the emotional condition of the audience", "Creative productions (works of art, poetry, music etc.) by mental patients can evoke positive feelings, inspire, enrich the inner world of the audience" and some others. Respondents must indicate whether they agree or disagree with these statements.

Another questionnaire administered to the same group of respondents was "How I perceive works of art by mental patients". It helped to additionally assess respondents' reactions to those works of art that were displayed at the exhibition. They were asked to evaluate the artistic and aesthetic value of the artworks; to indicate what emotional response they evoked in them; whether the meaning of the artworks displayed is valid and understandable for them; and what was most interesting and important for them in the artworks.

Finally, respondents were asked to choose one of the art pieces displayed at the exhibition which evoked the most powerful response in them and to create or choose a narrative (up to one page) to express their associations and feelings, as a response to the chosen artwork.

Creating narratives took place in groups that consisted of 15–20 persons and was part of the seminar about art of mental patients. The comparatively small size of the groups helped to achieve trust, focus on a chosen artwork and involve in creative activity as well as provided enough time for feedback and discussion. Such groups had certain similarity with expressive arts therapies groups, while the

task of creating or selecting a narrative was similar to a certain degree to the Jungian Active Imagination. The narrative part of the seminar was considered to be very important: it stimulated creative interaction with the works of art and self-disclosure for participants. Reading narratives in the group was not obligatory. However, people were invited to share their responses if they were comfortable enough.

“Myths and facts about people who are mentally ill and their art” questionnaire was administered to respondents two times, before and after the interactive exhibition and the seminar, in order to assess their destigmatizing effects.

## Results

Responses to “Myths and facts about people who are ill with schizophrenia” questionnaire showed that the main source of information about people who are ill with schizophrenia for most respondents was television (37%) and newspapers and magazines (25%) (respondents were asked to indicate up to three sources of information). According to information presented in such sources people who are ill with schizophrenia were characterized as “those who need better treatment and social support” (45%), “those who hear voices or speaking to themselves” (35%), “those who are depressed or having suicidal feelings” (35%), “those who have committed criminal acts or able to do that” (22.5%), “those who can break the law” (13%) (respondents could choose up to three statements).

Answering the question, to what degree problems associated with schizophrenia concern them, 70% of respondents answered “to some degree”; 18% indicated “not at all” and 12.5% indicated “to a considerable degree”.

When answering the question, what, according to what they know about schizophrenia, is the cause of this illness, 87% of respondents answered that the cause of schizophrenia is genetic factors, 35% indicated “brain dysfunction”, 12.5% indicated “chemical dysfunction in the brain” and 25% answered that “the real cause of this disease is unknown”.

A considerable number of respondents indicated psychological factors as cause of schizophrenia: 35% believed that its cause is “psychological trauma or violence”; 10% believed that its cause is “acute psychological trauma”; 10% indicated “crisis in the value system” (respondents could choose up to three statements). Metaphysical, spiritual or magic factors were indicated as a cause of schizophrenia only by two persons (“god’s punishment”, “possession with evil spirits” etc.).

As most typical characteristics of people who are ill with schizophrenia, respondents indicated the following: “hear voices that tell them what they must do” (75%), “suffer from splitting of their personality or multiple personality” (80%), “can work as other people” (55%), “can break the public order, or create discomfort to others due to their helplessness, dirtiness or strange behavior” (50%), “can be successfully treated at a hospital” (50%), “speak to themselves or shout on a

street" (30%), "can be successfully treated without medication, through psychotherapy or social interventions" (20%), "mentally retarded or having low mental capacities" (22,5%).

Most informative with regard to the stigmatizing attitude towards schizophrenic patients were the following statements: 72% respondents answered that they "would definitely not marry a person who is ill with schizophrenia", 72% indicated that they "would be afraid or feel discomfort living in an apartment or a room (in a hotel in particular) together with a person who is ill with schizophrenia", 40% indicated that they "would be afraid or feel discomfort to speak with a person who is ill with schizophrenia", 20% indicated that they "would be ashamed if others knew that some member of their family is ill with schizophrenia", 15% indicated that they "would not be friends of a person if they get to know that he/she is ill with schizophrenia".

Responses to the "Myths and facts about people who are mentally ill and their art" questionnaire administered before destigmatizing events, indicate that the social distance from mentally ill people is combined with recognizing that they can be creative, interesting, outstanding persons by a considerable number of respondents (93%). Many respondents also believed that creative productions by mental patients can evoke some positive effect in the audience (stimulate positive feelings, inspire, enrich the inner world, help to overcome psychological difficulties, heal). 50% of respondents confirmed that experience (feelings, ideas) expressed in creative productions by men-

tal patients is valid and understandable to them. Thus, the social distance from creative productions by mental patients and their experience expressed, though it was considerably less than from the patients themselves. It appears that an artistic, aesthetically attractive form of presenting mental patients' feelings and ideas is less frustrating and "dangerous" to the audience comparing to what they believe to feel while being in direct contact with the mentally ill.

Coefficients of linear correlation between responses to the fourth statement (which assesses the respondents' idea about creative potential of mental patients) and the last three statements (7, 8 and 9) that assess positive perception of creative productions by mental patients and validity of their experience expressed through such productions to the audience were statistically significant ( $r$  varied from 0.31 to 0.44). At the same time, positive responses to these statements negatively correlated with positive responses to statements 1, 2, 5 and 6 that indicate negative attitude towards the mentally ill and their art.

Responses to the questionnaire after an interactive exhibition and a seminar show that certain destigmatizing effects have been achieved: a degree of social distance from mental patients diminished and positive perception of their creative capacities and their art and its effects on the audience increased. Comparison of the responses to the questionnaire administered before and after the destigmatizing events with the use of criterion of signs ( $Z$ ) indicates a statistically significant difference ( $p$  varied from 0.05 to 0.001).

Responses to the “How I perceive works of art by mental patients” questionnaire showed that the mean score according to 10 score scale which assesses artistic and aesthetic value of artworks is 6.6. 83% of respondents indicated that artworks by mental patients evoked moderately strong emotions in them; 71% of respondents experienced both positive and negative moderately strong emotions, 7% of them experienced positive and 5% negative moderately strong emotions, 3% of respondents indicated that artworks didn’t evoke any emotional response in them, while 14% of respondents indicated that emotional response was weak.

Correlation between how respondents assess the artistic and aesthetic value of the artworks and intensity of feelings evoked by them was moderately strong ( $r=0.48$ ), while correlation between these parameters of assessment, on the one hand, and validity of experience expressed in mental patients’ artworks to the audience, on the other hand, was statistically insignificant.

While answering the question, what was most impress, respondents indicated the following: “extraordinary, expressive colors, childish naturalness”, “very imaginary, unusual expression”, “intense emotions, many meanings”, “multifaceted, complex images, the vision both from inside and outside”, “very impressive combination of colors, shadow and light, real and unreal”, “perception of the world from a different angle, unusual accents”.

As a result of the analysis of literary-poetic narratives ( $N=130$ ) that express people’s emotional and associative responses to the artworks of mental pa-

tients, the following three thematic clusters have been revealed.

1. “Existential” cluster includes the narratives connected to such themes as life and death, love (meeting and separation of two persons), loneliness, one’s life meaning etc. Narratives of this kind express feelings and ideas evoked by one’s confrontation with reality and life choices. There is no appeal to supernatural forces in such texts. There were 54% of such texts among literary-poetic responses.
2. “Religious-mystical and mythological” cluster includes the narratives that express ideas and feelings associated with one’s relation to supernatural, heavenly forces or mythological figures. Such narratives sometimes either reflect religious beliefs or mystical personal experience or can be indicative of the use of mythological symbols as metaphors and activity of imagination. There is usually some religious or metaphysical vision of reality rendered in such texts. There were 20% of such texts among literary-poetic responses.
3. “Fantastic-demonic” cluster includes narratives that depict imaginary or literary figures. The authors of such texts could perceive themselves in fantastic situations and often interacting with dark, evil personages. There is often a sense of mystery play, grotesque or a masquerade expressed in such texts. There were 26% of such texts among literary-poetic responses.

Taking into account the symbolic nature of most artworks displayed at the exhibition and many potential meanings implied in them, the task of creating a

narrative as a response to pictures seems to be projective and revealing needs and feelings of the audience. Narratives can be regarded as “interpretations” of visual stimuli rather than direct expression of artists’ inner worlds. At the same time, certain congruence to the artists’ inner reality is also possible. It is important, however with regard to the task of destigmatizing mental patients, the above-described clusters of themes and experiences revealed in the narratives serve as a bridge connecting the artists’ inner worlds with those of the people from the audience. Furthermore, through the process of acquainting and creatively interacting with the mental patients’ art, people from the audience could actualize and express in their narratives certain aspects of their own experience. This makes the possible to recognize the mental patients’ art as one of the facets of mankind’s culture.

## Conclusion

The results of the study are indicative not only of the social distance from mental patients, but also a considerable potential of their art to make this distance smaller and thus destigmatize the patients. The results confirm, in particular, that exhibitions and seminars that involve creative interaction of people from the audience with mental patients’ art, help to reveal those realms of human experience that seem to be universal and valid, both for people without psychiatric disorders and those suffering from mental illness. It should be emphasized, however, that the effects of such events can, to a considerable degree be determined by the quality of artworks and information about the artists. Different mechanisms to counteract discrimination and self-discrimination with regard to mental patients must be taken into consideration.

## References

- Arnheim R (1974). *Art and visual perception: a psychology of the creative eye*. The New Version. Berkeley and Los Angeles, University of California Press
- Calisch A (1992). *The use of imagery and art therapy in conjunction with verbal treatment: advantages and implications*. Unpublished Doctoral Dissertation
- Calvin WH (1996). *How brains think: evolving intelligence, then and now*. New York, Basic Books
- Daniel S (2006). *The art of vision*. St. Petersburg, Amphora
- Gardner H. (1982) *Art, mind, and brain*. New York, Basic Books
- Horowitz ML (1983). *Image formation & psychotherapy*. New York, Jason Aronson
- Mihaylova II, Sudakov SA, Yenikolopov SN, Myasoedov SN (2004). The use of cluster analysis for the description of the phenomenon of stigmatization. *Journal of Neurology and Psychiatry in the Name of S. Korsakov* 104:61–65
- Rubin J (1984). *The art of art therapy*. New York, Brunner Mazel
- Serebriytskaya LY (2005). Social idea about mental patients and psychiatry in the context of their stigmatization. *Journal of Neurology and Psychiatry in the Name of S. Korsakov* 105:47–54

## HOW TO OVERCOME PSYCHIATRIC STIGMA THROUGH ART

- Serebriyskaya LY, Yastrebov VS, Yenikolopov SN (2002). Social-psychological factors of stigmatization of mental patients. *Journal of Neurology and Psychiatry in the Name of S. Korsakov* 102:59–68
- Solso R (1994). *Cognition and the visual arts*. Cambridge, MA, Massachusetts Institute of Technology Press
- Yastrebov VS, Mihaylova II (2005). Self-stigmatization in mental patients. *Journal of Neurology and Psychiatry in the Name of S. Korsakov* 105:50–54
- De Montefiores C (1986). Notes on the management of difference. In: Stein TS, Cohen CJ (eds) *Contemporary perspectives on psychotherapy with lesbian and gay men*. New York, Plenum
- Ertugrul A, Uluz B (2004). Perception of stigma among patients with schizophrenia. *Soc Psychiat Epidemiol* 39:73–77
- 

**Hans-Otto Thomashoff**, Psychiatrist, Schottengasse 3, Vienna 1010, Austria  
E-mail: thomashoff@utanet.at



# Disasters



# **Post-Katrina New Orleans Sustaining Multi-Disciplinary Approaches to Primary Care through Policy Reform**

---

**Karen DeSalvo, Eliot Sorel**

Section on Conflict Management and Resolution, World Psychiatric Association

## **Introduction**

The Conflict Management and Conflict Resolution Section's scientific contributions to the first and second volumes of *Advances in Psychiatry*, included "Violence Prevention and the Healing of Trauma" (Sorel 2002) and "Populations' Mental Health in Post-Conflict Contexts" (Sorel et al 2005). For the current third volume, our Section is focusing on global disasters, with an emphasis on lessons learned from post-Katrina New Orleans. Evolving, multi-disciplinary approaches to primary care through policy reform, that are now being implemented there, may be of utility not only in North America, but also in other regions of the world struck by disasters. A global sharing of experiences among health practitioners, researchers, educators and policymakers and the development of response models that integrate primary care, mental health and public health would enhance popu-

lations' health and mitigate responses to these global, complex emergencies.

## **Background**

Mega-disasters the scale and scope of Hurricane Katrina have been exceedingly rare in the USA. Nonetheless, careful study of such disasters can provide lessons learned that can lend essential insights to guide planning for future events of any size. Katrina was in many ways the "perfect storm" not only because of her meteorological characteristics but because she struck a portion of the United States with a high prevalence of chronic conditions, some of the highest rates of uninsured persons, and a geographically and financially consolidated safety net system that was antiquated and not meeting the needs of the population (Kaiser Commission 2006, Rudowitz et al 2006).

The greater New Orleans area was hit especially hard and experienced flood-

ing in more than 80 percent of the city (NOAA 2005). More than 1 million people in the New Orleans metropolitan area were displaced and all residents of New Orleans proper, an estimated 480,000 people, lived under a mandatory evacuation for 33 days. The flooding destroyed the underlying social fabric of the city from schools, to faith based organizations, to communities. The healthcare system was completely disrupted, from basic 911 services to quaternary care (DeSalvo 2005).

At the heart of the devastated area was the State's public hospital and associated clinics, the Medical Center of Louisiana at New Orleans (formerly known as Charity Hospital), which was the principle source of first-contact and chronic disease care for 250,000 uninsured and underinsured persons in the greater New Orleans area. Katrina's devastating flood rendered the facility completely inoperable Rudowitz et al 2006). This confluence of events left hundreds of thousands of vulnerable patients with chronic conditions in the most densely populated hurricane affected areas suddenly with no access to care. Though it is now reopened as University Hospital, tens of thousands of residents, in particular low-income and uninsured individuals are still without access to their usual source of care and rely heavily on emergency rooms (Kaiser Foundation 2008).

As the community looked to rebuild, questions were raised about which components of the health sector should be rebuilt as they were previously, which components should be rebuilt differently, and which components should per-

haps not be rebuilt at all (DeSalvo et al 2005). This conversation was rooted in the conventional wisdom prior to Katrina that restructuring the health system was long overdue. The performance of the health care sector in New Orleans was unacceptable even prior to Hurricane Katrina (State Scorecard 2007). Per capita costs were among the highest in the country, while outcomes and clinical quality were among the worst. The pre-Katrina model of non-integrated, physician-centered care was antiquated and not resulting in acceptable health outcomes. It was a system noted for low ratios of primary care physicians to population and high hospital bed per capita rates. No particular portion of the health sector can be blamed on the failures and limitations, and consequently, it was recognized early that if all of the components of the health system were rebuilt as they were before the storm, the same disappointing health outcomes would result.

