World Psychiatric Association

Obsessive Compulsive Disorder

Current science and clinical practice

Editor Joseph Zohar

WILEY-BLACKWELL

Contents

World Psychiatric Association Evidence and Experience in Psychiatry Series

Series Editor: Michelle Riba, WPA Secretary for Publications, Department of Psychiatry, University of Michigan

Post-Traumatic Stress Disorders
Edited by Dan Stein, Matthew Friedman and Carlos Blanco
ISBN: 9780470688977

Substance Abuse Disorders
Edited by Hamid Ghodse, Helen Herrman, Mario Maj and Norman Sartorius
ISBN: 9780470745106

Depressive Disorders, 3e
Edited by Helen Herrman, Mario Maj and Norman Sartorius
ISBN: 9780470987209

Schizophrenia 2e
Edited by Mario Maj, Norman Sartorius
ISBN: 9780470849644

Dementia 2e
Edited by Mario Maj, Norman Sartorius
ISBN: 9780470849637

Obsessive-Compulsive Disorders 2e
Edited by Mario Maj, Norman Sartorius, Ahmed Okasha, Joseph Zohar

ISBN: 9780470849668

Bipolar Disorders
Edited by Mario Maj, Hagop S Akiskal, Juan José López-Ibor, Norman Sartorius
ISBN: 9780471560371

Eating Disorders
Edited by Mario Maj, Kathrine Halmi, Juan José López-Ibor, Norman Sartorius
ISBN: 9780470848654

Phobias
Edited by Mario Maj, Hagop S Akiskal, Juan José López-Ibor, Ahmed Okasha
ISBN: 9780470858332

Personality Disorders
Edited by Mario Maj, Hagop S Akiskal, Juan E Mezzich
ISBN: 9780470090367

Somatoform Disorders
Edited by Mario Maj, Hagop S Akiskal, Juan E Mezzich, Ahmed Okasha
ISBN: 9780470016121

Current Science and Clinical Practice Series

Series Editor: Michelle Riba, WPA Secretary for Publications, Department of Psychiatry, University of Michigan

Obsessive-Compulsive Disorder
Edited by Joseph Zohar

ISBN: 9780470711255

Schizophrenia
Edited by Wolfgang Gaebel
ISBN: 9780470710548

Obsessive-Compulsive Disorder

Current Science and Clinical Practice

Editor

Joseph Zohar
Tel Aviv University, Tel Aviv, Israel

WILEY-BLACKWELL
A John Wiley & Sons, Ltd., Publication

This edition first published 2012

Wiley-Blackwell is an imprint of John Wiley & Sons, formed by the merger of Wiley's global Scientific, Technical and Medical business with Blackwell Publishing.

Registered Office:
John Wiley & Sons, Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

Editorial Offices:
9600 Garsington Road, Oxford, OX4 2DQ, UK
The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK
111 River Street, Hoboken, NJ 07030-5774, USA

For details of our global editorial offices, for customer services and for information about how to apply for permission to reuse the copyright material in this book please see our website at www.wiley.com/wiley-blackwell

in regard to the subject matter covered. It is sold on the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

The contents of this work are intended to further general scientific research, understanding, and discussion only and are not intended and should not be relied upon as recommending or promoting a specific method, diagnosis, or treatment by physicians for any particular patient. The publisher and the author make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation any implied warranties of fitness for a particular purpose. In view of ongoing research, equipment modifications, changes in governmental regulations, and the constant flow of information relating to the use of medicines, equipment, and devices, the reader is urged to review and evaluate the information provided in the package insert or instructions for each medicine, equipment, or device for, among other things, any changes in the instructions or indication of usage and for added warnings and precautions. Readers should consult with a specialist where appropriate. The fact that an organization or Website is referred to in this work as a citation and/or a potential source of further information does not mean that the author or the publisher endorses the information the organization or Website may provide or recommendations it may make. Further, readers should be aware that Internet Websites listed in this work may have changed or disappeared between when this work was written and when it is read. No warranty may be created or extended by any promotional statements for this work. Neither the publisher nor the author shall be liable for any damages arising herefrom.