The delivery redesign includes the creation of systems of medical homes that will link all people to a primary health provider. While many factors drive the poor health status and health system ratings of the state, policy analysts have pointed to the lack of access to primary care in neighborhood-based health centers as a major factor, particularly for the 20 percent of the population who is uninsured. Historically, the state delivered care to this population by allocating funds through the inpatient and outpatient services at a centralized public hospital facility, Charity Hospital (Rudowitz et al 2006).

This system had been unable to accommodate the population and the result was a high dependence on emergency department care for outpatient services and hospitalization for care when such care may have been provided less expensively and more appropriately in community-based settings.

### **Planning for reform**

Beginning in October 2005, the planning for a re-engineered health system ensued. Importantly, many of these planning groups had overlapping membership and ideologies, most of which can be mapped back to the Institute of Medicine's Crossing the Quality Chasm and Performance Measurement: Advancing Improvement reports. A common theme across all of these planning groups was a commitment to radically overhauling the health care system of the greater New Orleans area into a system that would be evidence-driven and designed, have reduced unwarranted variation and be financially sustainable (DeSalvo 2006). This consensus is likely the case because the evidence is overwhelmingly in support of health systems with a strong community based primary care foundation. Communities served by systems anchored in primary care have better health and experience reductions in health disparities. Systems with a strong primary care infrastructure experience more efficiency, leading to lower cost (Ferrer et al 2005).

In October 2005, over 100 stakeholders came together in Baton Rouge to discuss the rebuilding of the greater New Orleans health sector in the first major post-Ka-

trina health planning effort. Despite the varied backgrounds and interests of the group, candid dialog led to a unified call to not return to what we had pre-Katrina, but rather to find opportunity in the tragedy and rebuild a better health system. The result of weeks of meetings was a report, referred to as the "Framework", which served as a foundation for many of the strategic planning efforts that followed. The essence of this report was a desire to have a system strongly rooted in prevention and primary care, delivered through a network of neighborhood clinics and supported by world class, standards-based, health information technology. The recommendations of the Framework were supported not only by existing national evidence and the opinions of thought leaders, but also from extensive community input through focus groups and other active outreach efforts.

The Mayor of New Orleans, Ray Nagin, formed the Bring New Orleans Back Commission (BNOB) to create a rebuilding plan for New Orleans. Led by community leaders, this entity focused its planning efforts in Orleans Parish and the Health and Social Services Sub-Committee of the BNOB was tasked with creating a plan for a rebuilt health system. This sub-committee built their work upon the "Framework" expounding upon the tenets of supporting a distributed, multidisciplinary ambulatory care supported by interoperable health information technology.

Planning for health reform moved to the state level in the winter of 2006. The Governor appointed, the Louisiana Recovery Authority which created a Public Health

and Healthcare Sub-Committee to address the recovery issues of the 2005 hurricane affected areas. A Long term Redesign Workgroup (Workgroup), whose composition included many of the same community leaders and stakeholders who had participated on earlier planning groups, expounded on the previous plans. Included in the key recommendations of the Workgroup was to support the development of distributed primary care networks and the training, retention and recruitment of primary care physicians. More significantly, this Workgroup created the 12 Guiding Principles for Health Care Redesign (table 1) that remain the touchstone of health care reform for New Orleans.

### **Louisiana health care redesign collaborative**

The next phase in health care recovery was the Louisiana Healthcare Redesign Collaborative (the Collaborative), a multi-stakeholder group led by the Louisiana Department of Health and Hospitals. The Collaborative developed the defined structure for the comprehensive health system redesign, including recommended financing changes. The group was a gubernatorial appointed, multi-stakeholder group charged with finding opportunity in the post-Katrina decimation of the health system to rebuild a more effective, efficient healthcare system for our state. The Collaborative membership included broad and balanced representation among Louisiana health sector providers, payers, patients, and others whose commitment to and participation in the redesign are needed to maximize its prospects for

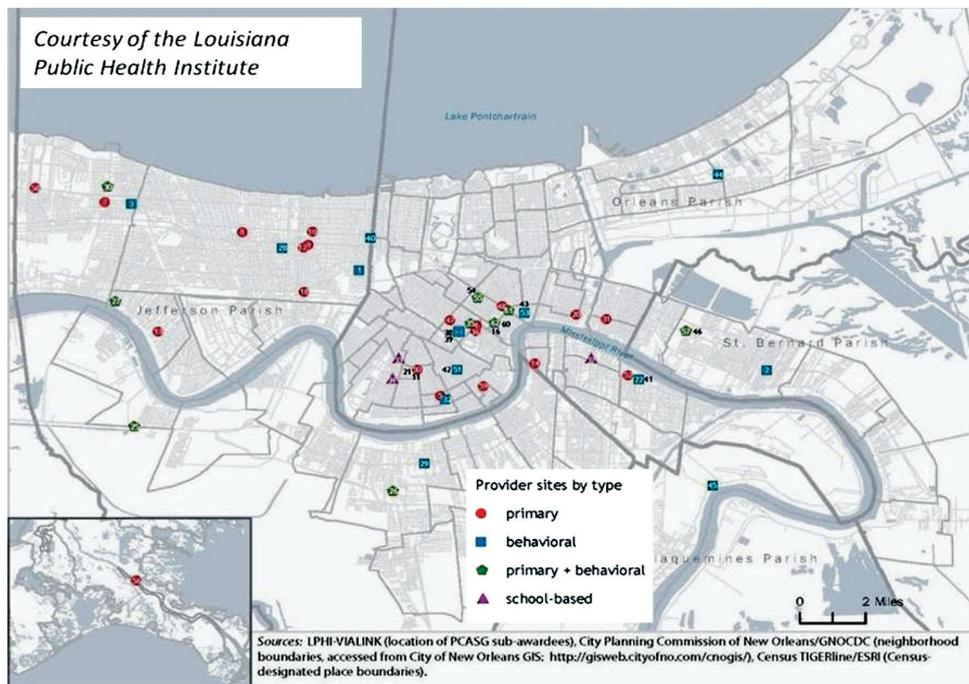
success. In aggregate, the 40 members of the Collaborative represented health care financing (public and private), delivery systems and providers, academia, public health, business, consumers, special interests and populations, and government officials. All Collaborative members and other willing participants publicly signed a Charter charging the group with “developing and overseeing the implementation of an evidence-based blueprint for a patient-centered, quality driven health care system accessible to all Louisianians”. This blueprint served as a guide both for health care policy in Louisiana and for the rebuilding of health care in Greater New Orleans. Importantly, the Charter included the 12 Guiding Principles defined previously (table 1).

The Collaborative undertook its efforts by organizing itself into discrete workgroups which including one focused on Short Term Recovery Issues to address the urgent needs of the system. The Current State Analysis Workgroup was charged with describing the cost, quality, delivery, infrastructure and population needs for Region 1 both pre and post-Katrina. The Blueprint Design Workgroup was charged with creating the new health system including financing and delivery. Their financing efforts were supported by a Finance Workgroup. The Quality Workgroup laid the foundation for the oversight of quality through identification of quality definitions, dimensions and potential structure for ongoing improvement of care quality. The Health Information Technology Workgroup was tasked with developing an in-

**Table 1.** Guiding Principles of the Louisiana Health Care Redesign Collaborative.

The following principles, together with a sufficient body of objective evidence, will guide the redesign of Louisiana's health care system. These principles are interdependent and, therefore, are meant to be taken together as a whole.

1. All health care organizations, professional groups, public and private purchasers, and other health system participants will commit themselves to continually reducing the burden of illness, injury and disability, and to improve the health and functioning of the people of Louisiana.
2. Individuals and their families will be expected to assume personal responsibility to the best of their ability for their own health, supported by public health initiatives and community-based services; individuals and their families will pursue healthful lifestyles, manage known health risks and chronic illnesses, access appropriate health services in a timely manner, make informed health care decisions, accept the practical limitations of standard medical care, and contribute appropriately and within their means to the cost of their coverage and care.
3. Everyone will have access to, enroll in, and contribute appropriately and within their means to an affordable, dependable public or private insurance program or other mechanism to ensure regular access to a medical home, through which access to a core system of quality-driven health care will be financially secured.
4. Patient-provider relationships grounded in mutual respect will engage providers and their patients in the common pursuit of desired patient outcomes. Providers will be culturally competent, avoiding disparities in treatment and partnering with patients in decision-making so as to best respond to their individual needs and values.
5. The foundation of health care delivery will be accessible, integrated, community-based, ambulatory care that is multi-disciplinary. This delivery system will be well suited to disease prevention, to the management of chronic illnesses and disability, and to episodic care. All primary care, specialty care, hospital services, after-care and community-based services will be effectively coordinated and patient-centered.
6. Health care services will be treated as a valuable resource, prioritized toward care for which objective evidence demonstrates that the patient is likely to receive a beneficial outcome.
7. Providers will be fairly compensated, and providers and health plans alike will be held accountable for the cost and quality of their services; patient choice and other market forces will reward them for helping to achieve optimal patient outcomes in the most cost-effective way possible.
8. The health care system will leverage system-wide, interoperable health information technology that meets national standards to: connect patients and clinicians; inform clinical practice; personalize patient care; improve safety; enable transparency of cost and quality of care; improve performance; and improve population health.
9. The redesigned health care system will support medical education, training, and retention of health care professionals upon which it relies, recognizing the various institutions involved in these efforts.
10. The health care system will become more cost effective and affordable as the unnecessary utilization of resources is reduced, as financial payments and incentives are more properly aligned, as operational efficiencies are realized, and as inequities in the sharing of system costs are eliminated.
11. The health care system will be driven by dynamic forces which encourage adaptation to emerging knowledge, patient and population needs, and longer-term economic conditions.
12. An all-hazards approach for effective emergency preparedness will be incorporated into the health care system.



**Figure 1.** New Orleans primary care and behavioral health sites.

ventory of current HIT resources and defining the future needs of the system.

After several intensive weeks of meetings and negotiations, the Collaborative arrived at a unified document known locally as the “Concept Paper” that was approved by the group and sent to Secretary Leavitt on October 20, 2006. This document describes a revision of the health system for the uninsured and under-insured of the Greater New Orleans area into one where citizens will have access to a mixed financial and structural safety net system. The financing plan aims to expand coverage to the uninsured poor using funds from the Disproportionate Share (DSH) program to subsidize premi-

um payments into the private insurance system. These patients, with their new insurance product, would be able to access care through any number of available health systems and providers. For those who remain uninsured, a small structural safety-net system would still exist to ensure access to some level of care. The redesigned system would include a delivery model in which all patients are linked to a physician led medical team in a medical home. The quality and expectations of care for these medical homes would be guided by a regional quality forum. The entire system would be supported by robust, interoperable health information technology.

## Overview of major reform recommendations

On October 19, 2006 the Collaborative adopted a set of recommendations to DHH and on October 20, 2006, DHH set forth a concept paper to HHS with recommendations (Louisiana Government 2007). The major recommendations include restructuring of health care delivery, financing, oversight and infrastructure including:

1. Creating the ‘Louisiana Health Care Quality Forum’ to assure patients that they can expect to receive appropriate, quality-based care from any certified medical home.
2. Redesigning health care delivery to create efficient, quality-driven, patient-centered models of care delivery, in the form of “medical homes” where patients could receive treatment for their physical and mental health.
3. Ensuring meaningful choice of quality-driven systems of care by expanding insurance coverage through a combined effort of expanding Medicaid and developing an entity, “the connector”, that will allow low income residents to use government sponsored premium support to buy into the private insurance market.
4. Supportive base of interoperable, standards-based technology to support practice including electronic health records, computerized order entry, decision support and networking across systems to allow for health information sharing aimed at reducing waste, improving safety and quality.

## Implementing health care reform

The Collaborative ended after negotiations between the state and federal government floundered. However, the involved stakeholders felt compelled to continue their work and see it through to implementation. The work of implementing the health system redesign outlined by the Collaborative continued either through grass roots efforts, civic planning groups or state sanctioned activities.

### *Quality forum*

The Louisiana Health Care Quality Forum (Quality Forum, [www.lhcqf.org](http://www.lhcqf.org)) was formed by the Louisiana Legislature in June 2007 to be a statewide public-private partnership dedicated to improving the quality of health and health care throughout Louisiana across payer and provider groups in a cost effective and transparent manner. The Quality Forum Board was selected through a competitive process and is constituted by a balance payers, purchasers, consumers and providers. The role of the Quality Forum is of a “learning system” for consumers, providers and payers, rather than a regulatory body with punitive functions. As such, the forum serves both as a bidirectional conduit to existing state and national quality measurement programs and also to formulate and pursue an analytical plan designed to truly describe, understand and improve population health and health care at the system level. It focuses its work on presenting data to consumers, payers, and providers so as to engender quality improvement. It formed 4 core committees to undertake its work. These mirror the redesign plans of

the Collaborative. They include the Medical Home Committee (MHC), Health Information Technology Committee, and the Quality Measurement Committee. In addition, the Quality Forum created a Community Outreach Committee to enhance consumer understanding and input. MHC is specifically charged with advancing the Medical Home Model across the state. It has defined the Medical Home for the state, including Medicaid, and serves as a learning Collaborative for the Louisiana Medical Home Demonstration Project in the State.

*Health care delivery:  
medical homes systems of care*

Crucial to the system redesign is dramatically increase access to high quality primary care for all citizens. The Collaborative, and subsequently the Quality Forum, has embraced the national concept of the Medical Home as the core of this system. The medical home is a structured form of primary care that is strongly associated with improvements in quality and reductions in health disparities (Beal 2007). As defined by the Joint Principles of the Medical Home, the medical home is not a building, house, or hospital, but rather an approach to providing comprehensive primary care. These homes provide care that is accessible, continuous, comprehensive, person-centered, coordinated, compassionate, and culturally effective. Additionally, the medical homes will agree to a set of standards for quality and safety, and offer access to the following scope of services:

- Care planning and coordination
  - Interoperable health information technology
  - Population measurement and management
  - Patient health education
  - Emergency preparedness planning.
- These medical homes by design will be part of a larger integrated delivery system across the entire continuum of care including primary, secondary, tertiary and long-term care as well as inpatient, outpatient, and home and community-based services. These medical homes will include a specifically skilled team led by a physician with special expertise in the disease process. The medical home will also include wrap-around services needed by these targeted populations. The expectation is that this medical home system of care will improve the quality and safety of care, reduce redundancy and reduce unwarranted variation in care as evidenced by the dramatic turn-around in these parameters by the Veteran's Administration in the late 1990's.
- In the greater New Orleans area, the Medical Home System of Care Implementation is centered on the development of a community care network of primary care and mental health providers. They are a coalition of health care organizations that serve vulnerable populations in the New Orleans area representing a broad array of organizational types including academia, government, faith-based, federally qualified health centers and free clinics. All share a common mission to maintain an open door policy, offering access to services for patients regardless of their ability

to pay. In the post-Katrina setting, the extraordinary efforts of these organizations have been especially vital to hurricane recovery, given the loss of so much of the capacity the State public hospital system that traditionally served the large population of the uninsured. The services delivered at these sites span primary care, chronic disease care plus behavioral and mental health services. Given the high prevalence of depression, PTSD and stress in the general population in the post-Katrina environment, the widespread availability of such services is critical to the healing of the community (DeSalvo et al 2007).

### *Expanding insurance coverage*

A strong primary care-based delivery system with high quality standards and transparency is not sustainable unless significant health financing reform will allow for changes in incentives and allocation of resources.

When the negotiations stalled in Louisiana after negotiations between the state and federal government about the specifics of the major recommendations and waivers requested, the community picked up the process. Nonetheless, at the local level, grass roots efforts to continue the development of health care services in the mold of the vision for a new health system are underway. Providers and local leaders are actively developing new partnerships aimed at implementing proposed changes. The Coalition of Leaders for Louisiana Health Care (COLLAH, [www.collah.org](http://www.collah.org)) was the principle group formed focused on coverage expansion. The group consists of healthcare and business leaders statewide and in the New Orleans area, which

organized to continue the discussion of financing and implementing the healthcare system that began under the Louisiana Health Care Redesign Collaborative just after the storms. Their work resulted in the development of a plan designed to expansion of health coverage for 80,000 low-income uninsured in Region 1 (Goidel & Terrell 2006) with a comprehensive plan that will include access to mental health services. The plan is designed to represent a compromise between using available funding for the uninsured to support the state run public hospital system and to develop an affordable health plan called "Right Care". Coverage for children was successfully expanded to include children up to 250% Federal Poverty Level. Other Medicaid reforms are currently underway to restructure reimbursement to support the multi-disciplinary medical home model and integrate mental health services into primary care.

## **Conclusion**

In the face of a catastrophic event, the community came together to plan and later implement reforms to the health sector designed to be one responsive to the citizens and capable of addressing their needs beyond their physical health and resilient in the face of future challenges (DeSalvo & Kertesz 2007). Early on, the community was engaged to ensure that the system would be patient-centered. Along the way, the planning process continued to work with consumers to get feedback on concepts and receive new ideas. Concurrently, the community pressed ahead with the work of building services for the

population that was in keeping with the ideas of the redesign plans. This was possible because the community, those who would implement, were integrally involved in the planning and redesign process along the way.

The greater New Orleans Community was not satisfied with simply rebuilding their old system that had led to the worst health outcomes in the United States. In-

stead the community was intent on redesigning their system into what would be one of the most effective health systems. This unique convergence of community and policy efforts has resulted in an empowered and forward thinking health sector reform movement that is led by non-governmental groups and can be a model for other communities facing such dramatic challenges.

## References

- Beal A (2007). Closing the divide: how medical homes promote equity in health care. New York, NY Commonwealth Fund
- DeSalvo KB (2005). September 19th, A letter from New Orleans. *Ann Intern Med* 143:905–906
- DeSalvo KB, Muntner P, Fox E (2005). Community-Based Health Care for “The City that Care Forgot”. *J Urban Health* 82:520–523
- DeSalvo KB (2006). *New Orleans health care after Katrina – 1 year out*. Johns Hopkins Advanced Studies in Medicine
- DeSalvo KB, Hyre AD, Ompad DC, Menke A, Tynes LL, Muntner P (2007). Post-traumatic stress disorder and difficulty coping in New Orleans residents following hurricane Katrina. *Journal of Urban Health* 84:142–152
- DeSalvo KB, Kertesz S (2007). Creating a more resilient safety net for persons with chronic disease: beyond the “medical home”. *J Gen Intern Med* 22:1377–1379
- Ferrer R et al (2005). The essential role of generalists in health care systems. *Ann Int Med* 142:691–699
- Goidel K, Terrell D (2008). *Estimating the number of uninsured Louisiana residents under 200% of Federal Poverty in post-hurricane Louisiana*. Accessed at <http://www.dhh.louisiana.gov/offices/publications/pubs-1/uninsured%20Study.pdf>, March 28, 2008
- Kaiser Commission on Medicaid and the Uninsured. *Key facts: states most affected by hurricane Katrina*. Publication #7395. Accessed at [www.kff.org](http://www.kff.org), March 28, 2008
- Louisiana Health Care Redesign Collaborative (2007). *A redesigned system of care for the New Orleans region*. Accessed at [www.dhh.louisiana.gov/offices/publications.asp?ID=288&Detail=1417](http://www.dhh.louisiana.gov/offices/publications.asp?ID=288&Detail=1417), March 28, 2008
- NOAA (2005). *Hurricane Katrina: a climatological perspective-preliminary report*. National Climate Data Center, Asheville, NC, 2005
- Rudowitz R, Rowland D, Shartz A (2006). Health care in New Orleans before and after hurricane Katrina. *Health Affairs* 25:393–406
- Sorel E (2002). Violence prevention and the healing of trauma. In: Christodoulou GN (ed) *Advances in Psychiatry*. Vol. 1. World Psychiatric Association (pp 35–40)

POST-KATRINA NEW ORLEANS

Sorel E et al (2005). Populations' mental health in post-conflict contexts. In: Christodoulou GN (ed) *Advances in Psychiatry*. Vol. 2. World Psychiatric Association (pp 163–171)

State Scorecard 2007. Accessed at [www.cmwf.org](http://www.cmwf.org). March 28, 2008

Starfield B et al (2005). Contribution of primary care to health systems and health. *Milbank Q* 83:457–502

The Kaiser Family Foundation. *Giving voice to the people of New Orleans*. The Kaiser Post-Katrina Baseline Survey. Accessed at [www.kff.org](http://www.kff.org), March 28, 2008

---

**Karen B. DeSalvo**, MD, MPH, Tulane University, School of Medicine, New Orleans, LA, USA  
**E-mail:** [kdesalv@tulane.edu](mailto:kdesalv@tulane.edu)



# **Torture and Extreme Social Violence A Simple Issue? Questions in Research and Ethics**

---

**Thomas Wenzel, Lilla Hardi, Fabian Friedrich, Federico Allodi**

Section on Psychological Consequences of Torture and Persecution,  
World Psychiatric Association

## **Introduction**

Persecution out of political, religious, or economic reasons can be seen as not only as old as history, but might also be the probably most important risk for mental health besides poverty (Allodi 1982). Torture as a factor in persecution has received special attention over the last decades, reflecting most probably two factors. On one side, it is more easy to define, obviously gruesome, and therefore in the developing international human rights legal documents it has been banned most unequivocally (see for example the UN declaration on torture (Declaration on the Protection of All Persons from Being Subjected to Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, ([http://www.unhchr.ch/html/menu3/b/h\\_comp38.htm](http://www.unhchr.ch/html/menu3/b/h_comp38.htm))).

On the other side, the discussion has recently been rekindled by the unashamed use by armed forces or clandestine ser-

vices and the renewed questioning of its clear prohibition by US politicians in regard to Abu Ghraib and Guantanamo Bay (Clark 2006). Among the strong arguments against the use of torture, besides the impact against a civil society, is the by now well documented severe mental health impact, most commonly Post-traumatic Stress Disorder (PTSD), depression, and psychosomatic patterns linking physical and psychological sequelae such as chronic pain (see for example Wenzel 2007). Some first studies have already been published to document the impact of the torture of parents on indirect victims –especially on children of survivors (Montgomery 2004)– indicating that post traumatic stress, depression and behaviour changes are likely to affect also the family, and earlier data on holocaust survivors show the impact of persecution including torture on the second and third generation (Kellermann 2001). Still, more research is required to under-

stand the mechanisms and complex reactions of family members and close environment in this context, as also the effect on members of the general community. This secondary impact on third parties underlines again the need for a general prohibition of all forms of torture.

### **A question of definitions?**

The UN defines torture as “any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed, or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity. It does not include pain or suffering arising only from, inherent in or incidental to lawful sanctions”. ([http://www.unhcr.ch/html/menu3/b/h\\_comp38.htm](http://www.unhcr.ch/html/menu3/b/h_comp38.htm)).

The UN definition, that has a well justified and necessary status as a more or less universally accepted legal standard, has been developed for the needs of international human rights law, and somewhat broader definitions have been developed in the medical context, such as the WMA definition:

“For the purpose of this Declaration, torture is defined as the deliberate, systematic or wanton infliction of physical or mental suffering by one or more persons acting alone or on the orders of any

authority, to force another person to yield information, to make a confession, or for any other reason.” (The World Medical Association Declaration of Tokyo, see <http://www.wma.net/e/policy/c18.htm> for the latest 2006 revision).

This definition shifts the focus from strictly governmental torture to include also other forms of torture and cruel forms of punishment.

The WPA has taken up the issue in its important declaration of Madrid (Declaration on Ethical Standards for Psychiatric Practice, approved by the General Assembly on August 25, 1996 and amended by the General Assembly in Yokohama, Japan, August 2002), underlining that “Psychiatrists shall not take part in any process of mental or physical torture, even when authorities attempt to force their involvement in such acts”.

Definitions therefore differ according to context—from very subjective descriptions of victims that sometimes do not rate “common” “abuse” and prison treatment as torture and health care oriented definitions to the use of strictly legal definitions such as the UN declaration, or the use of the term in checklists in such instruments as the Harvard Trauma Questionnaire (HTQ) (Mollica, Caspi-Yavin, Bollini et al 1992). While the intentional misinterpretation of definitions to permit circumventing the conventions is a common problem in the legal implementation of the UN and European conventions against torture, the broadest possible definition should be used as reference for treatment and questions of professional ethics in health care (see also the Declaration of Madrid, above).

## **Survivors: a homogenous group of political activists?**

In practice, torture is –in a cross-cultural perspective– used against all types of groups and for a variety of reasons (Asgary et al 2006), it can be systematic or unsystematic, include a wide range of instruments and actions (Amnesty International 2000), and can take in different settings including prisons, police stations or other places. The relatively simple legal definitions discussed in the beginning can also not convey the range of practices and subjective experiences of the victims. Many publications apparently adopt the definition of “torture survivor” assuming the existence of a homogenous population. Duration of detention and forms of torture applied vary greatly, as do other potentially traumatic experiences during torture (Netland 2001) or further severe life events related to persecution, deprivation, war or forced migration as well as exile independent from torture. Loss or persecution of family members during imprisonment for example is a highly relevant issue that might be as stressful or traumatic as torture (Quiroga, Jaranson 2005). Extreme life events like bereavement through social violence, persecution or war frequently accompany torture before and after imprisonment and constitute one of the most important complicating factors in the conceptualisation of the impact of torture, underlining the need for a very open approach sensitive to culture and individual issues in research, treatment and rehabilitation (McKinney 2007, Kucukalic et al 2003).

Psychological and physical torture are usually linked closely and both can rarely be seen isolated from each other (Wenzel 2002). Still, considerable differences can be observed regarding not only the presence of psychological but also of physical long term sequelae. Many studies so far focus on one aspect only and do not offer an integrated perspective, though it is well known that both aspects will closely influence each other (Quiroga & Jaranson 2005). This does not limit conclusions on prevalence of for example PTSD, but limits both a comprehensive understanding of the person and the knowledge of factors that create a continuous stress in the life of survivors.

While in some countries only political activists –a more selected group that might in some cases have stronger resilience, as indicated by Basoglu’s studies– are targeted, torture is also used against “general” (“criminal justice”) prisoners, innocent prisoners, or non-activist members of minorities, ethnic or political groups and relatives of activists (Basoglu et al 1994, 1997). It can be assumed therefore that while some groups with an in general higher resilience factor and a firm ideological framework or sense of meaning that can at least partly protect against suicide are part of the group of torture survivors, any member of the general population including those with high vulnerability can be a victim.

## **Professional ethics**

Participation of physicians and psychiatrists in torture, as noted before in the context of definitions, is clearly forbidden

by international guidelines and in many countries, also specifically by country legislation. Guidelines include the above mentioned declarations of the World Medical Association, of the World Psychiatric Association and corresponding guidelines of the Council of Nurses (<http://www.icn.ch/ps torture.htm>), which in the context of the WMA declaration might be seen as the duty not only not to participate in, but to stop, document, and report the use of torture. The Istanbul protocol ([www.unhcr.ch/pdf/8istprot.pdf](http://www.unhcr.ch/pdf/8istprot.pdf)) as recommended training standard by the UN provides an excellent framework for this and all related activities.

Dual obligation physicians, such as doctors employed by the military, police, or prison systems can be seen at a particular risk, as they may not realise or heed the existence of principles of general professional ethics and it is therefore of crucial importance that local medical associations including the local psychiatric associations take the responsibility of taking a firm stance and supervising the inclusion of these ethical restrictions in all health care and legal curricula.

Asylum procedures play a special role in this context, as recent studies have demonstrated that this process, and especially detention, that is often used indiscriminately and unnecessarily (Staehr & Munk-Andersen 2006) may lead to re-traumatisation and extreme mental distress in survivors suffering from PTSD, suicidal ideation, and related disorders sensitive to environmental stress or threat, as procedures and detention may not only activate the fear of refoulement and repeated exposure, but also replay

torture in flash-backs and nightmares. Psychiatrists in government service can be in double obligation risk situations, and local professional organisations and individuals again should take the responsibility to inform them and urge them not to participate in undue procedures because of the obvious medical and psychiatric concerns.

The Nuremberg physicians' trials have set up a standard in the unfortunately common situation in which a country's legal system and professional bodies are unwilling or unable to set sanctions in cases of professional involvement (Pellegrino 1997). Effective mechanisms in this area are often still missing. The same holds true for the protection of psychiatrists and other health care professionals.

Protection for those psychiatrists who speak up against torture is a further not yet resolved problem. Solution of this problem requires not only individual courage, but also a firm supportive position by universities, medical and mental health professional organisations.

### **Taking care of an often hidden patient group**

Torture survivors require special care, as this can be illustrated by some examples from recent research. Eisenman (Eisenman et al 2000) and others have demonstrated, that many survivors remain unrecognised, as fear, shame, survivor guilt feelings, stigma, and cultural factors can interfere with active help seeking. This group of patients should be seen as a population with individual

needs, experiences and backgrounds, that often reflect not only torture, but other forms of persecution, displacement, and social conflicts.

Lack of awareness of the special background and needs of survivors, or a too limited focus on Posttraumatic Stress Disorder alone can lead to insufficient support and treatment (Wenzel 2007), and continuous suffering, and may risk missing suicidal ideation, especially in

refugees and asylum seekers, as studies by Ferrada-Noli (Ferrada-Noli et al 1998) and Staehr (Staehr & Munk-Andersen 2006) have shown.

In conclusion, because of the severe impact of these situations on individuals and their families, prevention and treatment of the sequelae of extreme social violence, persecution, and torture should receive a more direct and better differentiated attention.