Library of Congress Cataloging-in-Publication Data

Obsessive-compulsive disorder : current science and clinical practice / editor, Joseph Zohar.
p. ; cm.
Includes bibliographical references and index.
Summary: “A clear summary of what is known about a highly prevalent and debilitating disorder that affects nearly as many people as does asthma. Expert authors review the biological basis for the disorder and describe both pharmacological and psychological approaches to treatment”–Provided by publisher.
ISBN 978-0-470-71125-5 (cloth)
I. Zohar, Joseph.
[DNLM: 1. Obsessive-Compulsive Disorder–diagnosis. 2. Obsessive-Compulsive Disorder–drug therapy. 3. Obsessive-Compulsive Disorder–therapy. WM 176]
616.85′227–dc23
2012009775

A catalogue record for this book is available from the British Library.

List of Contributors

Anat Abudy
Psychiatry Department A, Division of Psychiatry
Chaim Sheba Medical Center
Tel Hashomer, Israel

Rianne M. Blom
Department of Psychiatry
Academic Medical Center
University of Amsterdam
Amsterdam, The Netherlands

Ashley R. Brown
Clinical and Research Program in Pediatric Psychopharmacology
Department of Psychiatry
Massachusetts General Hospital
Boston, MA, USA

Andrea Cantisani
Department of Psychiatry
University of Florence
Florence, Italy

Samuel R. Chamberlain
Department of Psychiatry
University of Cambridge
Addenbrooke's Hospital
Cambridge, UK

Eric H. Decloedt
Department of Medicine

Division of Clinical Pharmacology
University of Cape Town
Cape Town, South Africa

Damiaan Denys
Department of Psychiatry
Academic Medical Center
University of Amsterdam
Amsterdam, The Netherlands;
The Netherlands Institute for Neuroscience
Amsterdam, The Netherlands

Phillip C. Easter
Department of Psychiatry and Behavioral Neurosciences
Wayne State University School of Medicine
University Health Center
Detroit, MI, USA

Alyssa L. Faro
Clinical and Research Program in Pediatric Psychopharmacology
Department of Psychiatry
Massachusetts General Hospital
Boston, MA, USA

Martijn Figee
Department of Psychiatry
Academic Medical Center
University of Amsterdam
Amsterdam, The Netherlands

Naomi A. Fineberg
National OCD Treatment Service
Hertfordshire Partnership NHS Foundation Trust
Queen Elizabeth II Hospital

Welwyn Garden City, UK
and University of Hertfordshire, College Lane
Hatfield UK

Martin E. Franklin
University of Pennsylvania School of Medicine
Philadelphia, PA, USA

Daniel A. Geller
Clinical and Research Program in Pediatric Psychopharmacology
Department of Psychiatry
Massachusetts General Hospital
Boston, MA, USA;
Harvard Medical School
Boston, MA, USA

Adriel Gerard
Montefiore Medical Center
University Hospital of Albert Einstein College of Medicine
Bronx, NY, USA

Addie Goss
Bryn Mawr College
Bryn Mawr, PA, USA

Giacomo Grassi
Department of Psychiatry
University of Florence
Florence, Italy

Eric Hollander
Montefiore Medical Center
University Hospital of Albert Einstein College of Medicine

Bronx, NY, USA

Alzbeta Juven-Wetzler
Psychiatry Department A, Division of Psychiatry
Chaim Sheba Medical Center
Tel Hashomer, Israel

Hannah C. Levy
Department of Psychology
Concordia University
Montreal, QC, Canada

John S. March
Department of Psychiatry and Behavioral Sciences
Duke University Medical Center
Durham, NC, USA

Jose M. Menchon
Department of Psychiatry
Hospital Universitari de Bellvitge-IDIBELL
Hospitalet de Llobregat Barcelona;
Department of Clinical Sciences
School of Medicine
Universitat de Barcelona;
Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM)
Instituto de Salud Carlos III
Ministry of Science and Innovation
Barcelona, Spain

Lara Menzies
Department of Psychiatry
University of Cambridge
Addenbrooke's Hospital