## References

- Allodi F (1982). Psychiatric sequelae of torture, and implications for torture. *World Med J* 29:71, 76
- Amnesty International (2000). *Torture worldwide: an affront to human dignity*. London, Amnesty International
- Asgary, Metalios, Smith et al (2006). Evaluating asylum seekers/torture survivors in urban primary care: a collaborative approach at the Bronx Human Rights Clinic. *Health Hum Rights* 9:164–179
- Basoglu M, Mineka S, Paker M et al (1997). Psychological preparedness for trauma as a protective factor in survivors of torture. *Psychol Med* 27:1421–1433
- Basoglu M, Paker M, Paker O et al (1994) Psychological effects of torture: a comparison of tortured with nontortured political activists in Turkey. *Am J Psychiatry* 151:76–81
- Clark PA (2006). Medical ethics at Guantanamo bay and Abu Ghraib: the problem of dual loyalty. *J Law Med Ethics* 34:481, 570–580
- Eisenman DP, Keller AS, Kim G (2000). Survivors of torture in a general medical setting: how often have patients been tortured, and how often is it missed? *West J Med* 172:301–304
- Ferrada-Noli M, Asberg M, Ormstad K (1998). Suicidal behavior after severe trauma. Part 2: The association between methods of torture and of suicidal ideation in posttraumatic stress disorder. *J Trauma Stress* 11:113–124
- Kellermann NP (2001). Transmission of Holocaust trauma – an integrative view. *Psychiatry* 64: 256–267
- Kucukalic A, Bravo-Mehmedbasic A, Masic I (2003). Torture as a medico-psychological and social problem. *Med Arh* 57:105–108
- McKinney K (2007). Culture, power, and practice in a psychosocial program for survivors of torture and refugee trauma. *Transcult Psychiatry* 44:482–503
- Mollica RF, Caspi-Yavin Y, Bollini P et al (1992). The Harvard Trauma Questionnaire. Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *J Nerv Ment Dis* 180:111–116

- Montgomery E (2004). Tortured families: a coordinated management of meaning analysis. *Fam Process* 43:349–371
- Netland M (2001). Assessment of exposure to political violence and other potentially traumatizing events. A critical review. *J Trauma Stress* 14:311–326
- Pellegrino ED (1997). The Nazi doctors and Nuremberg: some moral lessons revisited. *Ann Intern Med* 127:307–308
- Quiroga J, Jaranson J (2005). Politically-motivated torture and its survivors. *Torture* 16:1–111
- Staehr MA, Munk-Andersen E (2006). Suicide and suicidal behavior among asylum seekers in Denmark during the period 2001–2003. A retrospective study. *Ugeskr Laeger* 168:1850–1853
- Wenzel T (2002). Forensic evaluation of sequels to torture. *Current Opinion in Psychiatry* 15:611–615
- Wenzel T (2007). Torture. *Curr Opin Psychiatry* 20:491–496
- 

**Thomas Wenzel**, Professor of Psychiatry, Department of Psychiatry and Psychotherapy, Medical University of Vienna, Währingergürtel 18–20, A-1090 Vienna, Austria  
**E-mail:** thomas.wenzel@meduniwien.ac.at

# **Areas of Specific Interest**



# Objectivity in Psychiatry

---

**Giovanni Stanghellini, Matthew Broome, Alessandra Ambrosini,  
K.W.M. (Bill) Fulford**

Section of Psychiatry and the Humanities, World Psychiatric Association

## **Introduction: three kinds of objectivities**

Mental health professionals have viewed the problem of objectivity in psychiatry in three broad fashions. The first could, perhaps, be called “realist” or “essentialist”. This conception views the existing categories of psychiatric disorders as being validated through the discovery a discrete, identifiable “essence”, whether that essence be genetic, neural, cognitive or experiential. The second perspective is both “anti-essentialist” and “pragmatic”. It sees a classification as fulfilling certain concerns and purposes, that may well be in conflict, and considers that disorders themselves do not necessarily have to have a discrete essence or be a natural kind. Lastly, there is the view that could be termed “eliminative mindless psychiatry”. This suggests that the entities of psychiatry cannot survive the reduction to their putative biological underpinnings, and that the only “reality” is that of the biological underpinnings of mental disorder.

The leading paradigm in research for psychiatry is that of “cognitive neuropsychiatry”. Halligan & David (2001) define cognitive neuropsychiatry as a systematic and theoretically driven approach to explain mental pathologies in terms of deficits to normal cognitive mechanisms. A concern with the neural substrates of impaired cognitive mechanisms links cognitive neuropsychiatry to the basic neurosciences. Cognitive neuropsychiatry attempts to bridge this gap by first, establishing the functional organisation of psychiatric disorders within a framework of human cognitive neuropsychology and second, linking this framework to relevant brain structures. Cognitive neuropsychiatry suggests a smooth reductionism. There is a realist assumption in this approach. For the cognitive neuropsychiatrist, the entities of psychopathology are real, but further, they can be related back to neuropsychology, and this in turn can be related back to brain structure and function. Contrary to “eliminative mindless psychiatry”, the cognitive neuropsychiatrist presumes that there is a smooth

reduction from psychopathology to neural circuitry.

The anti-essentialist and pragmatic approach is based, instead, on the idea that pathological taxonomies are evolving constructs, with indicative value, depending on the different pathological experiences of people. They represent conceptual resources whose role does not consist in dispensing us from the encounter with the singularity of each person, but in orienting the clinical community in the knowledge and treatment of persons. Syndromes introduced by our taxonomies represent, therefore, models which are useful in order to have empirically adequate knowledge about singular cases.

The option referred to as “eliminative mindless psychiatry” (Jablensky & Kendell 2002) carries on from the Churchlands’ programme of eliminative materialism in the philosophy of mind (Bermudez 2006). This position may eliminate our “folk” psychopathology and classification in that schizophrenia, bipolar, depressive psychosis as we currently think about them may no longer exist. Ontological primacy will be given to neurological explanations, and the entities that make up such explanations, instead. Schizophrenia would either have to have radically different criteria for its diagnosis, and hence “schizophrenia” would have to mean something different from what it means now, or a new term would have to be invented. Either way, the traditional taxonomy of psychopathology is eliminated, and replaced by, rather than reduced to, that of neuroscience. The kind of objective knowledge obtained by

this reduction will dispense us from any encounter with the subjective experience of each patient. Indeed, patients will have to use a new language, based on neuroscience, when describing themselves and their problems.

### The “Object” of psychiatry

Mental illnesses are apparent in the realm of human subjectivity as abnormal, skewed, or constrained experiences, expressions and behaviours. This is how mental illness is presented to us and this is the precise meaning we attribute to this term. Mental illnesses are first of all mental. Mental illnesses qua illnesses are manifest at this level.

A pathology of the psyche constitutes an experienced condition and a family of behaviours, feelings and conscious contents, the peculiar significance of which emerges within a personal history and a socio-cultural context. Such a kind of pathology is, therefore, completely on view only because of what has been called “the personal level of analysis” (Hornsbey 2000, Gabbani & Stanghellini 2008). Only at this level, indeed, the real correlates of a psychopathological condition can be understood in their peculiar feel, meaning and value for the subjects affected by them (Stanghellini 2007). The main difference between this approach and cognitive neuropsychiatry is that here the emphasis is at the level of conscious abnormal human experience, whereas in cognitive neuropsychiatry the focus is on implicit, subpersonal neuropsychological mechanisms.

The comprehension of the pathological significance of a psychic state (that is its meaning in a personal life) also requires a kind of analysis which exceeds the range of a naturalistic approach. What one sees physically may be changes in receptor function, neurotransmitter metabolism or whatever. But such changes cannot be diagnosed as “disordered” in and of themselves: they require mental abnormalities to be detected. The norm at play here is first and foremost at the level of the mental. The point here is that everyone, clinician or not, can see when mental disorder is present: it appears on the personal level. Subpersonal abnormalities are only picked out as such by the person-level experience of disorder. The altered level of dopamine release would not be seen without the person already having been given a diagnosis of schizophrenia. And even if this should happen, an altered level of dopamine release in itself is not a mental disorder.

### **Objectivity in biological and phenomenological psychiatry**

Contrary to prevailing trends, the findings of biological psychiatry are dependent upon what is normal or abnormal in the realm of human subjectivity. For biological psychiatry to have any validity as psychiatry, that is to be anything more than neuroscience, the main object of study needs to be abnormal human subjectivity. The normal and the abnormal themselves are normatively defined, and are not properties of the brain. The norm at play here is a value-laden concept and reflects the leading values in a given community.

Thus, psychiatry requires its proper kind of objectivity. The kind of objectivity we can require from psychiatry depends on the nature of the phenomena under investigation in this discipline, and as we have seen these phenomena are mental.

Arguably, biological psychiatry shares strong similarities with contemporary phenomenological psychiatry, at least conceptually. Phenomenological and biological psychiatry have different aims: the former looks for the understanding of the meaning of human abnormal subjectivity, the latter for the causes of abnormal human experiences and behaviours. None the less, both methods of investigation seek to find the defining characteristic of a mental illness. They look for an objective description of the mentally abnormal. For phenomenology these characteristics will be some essential feature of subjective experience, whilst for biological psychiatry it may be a particular activation of neural circuitry or a discrete genetic polymorphism. A search for a faithful description of experience must be considered as a necessary first step in any taxonomic effort, including attempts of reducing abnormal experience to its potentially biological substrate. The investigations of both fields may be complementary, and in some contemporary writers there is the suggestion that further advances in biological psychiatry will be dependent upon phenomenology. Parnas & Zahavi (2002) endorse the strategy of phenomenology guiding biological research and, it seems, endorse the possibility of reduction of psychiatric disorder. Contemporary clinical phenomenologists offer phenomenology as a method

to define more clearly that which we seek to reduce, namely, the subjective essence of the given experience. As an example, qualitative analysis of anomalous experiences is concerned with bringing forth the typical feature(s) of personal experiences in a given individual to establish “objective”, trans-personal constructs. Trans-personal constructs are central exemplars or prototypes of a wide range of personal narratives. They have to fulfil formal criteria: sensibility, reliability and discriminant validity (Stanghellini & Ballerini 2008). All this appear to suggest that either ontological identity reduction is possible, or efforts to bridge explanations of subjectivity and biology require phenomenology.

## References

- Bermudez JL (2006). Arguing for eliminativism. In: Keeley BL (ed) *Paul Churchland*. Cambridge, Cambridge University Press (pp 32–65)
- Halligan PW, David AS (2001). Cognitive neuropsychiatry: towards a scientific psychopathology. *Nat Rev Neurosci* 2:209–215
- Hornsby J (2000). Personal and sub-personal: a defence of Dennet’s early distinction. *Philosophical Explorations* 2:6–24
- Gabbani C, Stanghellini G (2008). What kind of objectivity do we need for psychiatry? A commentary to Oulis’ ontological commitments in psychiatric taxonomy. *Psychopathology* 41:203–204
- Jablensky A, Kendell RE (2002). *Criteria for assessing a classification in psychiatry. Psychiatric diagnosis and classification*. Chichester Wiley (p 1–24)
- Parnas J, Zahavi D (2002). The role of phenomenology in psychiatric diagnosis and classification. In: Maj M, Gaebel W, Lopez-Ibor JJ, Sartorius N (eds) *Psychiatric diagnosis and classification*. Chichester, Wiley (pp 137–162)
- Stanghellini G (2007). The grammar of psychiatric interview: a plea for the second person mode of understanding. *Psychopathology* 40:69–74 (Editorial)
- Stanghellini G, Ballerini M (2008). Qualitative analysis. Its place in psychopathological research. *Acta Psychiatrica Scandinavica* 117:161–163 (Editorial)
- 

**Giovanni Stanghellini**, Professor of Dynamic Psychology and Psychopathology, Department of Biomedical Sciences University “G. D’ Annuncio Chieti, Italy  
**E-mail:** giostan@libero.it

# **An Image-Bank of Mental Illnesses The Psychiatrist Enters the Scene**

---

**Pier Maria Furlan, Francesco Oliva, Rocco Luigi Picci**

Section of Informatics and Telecommunication, World Psychiatric Association

Teaching psychiatry is notoriously surrounded with numerous problems, including problems connected with evaluation criteria and relational problems, not to mention those of a practical nature. The teacher must describe feelings, thoughts, and behaviours, must represent expressions and their shades of meaning in words, describe the manifestations of mental disorders and their contingent variations. Frequently this comes about not only to the detriment of completeness, but also leaves considerable room for a failure to understand, and for interpretations that are frequently influenced by subjective experiences.

On the other hand, to learn directly on the patient, as is widely employed in other clinical disciplines, is a particularly delicate procedure in psychiatry, as it entails problems of privacy, of effective informed consent, and of ethics. In parallel it is understandably extremely difficult for the patient to demonstrate here and now his or her symptoms, so that the re-

quest to “show” onlookers his or her disorder rarely produces the desired result.

Scholars of the theories of psychodynamics are well aware that the psychic functioning of a subject who is “exposed” to an audience, and thus also the symptoms that he or she manifests, are very different from what they would be in conditions of greater privacy.

Lastly, pharmacological therapy changes the expression of a mental illness, and however beneficial its effects, the result cannot be held to be the natural expression of that illness.

## **From the thematic to the iconic**

The transmission of knowledge has always been based, to a considerable extent, not only on direct experience, but also on communicating reality through signs. This comes about through two fundamental semantic processes: thematisation, which is based on the “logos” and produces theoretical discourse,

and figurativisation, which is based on the image and produces figurative discourse (Greimas & Courtés 1979). The former, which is characteristic of both oral and written treatments, implies the production of a set of words structured so as to communicate a message, ideally in an understandable, complete and consistent way. However, very frequently it is thanks to images, to the figured text that, however meaningful and incisive, the explanation becomes clear and the representation is enriched and completed (Panofsky 1939).

The importance of iconographic documentation to study psychic illnesses and in teaching psychiatry (and medical science in general) was appreciated long before the invention of photography. Figuration, in the form of drawings (sometimes true works of art) has very frequently been used to make descriptions more explanatory. The incisions in the treatise by Esquirol (Esquirol 1838) or the drawings in Charcot's manual (Charcot 1876–1877, 1878, 1879–1880, Tribbioli 2000) are significant examples. Naturally, compared to drawing, photography can provide greater objectivity, and it also makes it possible to quickly obtain a large number of images from which to choose the most significant and the most expressive. It is not by chance that Charcot himself soon moved on to photography, as is shown by his book "Photographic iconography of the Saltpetrière".

In his preface to the beautiful book by Petiziol and Sammartino "Iconography and expressivity of psychopathological states", Mario Gozzano says

that "a collection of photographs of patients with psychic illnesses that reproduce their different facial expressions, from the typical and usual ones that enable even the least expert to immediately recognise the characteristic expression of melancholy ... to those that are less characteristic but that can still be recognised in the infinite shades of their expressiveness, is always a highly useful tool to guide us towards a psychiatric diagnosis" (Petiziol & Sammartino 1969) and, we would add, towards teaching psychiatry.

The development of new multimedia tools has made it evident even to Western civilisations, traditionally "logocentric", that the transmission of knowledge does not come about exclusively through words, and that images, sounds and other sensory perceptions can act as a vector for it (Byrne 2003, Furlan 2004). From this standpoint, the enormous diffusion of audiovisual communication, above all of cinematographic communication, is of great interest: this widespread diffusion means that these sources now produce knowledge much more powerfully than the classical ones (Alexander et al 2004 Liles 2007).

The cinema has over the years represented all the mental illnesses and disorders that are described in the great treatises (Wedding & Boyd 1999). Films can thus be used as material from which to obtain information, not so much in terms of the story that they tell, but for the situations they enact (Bhugra 2003). Furthermore, as we said above, the thematic illustration frequently requires the figu-

rative illustration, which can enrich and clarify the description in mere words. Films enable us to go much further, to move from the figurative to the iconic: cinematographic representation clothes figures completely, it produces the referential illusion that transforms them into images of the world (Greimas & Courtés 1979), in our case into images of the psychopathological world.

### **Cinematography and the expression of mental disorders**

The relationships between cinema and psychiatry or psychoanalysis have been investigated from varying standpoints (Salter 2003, Greenberg 2003, Bhugra, 2005). Christian Metz analysed the mental processes, expectations, tensions, and forms of identification that compel the spectator at the cinema (Metz 1977), Glenn and Krin Gabbard considered how the cinema, through stereotypes, has represented the professionals of psychiatry (Gabbard & Gabbard 1999) and last but not least, Ignazio Senatore, Italian psychiatrist and psychotherapist, has written many works on the relationship between the cinema and the psyche (Senatore 1998, 2002, 2004, 2006).

The authors, members of the Section on Informatics and Telecommunications in Psychiatry, decided to use cinematography in making a DVD-ROM. Indeed, one of the main aims of the Section on Informatics and Telecommunications in Psychiatry is to improve the

potential for communication and the exchange of information among those involved in mental health care including the key area of teaching. Further, our world wide association needs to be aware that language does not necessarily always permit the perfect sharing of all the nuances and fine details of psychiatric syndromes.

The DVD-ROM fundamentally comprises two sections, one being of text in the form of a basic treatise on mental illness with text links. The other part is iconographic, comprising 130 video-clips taken from 57 films, which are descriptive and representative of the different mental disorders treated in the basic text. This is therefore a hypertext product (or better a multimedia one, since it comprises different media) that enables a free connection (of the associative type) between “nodes” (blocks of text or video), through links between the various blocks.

The DVD can thus be read non-sequentially, ordered by centres of interest. A great quantity of information can be viewed, in ways selected by the user, and, at the same time, in ways planned by the authors.

To find one’s way around this network of links (to “navigate”) we start with a compass (a sort of map) that is simply the general index of the subjects treated. There are nine principal head-words: consciousness disorders, orientation disorders, attention and concentration disorders, memory disorders, intelligence disorders, thought disorders, perception disorders, affect disorders – which

also includes anxiety disorders – and behaviour disorders, including aggressiveness.

By clicking on one of these head-words, for example “thought”, we access the basic text and naturally the description of thought and of thought disorders (figure 1). The treatment in the basic text is deliberately simple and schematic, almost by bullet points, so that the DVD can be used by non-specialists. The index of the nine main subjects remains in the column alongside the text and, if desired, the subsections can also be accessed. This makes it possible to navigate around the text

quickly by principal subjects and by subsections of those subjects.

The user can scroll down the basic text, so as to read it. But, at any time he or she desires, by clicking on the icon showing a cinecamera situated alongside the head-word, may enter into what might be called the “core” of the DVD (figure 2). This “core” is the central page (there are a total of 97 central pages in the DVD): at this point, in autoplay it is possible to see the representative video-clip that illustrates the disorder in question. Naturally, the video clip can be enlarged to full screen and may be controlled via the usual available commands.

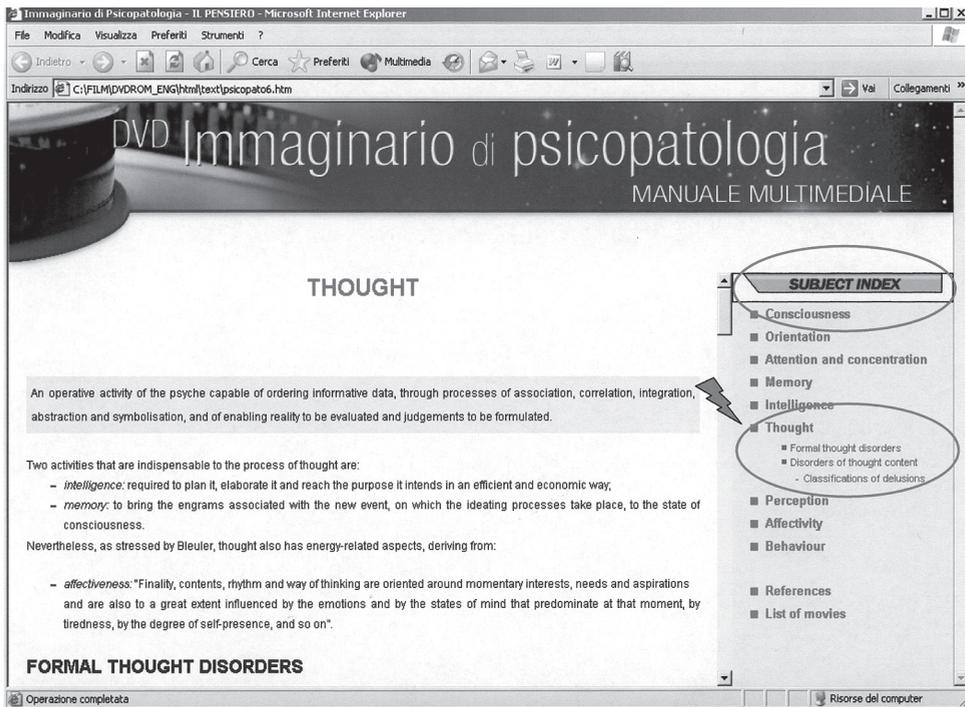


Figure 1. The basic text.

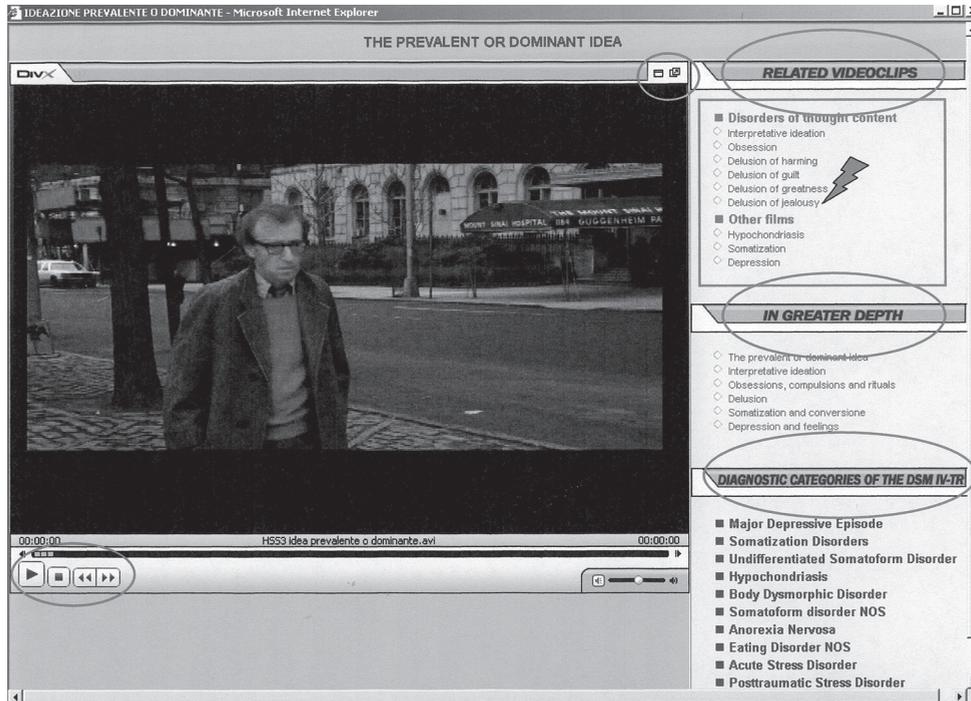


Figure 2. The “core” of the DVD: the central page.

Thus the user has moved on from a sequential reading (that of the basic text) to a hypertext reading, with the possibility of freely accessing the various “nodes”, through a personalised consultation of the different links present in the central page. Here, alongside the films to be viewed, at one side there is a list of the video-clips that have some connection with the disorder in question; the list of the in-depth technical descriptions related to it; the list of the diagnostic categories of the DSM-IV TR in which the disorder in question is listed.

If the viewer wants to compare the expressions of different mental disorders

(for example to view and compare a delusion of influence with a delusion of reference) or if he or she simply wants to skip reading the basic text and navigate among the films, this is possible through the list of correlated video clips. Click on the head-word in question and the clip that illustrates it will start in autoplay.

The in-depth technical descriptions are in the form of text windows (figure 3), whose aim is to go into the subject explored in greater depth, the treatment being at a higher level than the basic text which, as we have said, can also be used by non-experts. These descriptions contain the authors’ personal views, along-

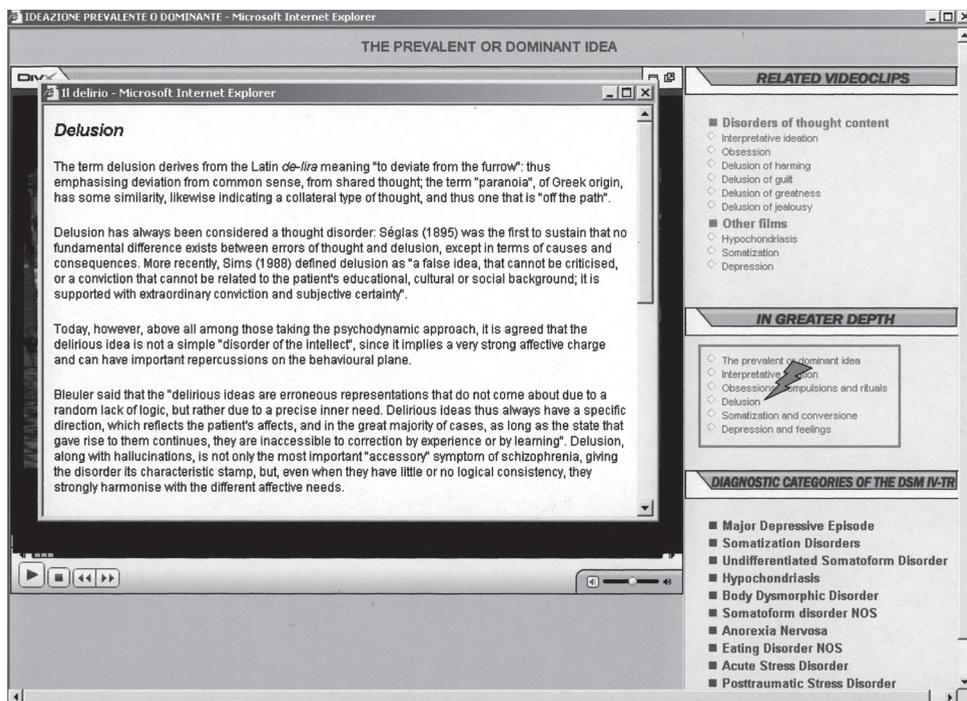


Figure 3. The “window” with the in-depth technical description

side contributions from the “classics” of psychopathology. For example, clicking on the item “delusion” a window will pop up with the description in question. Naturally, these descriptions betray the authors’ viewpoint: they favour a phenomenological and hermeneutic model, in particular a psychodynamic model, of psychiatric symptoms rather than the clinical-descriptive approach.

Likewise with the list of diagnostic categories of DSM-IV TR: clicking on one of the entries listed, a window pops up with the description of the diagnostic category in question, for example “Delusional disorder” (figure 4). Specific graphic

symbols make it possible to differentiate between cases in which the disorder in question (“delusion”) is explicitly listed among the criteria of the diagnostic category (“delusional disorder”), those in which it is not listed as such among the criteria but can be deduced from them, and lastly, those in which the disorder does not appear among the diagnostic criteria, but clinical experience documents it among the possible signs and symptoms of the category in question.

Naturally, at any time it is possible to return to the map, the general index page, from which the bibliographical references and a list of films can be accessed

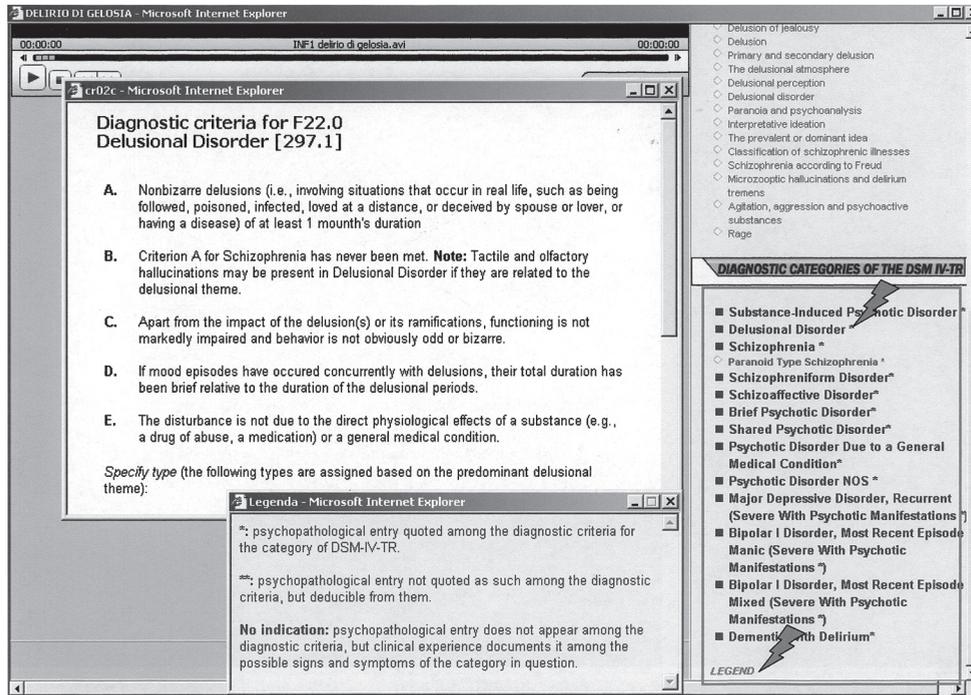


Figure 4. The “window” with the diagnostic category (DSM-IV TR) and the legend.

(these can also be accessed directly from the central pages).

### Using the films for learning purposes

By entering into the reality of the film, the user of the DVD can capture emotions, behaviours, thoughts, including those that the theoretical description frequently does not succeed in presenting and that, in direct observation of the patient (where such observation is possible) can frequently escape us, perhaps because the patient him or herself keeps them hidden.