Cambridge, UK

Georgia Michalopoulou
Wayne State University School of Medicine;
Children's Hospital of Michigan
Department of Psychiatry and Psychology
Detroit, MI, USA

Stefano Pallanti
Department of Psychiatry
Mount Sinai School of Medicine
New York, NY, USA;
Department of Psychiatry
University of Florence
Florence, Italy;
Institute of Neuroscience
Florence, Italy

David L. Pauls
Psychiatric and Neurodevelopmental Genetics Unit
Center for Human Genetic Research
Massachusetts General Hospital
Harvard Medical School
Boston, MA, USA

Steven Poskar
Montefiore Medical Center
University Hospital of Albert Einstein College of Medicine
Bronx, NY, USA

Samar Reghunandanan
National OCD Treatment Service
Hertfordshire Partnership NHS Foundation Trust
Queen Elizabeth II Hospital
Welwyn Garden City

UK

David R. Rosenberg
Children’s Hospital of Michigan;
Wayne State University School of Medicine
Department of Psychiatry
University Health Center
Detroit, MI, USA

Rachel Sonnino
Psychiatry Department A, Division of Psychiatry
Chaim Sheba Medical Center
Tel Hashomer, Israel

Dan J. Stein
Department of Psychiatry
University of Cape Town
Cape Town, South Africa

Nienke Vulink
Department of Psychiatry
Academic Medical Center
University of Amsterdam
Amsterdam, The Netherlands

Joseph Zohar
Psychiatry Department A, Division of Psychiatry
Chaim Sheba Medical Center
Tel Hashomer, Israel

Introduction

During my career, I have witnessed two revolutions in obsessive-compulsive disorder (OCD).

As a resident in psychiatry (in the late 1970s), I asked my supervisor for advice, having examined a patient with OCD; his response was that there was very little that could be done for these rare cases. He was right; at that time, OCD was considered a rare disorder of psychological origin, and refractory to treatment. The first revolution in OCD overturned all three of these conceptions. The seminal work of M.M. Weissman reported a lifetime prevalence of about 2%. Pioneering double-blind, placebo-controlled work at the National Institute of Mental Health (NIMH) raised the curtain on the specific response to serotonergic medication, highlighted the serotonergic basis and gave initial hints for the relevant brain regions involved in OCD.

The second revolution in OCD is taking place right now. It is composed of building blocks such as neurocognitive endophenotypes (see Chapter 12), genetics (Chapter 11), sophisticated brain imaging (Chapter 10), daring conceptual challenges (Chapter 6), and venturing beyond the conventional serotonin hypothesis (Chapter 9).

To help us build these new, improved, contemporary understandings of OCD and OC spectrum disorders, we use better assessment tools (Chapter 1), and utilize much more sophisticated methodological techniques (Chapter 8). All of this provides us with sharper pharmacological tools (Chapter 2) and psychological interventions (Chapter 3), for adult patients as well as for children (Chapter 7). Moreover, it enables us to embark on new therapeutic approaches (Chapter 5), including new physical interventions (Chapter 4).

This book is a sort of celebration of the emergence of the second revolution in OCD, and I hope that the reader will feel the enthusiasm shared by all the contributors about the promising present and the bright future of OCD.

Joseph Zohar
2012

SECTION 1

Assessment and Treatment

CHAPTER 1

Assessment

Jose M. Menchon

Department of Psychiatry, Hospital Universitari de Bellvitge-IDIBELL, Hospitalet de Llobregat (Barcelona), Universitat de Barcelona, CIBERSAM, Spain

INTRODUCTION

Many people have some obsessions during their lives: it is estimated that more than one-quarter of people experience obsessions or compulsions at some time [1], and a substantial proportion of them will meet the criteria for obsessive-compulsive disorder (OCD). The lifetime prevalence of OCD is about 2–2.5%, and the annual prevalence is 1–2% among the general population [1,2]. The male to female ratio is approximately unity, with some studies finding a slightly higher prevalence in women, while in the child and adolescent populations males show a higher prevalence.