The user can also view the scenes reduced to short “clips”, once or more than once (at will or at need) and can interrupt them by halting the image (to grasp significant expressions). Verbal definitions can also continually be correlated with the representations.

But, above all, the filmed reality enables mental disorders to be contextualised, that is they can be observed in the context in which they are produced and develop, within those social and human interactions that are frequently their cause, and that in any case determine their expression and evolution. Thus, from the ba-

sic text it is possible to learn that “prevalent or dominant ideation” is “an idea or a set of ideas, of themselves substantially normal, that are privileged with respect to other mental contents in occupying the field of awareness, in relation to the strong emotional load connected to them”, but through Woody Allen’s great interpretation in “Hannah and her sisters” we can grasp the intrusiveness of the fear of having a brain tumour, as this thought is reiterated in different places and times, which enables the impact to be seen in the expression of the actor’s face, in his body posture, in the trembling of his voice, all within the relational, professional and social context of his Manhattan.

The same holds for the comparison between photographs and films. The extraordinary series of photographs by Charcot on the symptoms of hallucination shows us the emotional resonance of the dis-perception of Céline, a “hysterical-epileptic” woman patient, which we see on her face in the form of expressions of anxiety, surprise, disdain, irony, terror, repugnance, etc. But the splendid interpretation by Russell Crowe and Jennifer Connelly (John and Alicia Nash) in “A beautiful mind” by Ron Howard, tells us much more

on the enigmatic and unlimited regions of the hallucinatory experience. Here we are able to capture some fundamental characteristics of hallucinations, such as their clarity, intensity, outward projection and absolute impression of reality; but we can also appreciate the significance of hallucinations in affective and reactive terms, and do so dynamically (through body movement, tones of the voice) and not only statically (expressions of the face, posture of the limbs). The impossibility for the subject suffering hallucinations to avoid their imperative force, as well as the impossibility of a close relative to understand what is happening, become clear.

On the contrary, a simple theoretical description of psychopathological phenomena, including with the support of figuration, or even the observation of these phenomena in specific situations (a hospital ward, a psychiatric outpatients department, etc) can only give a partial representation of psychic suffering, since they de-contextualise it completely or partially simply by extrapolating it from that close network of affect and of relationships that link each person to the various forms of cultural, civil and social activity proper to the time and place in which he or she lives.

## References

- Alexander M, Lenahan P, Pavlov A, Stuart MP (2004). *Cinemeducation. A comprehensive guide to using film in medical education*. Redcliffe Publishing, Oxford
- Bhugra D (2003). Teaching Psychiatry through Cinema. *Psychiatric Bulletin* 27:429–430
- Bhugra D (2005). Mad tales from Bollywood: the impact of social, political and economic climate on the portrayal of mental illness in hindi films. *Acta Psychiatrica Scandinavica* 112:250–256
- Byrne P (2003). Psychiatry and the media. *Advances in Psychiatric Treatment* 9:135–143

- Charcot JM (par Bourneville et Regnard). *Iconographie protographique de la Salpêtrière*. 3 volumes. Aux Bureaux du Progrès Médical/V. Adrien Delahaye et Cie Libraire, Paris 1876–1877, 1878, 1879–1880
- Esquirol E (1838). *Des maladies mentales considérées sous le rapports medical, hygienique et medico-légal*. J.B. Baillière, Paris
- Gabbard GO, Gabbard K (1999). *Psychiatry and the cinema*. American Psychiatric Press Inc, Washington and London
- Greenberg HR (2003). *La-La Land Meets DSM-IV: the Pleasures and pitfalls of celluloid diagnostics*. *Psychiatric Services* 54:807–808
- Greimas AJ, Courtés J (1979). *Sémiotique. Dictionnaire raisonné de la théorie du langage*. Hachette, Paris
- Liles RE (2007). The use of feature films as teaching tools in social work education. *Journal of Teaching in Social Work* 27:45–60
- Metz C (1977). *Le signifiant imaginaire. Psychanalyse et cinéma*. Union Générale d'Éditions, Paris
- Panofsky E (1939). *Studies in iconology*. Oxford University Press, New York
- Petiziol A, Sammartino L (1969). *Iconografia ed espressività degli stati psicopatologici*. Feltrinelli, Milano
- Senatore I (1998). *L'analista in celluloido*. Franco Angeli, Milano
- Senatore I (2002). *Curare con il cinema*. Centro Scientifico Editore, Torino
- Senatore I (2004). *Il cineforum del Dottor Freud*. Centro Scientifico Editore, Torino
- Senatore I (2006). *Psycho-cult*. Centro Scientifico Editore, Torino 2006
- Tribbioli G (2000). *Appunti per una storia della psichiatria a Torino*, DVD-Rom, <http://www.psichiatriaestoria.org/Charcot/index.htm>, Torino
- Wedding D, Boyd MA (1999). *Movies and mental illness: using films to understand psychopathology*. McGraw-Hill College, New York
- 

**Pier Maria Furlan**, Professor of Psychiatry, Head Department of Mental Health, San Luigi Gonzaga Hospital, University of Torino, Regione Gonzole 10, Orbassano, Turin 10043, Italy  
**E-mail:** piermaria.furlan@unito.it



# Advances in Urban Mental Health

---

**Giovanni Caracci, Mariano Bassi**

Section on Urban Mental Health, World Psychiatric Association

## Introduction

In 1900 only 15% of world population lived in urban areas. In 2030 this percentage will rise to 60%. On May 23, 2007, according to data published by North Carolina State University and Georgia University, the overtaking took place: for the first time the urban population exceeded the rural. The metropolitan area is destined to increasingly become the new environment of 21st century homo sapiens (Sterling 2002).

This statement is supported by academic evidence. In recent years some investigators have focused their attention on the big city, the “megalopolis”, and their findings have prompted architectural investments, as well as urban, industrial, commercial, ecological and health care plannings (Reinhold & Kadambari 2007).

This focus of interest on the new large urban reality is based not only on academic inquiry but also on extraordinary concerns. The big “megalopolis” often undergoes rapid and uncontrolled development, which in turn may produce “desperate settlements”, that become integral part of the urban environment with a significant im-

pact on the urban dynamics. These settlements, often called “slums”, are built at the outskirts of the city, arising illegally most often from nothing, named as favelas, ranchitos, deprived banlieu. A significant segment of the urban population lives on the border or within the “planet of slums”. Many inhabitants of these informal settlements lead an “up-to-date” life. They own mobile phones, laptops, motorcycles, appliances and satellite dishes. They frequent internet cafés and they wear clothes made in China. While they are poor, they lead the same “ultramodern” life as the majority of the inhabitants of the large metropolitan areas.

The largest metropolitan areas are also characterized by other forms of urbanization, such as large shopping malls and so-called “inner-city villages”, which artificially reproduce the lost world of the small town, where everyone knows and recognizes everybody else.

When looking at big metropolitan areas one could identify the following ambivalence: on the one hand a modernist tension, the “modernist dream” for many authors, who still want to believe in large projects and utopias, obviously destined

to defeat, on the other hand a realistic recognition of the so-called “post-modernity” or “failed modernity”, or “retro-modernity”, already swept away by globalization and also doomed to a poor outcome. Some authors advance the theory of the multi-national-cities achievement, large and undifferentiated urban areas, characterized by the same unvaried landscape from any side you look, with only few distinctive areas.

This is the true planet-city, epitomized by Los Angeles, as it was seen and described by the best post-modern European theoreticians, like Jean Baudrillard and Umberto Eco. Los Angeles offers herself to the observer as a spread-out metropolitan area, without plans, absorbing everyone and everything, continuously evolving, within from time to time unstable and changeable borders. Los Angeles was represented in the view of visitors as a symbol, a city without differences and full of shadows. Today Los Angeles is conceding its primacy of planet-city to another US metropolitan area, Las Vegas, another utopian and artificial model of planet-city.

The development of Las Vegas could lead, as some futuristic and visionary dreamers assumed, to a monstrous connection with Los Angeles, becoming the first practical model of “multicity”.

Health care policy has a major bearing on big cities. Metropolitan areas are complex social environments that are home to disproportionately large numbers of disenfranchised and marginalized groups, including the poor, socially excluded people, and illegal and legal immigrants. Thus, despite the diversity and richness

of their residents, the most vulnerable and oppressed segments of the population also live in the big cities. These groups are heavily impacted by health care policy, particularly public health programs, funding for public health care facilities, as well as a range of other policies that both directly and indirectly impact people’s health (Dye 2008).

The majority of people now live in urban areas and will do so for the foreseeable future. As a force in the demographic and health transition, urbanization is associated with falling birth and death rates and the shift in burden of illness from acute childhood infections to chronic, non-communicable diseases of adults. Urban inhabitants enjoy better health on average than their rural counterparts, but the benefits are usually greater for the rich than for the poor, thus magnifying the differences between them. Today the main obstacles to improving urban health are not technical or even financial, but rather they are related to governance and the organization of civil society. A community-based mission, orientation, and strategies are necessary to promote the health and the mental health. In urban areas, safe, affordable housing, greater availability of food, adequate numbers of public parks and exercise facilities, and easy accessibility to public transportation systems and medical facilities are all crucial to promoting healthy communities and healthy lives.

Over the last few years research on urban mental health has flourished, as significant contributions have been made in this expanding field. In this update we will summarize the latest developments in the field. First, we will discuss the most important research approach-

es in urban mental health, we will then deal with some of the emerging issues in urban mental health in the developing world, and finally we will discuss environmental as well as social determinants of urban mental health.

### Research approaches

The three most commonly cited approaches are the rural vs urban approach, the intercity comparisons approach and the multilevel contextual model. An example of urban vs rural model is the National Morbidity Survey in Great Britain (Paykel et al 2002), which found no rural-urban differences in overall morbidity, although they found more likelihood of multiple diagnoses in large metropolitan counties. Although overall, studies comparing rural to urban areas have yielded conflicting results, recently there has been renewed interest in this approach especially in the field of suicide and of psychosis (Dekker et al 2008, Pedersen & Mortensen 2001).

The in between-cities study design attempts to understand how determinants of health and mental health differ in direct-city to city comparisons. This kind of design has been used especially in comparisons of health/mental health care systems among different cities (Rodwin & Gusmano 2002). A third approach examines contextual intra-city differences of health and mental health determinants in discrete spatial units (neighborhoods or communities) to identify specific characteristics associated with health and mental health problems. For example a study by Galea et al (2005) found living in areas with poor quality of built environment to be associ-

ated with greater likelihood of depression, while Kirkbride et al identified specific socio-environmental risk factors, such as deprivation, social capital and social mobility correlated with the incidence of psychosis (Kirkbride et al 2007).

All three designs are heavily context-dependent, therefore their findings are difficult to generalize to other cities and even other areas of the same city. Nevertheless, by focusing on smaller units, this last approach allows to circumscribe the scope of inquiry, which in turn makes addressing findings more manageable.

Given the multifaceted nature of the urban mental health field, to better understand the impact of urban living on health and mental health, some investigators have proposed a variety of approaches. More recently, Vlahov et al (2005) summarized them as follows: the urban health penalty, the urban sprawl model, the urban health advantage model and the urban living conditions model. The urban health penalty model posits that urban areas, due to unhealthy environments creating the conditions for poor health. Thus, penalty stands for higher rates of medical problems, mental illness and substance abuse. For example, a recent German study found that higher levels of urbanization were linked to higher 12 month prevalence for almost all major psychiatric disorders (Dekker et al 2008). Similarly, in the Netherlands, five levels of increasing urbanization were significantly associated with increasing prevalence of psychiatric disorders (Penn et al 2007).

The urban sprawl model focuses on the negative impact of rapid sub-urbanization of cities on health and mental health,

with increased rates of illness secondary to sedentary lifestyles, increased pollution and loss of social capital (Frumkin 2002). The third model is the urban health advantage, which emphasizes the health benefits of living in cities. For example, there is some evidence that, particularly in developing countries, some health indicators, such as infant mortality rates (especially among the poor) are better in cities than in rural areas (Montgomery et al 2003). Proximity of wealth, providing access to resources to the poor, availability of higher levels of social support and better access to necessities of life are thought to account for such advantage.

Finally, urban living condition focuses on health and mental health as shaped by a variety of contexts. Health in cities is seen as a function of individual factors affected by local, social and physical environments. This is an integrated model that allows seeing urban health and mental health through a stratified prism of multiple levels of analysis (Galea et al 2005).

This comprehensive framework, can easily integrate the three previously cited ones and has the added advantage of flexibility of looking at the larger as well as the more circumscribed level.

In recent years the field of urban mental health has shifted from the epidemiological focus to a contextual one. More and more health and mental health in urban areas are viewed as a result of the convergence of a multi-layered set of contextual influences that are often interdependent or happening at the same time. Because the literature on these broad categories is too vast to summarize, this review will focus on most recent findings

on environmental and social factors' adverse impact on health and mental health in cities, while the other dimensions will be discussed elsewhere.

### **Physical environment and determinants of urban mental health**

It has been argued that the feature that most distinguishes the 20th century from previous centuries is the extent to which humans have been able to influence the physical environment.

The characteristics of the urban built environment affecting mental health have been less studied than the same characteristics impacting general health. The deterioration of inner cities has been found to promote the spread of HIV, tuberculosis, violence and health disparities.

The pioneers in this area of urban mental health were Faris and Dunham, who in 1939 studied the neighborhoods of origin of 30,000 psychiatric patients treated in a Chicago area facility. Their findings were that higher rates of schizophrenia and substance abuse disorder were coming from "deteriorated regions in and surrounding the center of the city, no matter what race or nationality inhabited that region".

Galea et al (2006) among 1355 respondents found that residence in neighborhoods characterized by a poor quality built environment was associated with greater individual likelihood of past six months and lifetime depression, after adjusting for age, race/ethnicity, sex and income. Similarly, living in a poor neighborhood has been associated with higher levels of depressive symptoms in

older adults, after controlling for individual vulnerabilities (Kubzansky et al 2005).

According to Klitzman et al (2006) the defining characteristics of the urban physical to the urban social environment, are density, diversity and complexity. Physical and social environments interact in complex ways to affect health and well being. She divides them in underlying community level factors (population density), physical infrastructure systems (transportation, solid waste) housing, and proximate levels of environmental mediators such as water and air quality, dust and soil, noise, local climate, pestilence and disasters.

The physical conditions of a spatial unit such as neighborhood provide the opportunities for people to interact and monitor the group's behavior. That deteriorated appearances of buildings should be associated with higher crime rates is somewhat intuitive given the criminals' tendency to choose areas where they can conduct their activities with impunity. Hence some approaches to "fix broken windows" as a preventive measure against crime (Wilson & Kelling 1982).

Children aged 9–11 living in inner city neighborhoods were found to be more fearful, lonely and unhappy than other children after controlling for social variables (Hamel & Burns 1989). Similarly, higher levels of depression, anxiety and conduct disorders were found among adolescents living in neighborhoods considered dangerous and marked by graffiti compared to adolescents from more ordered neighborhoods (Aneshensel & Sucoff 1996).

## The developing world

In the developing world, where most of the fast growth of urbanization is concentrated, slums account for a high percentage of that growth. A slum is a "wide range of low income settlements and poor human living conditions" (UN Habitat 2003). Slums lack basic services, are characterized by overcrowded populations housed in substandard constructions and exposed to unhealthy living conditions. It is calculated that 31.6% of the world urban population, 43% in the least developed countries, live in slums. It is estimated that in 30 years the number of people living in slums will grow to 2 billion.

From an environmental view point, access to safe waste, garbage removal and proper sanitation are all deficient in the cities of the developing world with resulting high frequency of infectious diseases and water-washed disease. Waste landfill has been associated with low birth weight, birth defects, infectious disease and neoplastic disease, all conditions with significant mental health consequences. Pollution, especially particulate matter increases the risk of cardiovascular disease and asthma. Outdoor ambient pollutants have been associated with deleterious mental health outcomes (Evans 1994).

Noise has been associated with medical problems such as hypertension and ischemic heart disease as well as psychological distress in children. Poor housing conditions are associated with respiratory diseases, infections, mental health problems and injuries. Other factors having a negative impact on health and mental health are poor transportation, climate and geography and being prone to natural disasters.

A significant perspective on the interaction between the environment and health/mental health was produced in 2006 by the World Health Organization, with the publication of its "Project on Preventing Disease Through Healthy Environment". In this effort WHO's definition was as follows: "The environment is all the physical, chemical and biological factors external to the human host, and all the related behaviors, but excluding those natural environments that cannot be reasonably modified".

In this study 3 experts for each of the 102 diseases/injuries researched were asked to provide their estimate of the fraction of burden of disease attributable to reasonably modifiable environment, based on systematic literature reviews. The results showed that environmental factors contributed 24% to the global burden of disease (in Disability Adjusted Life Years, DALY's) and 23% of all deaths. Diarrheal disease, lower respiratory infections, neuropsychiatric conditions and cardiovascular diseases are the largest contributors to global disease with an environmental component. Yet the report concludes that the overall contribution to the disease burden of neuropsychiatric disorders was relatively modest (attributable fraction estimates at 13%).

### **Social determinants of urban mental health**

A number of authors have recently addressed the topic of social determinants of urban health and mental health.

For example, in Lisa Berkman's formulation (Kawachi & Berkman 2001), so-

cial networks impact on health and mental health by a cascade of causal processes going from the macrosocial to the psychosocial mechanisms. She argues that social networks should be seen in a larger and social context and upstream forces are seen to condition network structure. Conversely, downstream forces are thought to condition the influence on social and interpersonal behavior. Using the Durkheim social integration theory and John Bowlby's attachment theory, she arrives at one overarching model on how social mechanisms affect health and mental health.

Social determinants cause deleterious effects on health through pathways of environmental exposures. Kjellstrom and Corvalan (2007) at WHO have created a framework to describe these pathways. The driving forces are socially determined, they lead to pressures on environment contributing to change in the state of the environment, which in turn produces effects on health. For example, effects on health would be mortality trends, environmental burden of disease, occupational injuries and diseases and traffic car injuries. All of these variables have major mental health correlates that can be addressed by comprehensive approaches including upgrading of infrastructures, health promotion and community participation.

The World Health Organization and the Pan American Health Organization have demonstrated that achieving equitable environmental health conditions depends on social and environmental changes and that the two of them are inextricably intertwined. Their program, WHO Healthy Cities Europe and PAHO Healthy Municipalities Cities and Communities aim at positively impacting the environment as

a source of health and mental health and by driving forces and pressures through governmental and local programs.

Within the urban social environment, social networks and social groups regulate behavior that affects mental health (substance abuse, sexual behavior etc). Social capital includes organizations and community organizations that may influence mental health. Social support is considered to have a beneficial effect on stressors as well as provide access to service that significantly impacts health. Kawachi and his group at Harvard have found that social support produces positive psychological states including a sense of purpose, belonging, security and recognition. This leads to increased motivation for self-care and modulation of neuroendocrine response to stress. Furthermore, the perceived availability of social support in the face of a stressful event may lead to a more benign appraisal of the situation and block cascades of negative feelings and behaviors. Social isolation would have opposite effects (Coutts & Kawachi 2006). It is also important to emphasize that cultural factors significantly modulate the impact of

social norms, values, expectations and belief systems when it comes to health and mental health.

More recently, the World Health Organization' Commission on Social Determinants of Health produced a report on the social Determinants of health called the Solid Facts. It was based on research reports both cross-sectional and longitudinal. The bulk of evidence came from developed countries and it mentioned 10 broad areas of interest, making policy recommendations for sustainable development and urban planning. The 10 areas are the social gradient, stress, early life, social exclusion, work, unemployment, social support, addiction, food and transport.

In sum, over the last few years, there has been a wealth of research on environmental and social determinants of urban mental health. Given the projections of worldwide urban growth for the coming decades, it is hoped that some of this research will translate into policy addressing health and mental health in urban populations.

## References

- Aneshensel CS, Sucoff CA (1996). The neighborhood context of adolescent mental health. *J Health Soc Behav* 37:293–310
- Coutts A and Kawachi I (2006) The urban social environment and its effects on health. In: Freudenberg N, Galea S, Vlahov D (eds) *Cities and the health of the public*. Vanderbilt University Press, Nashville, Tennessee (pp 49–53)
- Dekker J, Jaap P, Jurriijn K et al (2008). Psychiatric disorders and urbanization in Germany; <http://www.biomedcentral.com/1471-2458/8/17>
- Dye C (2008). Health and urban living. *Science* 319:766 – 769
- Evans GW (1994). The psychological costs of chronic exposure to ambient air pollution. In: Isaacson RL, Jensen KF (eds) *The vulnerable brain and environmental risks*. Plenum Press, New York (pp 167–182)

- Frumkin H (2002). Urban sprawl and public health. *Pub Health Rep* 117:201–217
- Galea S, Ahern J, Wallace RS et al (2005). Urban built environment and depression: a multilevel analysis. *J Epidemiol Community Health* 59:822–827
- Galea S, Ahern J, Nandi A et al (2006). Urban neighborhood poverty and the incidence of depression in a population based cohort study. *Annals of Epidemiology* 17:171–179
- Galea S, Freudenberg N, Vlahov D (2005). Cities and population health. *Soc Sci Med* 60:1017–1033
- Hommel R, Burns A (1989). Environmental quality and the well being of children. *Soc Indicators Res* 21:133–158
- Kawachi I, Berkman LF (2001). Social ties and mental health. *J Urban Health* 78:458–467
- Kelling GL, Wilson JQ (1982). *Broken windows*. The Atlantic
- Kirkbride J, Morgan C, Fearon P et al (2007). Neighborhood-level. Effects on psychoses: Re-examining the role of context. *Psychological Medicine* 73:1413–1425
- Kjellstrom T, Friel S, Dixon J, Corvalan C, Rehfuess E, Campbell-Lendrum D et al (2007). Urban Environmental health hazards and health equity. *J Urban Health* 84(Suppl 3):86–97
- Klitzman S, Matte S, Kass D (2006). The urban physical environment and its effect on health. In: Freudenberg N, Galea S, Vlahov D (eds) *Cities and the health of the public*. Vanderbilt University Press, Nashville, Tennessee (pp 61–84)
- Kubzansky LA, Subramanian SV, Kawachi I, Fay M et al (2005). Neighborhood contextual influences on depressive symptoms in the elderly. *Am J Epidemiol* 162:253–260
- Montgomery MR, Stren R, Cohen B, Reed H (eds) (2003). *Panel on urban population dynamics. Cities transformed: demographic change and its implications in the developing world*. Washington DC, National Academic Press
- Paykel ES, Abbott R, Jenkins R, Brugha TS et al (2002). Urban-rural mental health differences in Great Britain: findings from the national morbidity survey. *Psychological Medicine* 30:269–280
- Pedersen CB, Mortensen PB (2001) Evidence of a dose-response relationship between urbanicity during upbringing and schizophrenia risk. *Archives General Psychiatry* 58:1039–1046
- Penn J, Dekker J, Schoevers R et al (2007). Is the prevalence of psychiatric disorders associated with urbanization? *Social Psychiatry and Psychiatric Epidemiology* 42:984–989
- Reinhold M, Kadambari B (2007). *Multinational city. Architectural itineraries*. Actar Editorial, New York
- Rodwin VG, Guzmano MK (2002). The World City project: rationale, organization and design for comparison of megacity health systems. *J Urban Health* 79:445–463
- Sterling B (2002). *Tomorrow now: Envisioning the next 50 years*. Random House. New York
- UN Habitat (2003). *The challenge of slums. Global report on human settlements*. Earthscan, London
- Vlahov D, Galea S, Gibble E, Freudenberg N (2005). Perspectives on urban conditions and population health. *Cad Saude Publica* 21:949–957

# Advances in Occupational Psychiatry

---

**Satoru Shima, Dorgival Caetano, Liliana Guimarães,  
Yueqin Huang, Maria S. Kopp, Annie Lau, Teruichi Shimomitsu,  
Norio Kuroki, Tomoki Takano, Yasushi Yoshimura,  
Sayo Ohba, Emi Shimabukuro, Crystal Lin**

Section of Occupational Psychiatry, World Psychiatry Association

According to reports from occupational mental health professionals and labor organizations in various countries, the work environment has undergone drastic changes over the past years, affecting not only specific workplaces but countries' economies as well. The causes for these changes may vary for each country; however, there is no question that these changes have created new challenges in occupational mental health.

In this section, we will: (1) introduce the changes in the workplace in various countries and their effects; (2) cite current researches, practices, and measures; (3) outline the obstacles that confront us.

## **Changes in the work environment and the effects on employee well-being**

In occupational psychiatry professionals and practitioners have been emphasizing the importance of employee stress, and they try to increase awareness of the relationship between stress in the work-

place and the level of productivity in the society. Recently, employers have begun to acknowledge the effect of stress, and the recommended way to increase productivity in workplaces is gradually shifting. For example, Brazil owned slaves as workforce until the turn of the 19th century. At that time the primary concern of its economy was to increase productivity, while neglecting the workers' well-being. It was only in 1988 when the government finally recognized the employees' health as a duty of the State. Now, many see good employee mental health as a key component for high productivity.

One of the critical factors with major influence on employee well-being is workplace conditions. A workplace is a very complex and yet very sensitive environment because itself is composed of and influenced by various factors. Here, two examples, which have caused enormous changes in workplaces, are presented; a change in economics and a change within a company. Then this section dis-

cusses how those changes affected the workplace.

### *Global trend in the workplace*

Economic change greatly influences the work environment. In the early 1990s in Japan, the "Bubble Economy" burst. The incident led the whole country into a job-scarce environment in succeeding years due to reorganization and restructuring by many companies and enterprises. Those companies were forced to reduce the number of employees, cut their salaries, and withhold new recruitment to reduce labor costs. Additionally, a great number of employees were encouraged to accept voluntary retirement and early retirement with incentives. These are a few examples of many measures executed for several years at this time.

As seen in the above, when changes occur within a company, it involves its management policies. Recently, industries in many countries weigh more on the outcomes than the process as the world economy changes. So the management systems also shift to evaluate more on outcomes. This modification inevitably changed the way people work. These include labor intensification, time-squeeze, lack of control over own job, long working hours, income insecurity, job instability, and merit pay. This trend certainly directly affects employee mental health, and it also implemented strains in the workplace.

The economic collapse is not the only thing that causes change in a workplace. Economic development produced further

requirements for higher skills and specialties in employees. The demand for computer skills is understandably necessary, but employees also must continuously learn new skills, which are only useful for a particular job and may turn out to be useless when personnel changes occur. Further researches conducted in the occupational mental health field have revealed that psychological and organizational factors may contribute to occupational health problems.

### *Problems related to employees' well-being*

The fact that employees' mental health is often undermined by work-related stresses is now widely recognized, and the stress often arises when the work environment changes. Since the burst of "Bubble Economy" in the 1990s, employees in Japan have been undergoing perpetual adjustments under the new economic conditions, while leaving many issues and assignments about their mental health on their path. Middle-aged and older employees, for example, tend to have trouble adjusting to the dramatic changes in the company structure due to decline in their flexibility and adaptability. On the other hand, the number of young workers with mental health problems has been increasing over the last several years. Generally described as being "fragil", they tend to develop mental health problems in relationships with others at work, possibly as a result of lower resistance to stress, compared to older people. Furthermore, young workers demonstrate the following features in many cases: they are often vulnerable

and slow to recover after sick leave, and they tend to lack coping skills for trauma or bad experiences.

One major problem in occupational psychiatry, like other psychiatric areas, is the matter of suicides. In Japan and many other countries, suicide has become a substantial problem in workplaces. The number of suicides in Japan has remained at abnormally high levels exceeding 30,000 for ten consecutive years from 1998. Nearly half of all cases committed suicide due to economic and personal problems, including debts and hardships of life, problems which arose massively among workers when the “Bubble Economy” burst.

Other than the major economic incident, factors specific to each age group also influence suicide rate. The high occurrence of suicide among middle-aged and older workers in “the prime of life” is astounding. Suicide from overwork with underlying depression is prevalent among this group. Occupational stress arising from chronic overwork, inability to meet work quota, etc. is inferred to occur in the background (Shima 2008).

As described by the recent special issue of ‘Depression in the workplace’ in the *Journal of Occupational and Environment Medicine*, depression in the workplace has become very common and is one of the major issues in the field of occupational psychiatry (Caruso & Myette 2008). Emotional problems in employees affect not only employees themselves, but also their co-workers, their employers, and their families. Since those problems can lead to profound financial and

organizational costs, they have recently received much more concern in the business world.

According to a review by Dame Carol Black, the national Director for Health and Work and the former President of the Royal College of Physicians, ill-health in workers costs the UK government 100 billion euros annually. An unhealthy workplace reduces company’s performance and productivity and it notably costs the company’s finances as well. Emphasizing employees’ well-being assists in achieving high productivity in companies, and it enables maintenance of a country’s healthy economy.

## **Interventions in occupational mental health**

Recently, well-being in the workplace has been receiving tremendous attention among researchers, policy makers, and other professions. In China, the National Natural Science Foundation of China (NSFC) advocates that more occupational mental health projects should be carried out in many important fields, such as neurosciences, psychology, and preventive medicine. Here, we will cite some current researches, and reveal how researchers and other professionals apply those findings in the society.

### *The relationship of stress to work and health*

Large national representative surveys on the relationship between work stress and self-rated mental and physical health were conducted in Hungary

(Kopp et al 2008). The results suggested that depressive symptoms are strongly affected by the following work related factors: job insecurity, low control, troubles at work due to life events, dissatisfaction with work and with superiors, and low social support at work, for both men and women. Among work-related factors, job security and control at work were the most important determining factors for well-being, while personal income was less closely related to well-being than other subjective job-related measures. These findings signify the importance of healthy working conditions. Furthermore, workers with excessive workloads, which interfere with leisure time, tend to rate their own health lower.

Stress related to work has effects on both a worker's mental health and physical health. Recent studies revealed that occupational stress is also related to cardiovascular diseases, psychological disorders, impaired immune functions, workplace violence and injuries (Kopp et al 2006). These findings help to shed light on important factors explaining both mental and physical health in the workplace.

### *Current activities of occupational mental health*

Originally, the basic aim of occupational medicine was to maintain and promote mental and physical health without directly addressing diseases and impairments, while focusing on primary prevention. In Japan, however, the government has become highly concerned with the problems of employees' mental health and suicides in the late 1990s; thus the

government necessitated expansion of the industrial coverage to include diseases. Therefore, mental health activities promoted by the national government in the area of occupational medicine have evolved and constructed the Guidelines for Promoting Mental Health Care in Enterprises (Ministry of Health, Labour and Welfare 2000, 2006).

These guidelines were formulated in response to the rapid deterioration of workplace mental health in and after the later 1990s. These indicate the following four types of care; namely self-care, care by line manager, professional care by in-house industrial health staff, and care by outside resources. Mental health professionals, using these guidelines, have strived to provide systematic and comprehensive measures to promote mental health as well as to achieve appropriate care to those who are in need. At the same time, individual and organizational interventions have been evolving along with the development of tools to assess both individual and organizational stresses and health.

Other countries have enacted measures to confront the problems, too. In Brazil, The List of Diseases Related to Work was published by the Ministry of Health in 1999. It included mental disorders, which significantly contributed to increase the awareness and the prevention of mental health problems. Moreover, a new national act came into effect in 2007, which determines the inverse of the onus of the proof. For example, if a worker lays a claim, companies and corporations have to prove that there is no relationship be-

tween the illness (or the work accident) and the work conditions/environment.

On the other hand, in the UK, the Department of Health has set the framework and standards for occupational health, and it emphasized the following areas including a healthy workforce, a healthy workplace, reducing hazards at work, and occupational stress. In March 2008, Dame Carol Black called for a new approach to work-related health services, and implored “urgent and comprehensive reform.” These proposals focus on maintaining people’s health at work and on supporting their return to work after sick leave.

Based on research, many countries are now seeking the appropriate way to apply those findings back to society. Examples of a few common ideas among these measures are to increase awareness in employees, to prepare and adjust to the appropriate working environment, and to intervene with proper tools and assessments for both individuals and organizations.

## **Future study directions**

### *The needs for further education*

In many countries, occupational psychiatry or occupational mental health is not yet recognized sufficiently among professionals, and thus mental disorders related to work are often diagnosed by general occupational physicians, most of them without proper training in psychiatry. In Brazil, few universities teach occupational psychiatry and conduct researches in the subject. The great major-

ity of universities do not teach it yet. The importance of employees’ mental health has increased due to rapid changes in the world economy; thus further education and also places that can provide such education are in great demand.

### *Areas of future research*

In the environmental and occupational health fields in China, many cross-sectional studies have been carried out to describe the psychological status of the occupational population, while only a little analytical scientific research has been conducted to establish the valid indicators. The establishment of research and training capacities is critical for responding to current workplace challenges. People have to minimize the negative effects of stress to maintain psychological and physical health when confronting new challenges at the workplace or at home. Further studies are required to develop new multi-disciplinary approaches to explore behavioral, psychiatric, engineering, and organizational solutions to occupational mental health problems.

### *Implementation of programs and services*

Despite the possibility of circular causality, there is a need for occupational mental health services at workplaces to possibly prevent mental and physical health deterioration related to job stress in the active population. However, to implement services and programs properly, highly organized leaderships and governances are required as well as satisfactory consultation within each profession to maintain high-quality service.

## References

- Caruso FM, Myette TL (2008). Introduction: The ACONEM Depression in the Workplace Project. *Journal of Occupational and Environmental Medicine* 50:379–380
- Kopp MS, Skarabski Á, Szántó, ZS, Siegrist J (2006). Psychosocial Determinants of Premature Cardiovascular Mortality Differences within Hungary. *Journal of Epidemiology and Community Health* 60:782–788
- Kopp MS, Stauder A, Purebl G, Janszky I, Skrabski Á (2008). Work Stress and Mental Health in a Changing Society. *European Journal of Public Health* 18:144
- Ministry of Health, Labour and Welfare (2000). *Guidelines for promoting mental health care in enterprises*. Japan
- Ministry of Health, Labour and Welfare (2006). *Guidelines for the maintaining and promoting worker's mental health*. Japan
- Shima S (2008). Present state and issues of workplace mental health. *Journal of Japan Medical Association* 136:19–29
- 

**Satoru Shima**, Kandahigashi Clinic, Kandacentral Building, 1–7 Kandasuda-cho, Chiyoda-Ku, Tokyo 101-0041 Japan

**E-mail:** shima@iomhj.com

## INDEX

### A

- “A beautiful mind” by Ron Howard 268
- “Atypical” or second generation antipsychotics 96
- Addiction 32
  - genetic factors 32
  - psychological factors 32
- Addictions 25, 29
- Adjustment disorders 110
- Adolescence 76
- Affective disorders 127
- Alexander and French 76
- Alzheimer’s disease (AD) 136
- American Psychiatric Association 17
- American Psychiatric Institute of Research and Education 17
- Anorexia nervosa 87
- Antidepressants 98
- Antipsychotic drug action 20
- Antipsychotics 20, 33
- Anxiety 144
- Anxiety disorders 127
- Art 223
- Assimilation 226
- Assisted suicide 111
- Audiovisual communication 262
- Australian Bureau of Statistics National Aboriginal and Torres Strait Islander Health Survey 120

### B

- Behavioral therapy 61
- Best practices 217
- Biological psychiatry 259
- Biological therapies 22
- Bipolar disorder 85
- Birth defects 275
- Brain imaging 32
- Bubble economy 280

- Bulimic patients 88
- Burden of mental disorders 166
- Burnout 108

### C

- Cannabis-related schizophrenia 28
- CBT in the depressed athlete 67
- Charcot 268
- Chronification 149
- Cinema 262
- Cinematographic communication 262
- Cinematography 263
- Classification 17, 38
- Clinical care 150
- Clinical course 12
- Cognitive 61
- Cognitive behavioral therapy 64
- Cognitive functions 19
- Cognitive neuroimaging 27
- Cognitive neuropsychiatry 257
- Comorbid 38
- Comparative effectiveness of antipsychotics 96
- Confrontation 226
- Consensus Statement on Psychiatric Prevention of the Section “Preventive Psychiatry” of the World Psychiatric Association (WPA) 150
- Consent to medical treatment 183
- Cost and financing of mental health services 170
- Cost-benefit 165
- Cost-effectiveness 165
- Cost-of-illness 167
- Cost-utility 165
- Council of Nurses 252
- Couples treatment 84
- Critical learning periods 75
- CATIE trial 95

**D**

DALYs 10  
 Declaration of Madrid 250  
 Definitions 250  
 Delusion 266  
 Dementia 136  
 Dementia praecox 3  
 Depressed athletes 61  
 Depression 65, 83, 141  
 Depression behaviour changes 249  
 Depressive disorders 110  
 Developing world 275  
 Diagnostic criteria 39  
 Disability-adjusted life years (DALYs) 166  
 Discrimination 215  
 Distress Thermometer (DT) 109  
 Disulfiram 33  
 Dopamine 27  
 DSM-V 17  
 Dual obligation physicians 252

**E**

Early childhood 76  
 Early intervention and prevention 22  
 Eating disorders 83, 87  
 Economic analysis of pharmaceuticals 169  
 Economic collapse 280  
 Economics of dementia 140  
 Education 281  
 Eliminative mindless psychiatry 258  
 Emotional problems in employees 281  
 Employee stress 279  
 Employee well-being 279, 280  
 Empowerment 150  
 Endophenotypes 19  
 Environmental factors 19  
 Epidemiology 9  
     quantity 9  
     location 9  
     causes 9  
     mechanisms 9  
     prevention and control 9  
 Ethics 188, 249  
 Evidence-based practice 192

Evolutionary psychiatry 75  
 Expert witness 178  
 Extreme social violence 253

**F**

Family 83  
     functioning 85  
     therapy 85  
 Fatal toxicity 101  
 Ferdo Knobloch 76  
 Figurativisation 262  
 fMRI 29  
 Forensic psychiatry 177

**G**

Garbage removal 275  
 Genetic factors 18  
 Genetic studies 27  
 Genetics behavioural phenotypes 40  
 Genomics 28  
 Ghettoization 227  
 Grief 108  
 Group therapy 80  
 Guidelines for promoting mental health care  
     in enterprises (Ministry of Health, Labour  
     and Welfare 2000, 2006) 282  
 Guiding principles 190

**H**

Hallucinations 268  
 Harvard Trauma Questionnaire 250  
 Health care delivery 244  
 Health promotion 149  
 Healthy public policy 218  
 Hippocrates 45  
 History of Psychiatry 3

**I**

ICD-11 17  
 Iconographic documentation 262  
 Image-bank 261  
 Immigration 127  
     schizophrenia 130  
 Incentive sensitisation 31  
 Independent forensic psychiatrists (IFPs) 179  
 Independent medical examinations 178

## INDEX

- Indigenous mental health screening instrument 122  
Indigenous people 121  
Individual therapy 80  
Infectious diseases 275  
Institutional Program of Psychiatry for the Person (IPPP) 5  
Insurance coverage 245  
Intellectual disability 37  
Intercity comparisons approach 273  
Involuntary treatment 187  
Istanbul protocol 252
- J**  
John and Alicia Nash 268
- K**  
Kinds of objectivities 257
- L**  
Law 188  
Learning 267  
Low birth weight 275  
Louisiana health care redesign collaborative 240
- M**  
Manic-depressive illness 3  
Marital satisfaction 84  
Maudsley model 88  
Medical ethics 178  
Medicalization of psychiatry 4  
Medico-legal assessments 178  
Mental health economics 165  
Metabolic adverse effects 97  
Meteoropathy 45  
Meteorosensibility 49  
Molecular genetic techniques 34  
Mood 83  
    disorders 83  
Multi-Disciplinary Approaches 237  
Multifamily group therapy 88  
Multilevel contextual model 273
- N**  
Narrative family therapy 88  
National Institute for Clinical Excellence (NICE) 139  
National Institutes of Health 17  
Natural history 12  
Negative effects of SSRIs 95  
Neoplastic disease 275  
Neural plasticity 33, 78  
Neurobiology 25  
    of schizophrenia 26  
Neuroimaging 19, 27, 34  
New treatment for AD 141  
Noise 275
- O**  
Obesity 31  
Objectivity 257  
Occupational psychiatry 279  
Old age psychiatry 135  
Oncology 107  
Open-the-Doors 217
- P**  
Palliative care 107  
Parental control 89  
Persecution 249  
PET 29  
Pharmacological treatments 41  
Pharmacopsychiatry 95  
Phenomenological psychiatry 259  
Physical environment 274  
Planning for reform 239  
Polymorphisms 19  
Positive health 149  
    in medicine and psychiatry 151  
    in persons experiencing schizophrenia 152  
Post traumatic stress 249  
Post-Katrina New Orleans 237  
Post-Traumatic Stress Disorder (PTSD) 79, 131, 249  
Practice guidelines 177  
Prevalence of ID 37  
Prevention 12, 107, 149  
Preventive interventions 34

- Primary care physician 159  
 Prison psychiatry 181  
 Problems in treating depressed athletes 67  
 Professional ethics 251  
 Programs and services 283  
 Project on Preventing Disease Through  
   Healthy Environment 276  
 Psychiatric assessment 39  
 Psychiatric Genomewide Association Study  
   Consortium 19  
 Psychiatric report 179  
   training 159  
 Psychiatry and oncology 112  
 Psychiatry for the person 56  
   in palliative care 111  
 Psychoanalysis 55  
   and biology 57  
 Psychoeducation 88  
 Psychological factors influencing a medical  
   condition 110  
 Psychoneuroimmunology 108  
 Psycho-Oncology 107  
 Psychopharmacology in oncology and pallia-  
   tive care 113  
 Psychophysiology 19  
 Psychosocial morbidity in cancer 108  
 Psychosocial therapy 21  
 Psychotherapy 63, 75
- Q**  
 Q-METEO 49  
 Quality forum 243
- R**  
 Recovery 149, 153, 215  
 Refugees 131  
 Religion 201  
 Religious needs 209  
 Research 283  
   approaches 273  
 Resilience 150  
 Rural vs urban approach 273
- S**  
 Safe waste 275  
 Salutogenic 150  
 Schizophrenia 3, 17, 25, 26  
 Screening 107  
 Seasonal variability 49  
 Section on Mental Health Economics 165  
 Section of Ecology, Psychiatry and Mental  
   Health 45  
 Section of Exercise, Psychiatry  
   and Sport 61  
 Section of Forensic Psychiatry 177  
 Section of Informatics and Telecommunica-  
   tion 261  
 Section of Medicine, Psychiatry and Prima-  
   ry Care 159  
 Section of Occupational Psychiatry 279  
 Section of Old Age Psychiatry 135  
 Section of Pharmacopsychiatry 95  
 Section of Preventive Psychiatry 149  
 Section of Psychiatry of Intellectual  
   Disability 37  
 Section of Psychoanalysis in Psychiatry 55  
 Section of Psychotherapy 75  
 Section on Art and Psychiatry 223  
 Section on Biological Psychiatry 25  
 Section on Conflict Management  
   and Resolution 237  
 Section on Family Research and Interven-  
   tion 83  
 Section on History of Psychiatry 3  
 Section on Measurement Instruments  
   in Psychiatric Care 121  
 Section on Psycho-Oncology and Palliative  
   Care 107  
 Section on Religion, Spirituality  
   and Psychiatry 201  
 Section on Schizophrenia 17  
 Section on Transcultural Psychiatry 127  
 Section on Urban Mental Health 271  
 Self-esteem 75

## INDEX

- SGAs 97
- Social determinants of urban mental health 276
- Social inclusion 150
  - violence 249
- Solid facts 277
- Specialization 227
- SPECT 29
- Spirituality 201
- SSRIs 98
- Stigma 215
  - and discrimination 22
- Stress 281
- Suicidality 95, 98
- Suicide 144, 281
- T**
- Temperature 49
- Terminology 38
- The Nuremberg physicians' trials 252
- The World Medical Association Declaration of Tokyo 250
- Thematisation 261
- Therapy 21
- Thomas Szasz 4
- Torture 249
- Transcriptional mechanisms 33
- Treatment 20, 41
- U**
- UN declaration on torture 249
- Urban mental health 271
- V**
- Values 187
- Values-based practice 187
- W**
- Weather 47
- WHO 17
- Work environment 279
- World Health Organization 18
- World Medical Association 252
- World Mental Health surveys 10
- World Psychiatric Association (WPA) 5, 252
- World religion map 208
- WPA consensus statement on religion and spirituality 204