The hallmark of OCD is the presence of either obsessions or compulsions. According to the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision* (DSM-IV-TR) [3] diagnostic criteria, the obsessions are defined by the following four criteria:

1. Recurrent and persistent thoughts, impulses or images that are experienced, at some time during the

disturbance, as intrusive and inappropriate and that cause marked anxiety or distress.

2. The thoughts, impulses or images are not simply excessive worries about real-life problems.

3. The person attempts to ignore or suppress such thoughts, impulses or images, or to neutralize them with some other thought or action.

4. The person recognizes that the obsessional thoughts, impulses or images are a product of his or her own mind (not imposed from without as in thought insertion).

Compulsions are defined as: '1) repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the person feels driven to perform in response to an obsession, or according to rules that must be applied rigidly, and 2) the behaviors or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation; however, these behaviors or mental acts either are not connected in a realistic way with what they are designed to neutralize or prevent or are clearly excessive.' Hence, obsessions and compulsions are repetitive, unpleasant and intrusive (although recognized as own thoughts), and usually the individual considers that the obsessions or compulsions are excessive or irrational, demonstrated by the subject's attempts to resist them. While obsessions are considered phenomena that increase anxiety or discomfort, compulsions are behaviours that are aimed at reducing it.

Obsessions and compulsions are very diverse and have been grouped into various types. Table 1.1 shows the percentage of obsessions and compulsions in adult OCD samples reported in several studies. Such diversity in the clinical manifestations of OCD has led researchers to examine whether the different obsessions and compulsions seen in patients could be related and grouped into a few

subtypes or dimensions; for instance, a recent meta-analysis [10] has derived four main factors: symmetry, forbidden thoughts, cleaning and hoarding. Apart from its descriptive utility, this kind of approach has heuristic value since it allows examination of the possible heterogeneity of OCD in terms of neurobiology, genetics or treatment response, among other aspects [11]. This issue is reviewed in detail in Chapter 6 of this book.

Table 1.1 Percentage of obsessions and compulsions in OCD adult samples reported in various studies.

Study	[4] ($n = 560$)	[5] ($n = 354$)	[6] ($n = 180$)	[7] ($n = 293$)	[8] ($n = 485$)	[9] ($n = 343$)
Obsessions						
Aggressive	31	44	56	71	58	36
Contamination	50	35	60	58	59	48
Sexual	24	15	17	13	26	10
Hoarding		18	11	29	34	12
Religious		22	22	26	31	8
Symmetry	32	36	32	48	50	42
Somatic	33	23	26	26	40	12
Compulsions						
Washing/cleaning	50	35	59	60	59	47
Checking	61	43	72	69	73	47
Repeating rituals		42	58	56	52	31
Counting	36	29	16	26	34	14
Ordering	28	29	25	43	50	22
Hoarding	18	16	13	28	36	12

Numbers in brackets refer to the relevant reference.

The assessment of OCD includes the usual elements involved in the psychiatric assessment of mental disorders, although there are also specific issues related to this condition. Relevant issues in the OCD assessment are (Table 1.2):

Table 1.2 Components in the assessment of OCD.

Clinical Assessment
Present obsessive-compulsive symptoms: subtype/dimensions of symptoms; severity; degree of insight
Risk of suicide

Cognitive biases and behavioural analysis (how does the patient behave in response to obsessions? What kind of obsessions elicits compulsions? How much associated anxiety is there? Is there any resistance to and control over compulsions?)

Neuropsychological dysfunctions

Conditions associated with the onset and course of the symptoms: past or present history of tics or Tourette disorder; possible history of PANDAS (Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infections); relationship of the disorder with reproductive events (onset or worsening of symptoms at the menarche, pregnancy and other reproductive events); relationship with life events

Course of the disorder: age at onset of the first symptoms and of the disorder, degree of stability of the subtype of symptoms (have always been the same type of symptoms?), age at first treatment, type of evolution (episodic, chronic or fluctuating, progressive improvement or worsening), degree of functional impairment

Personality traits or disorders

Differential diagnosis of other disorders and comorbidities: organic brain disorders, schizophrenia, depression, hypochondriasis, phobias, Tourette or tic disorder, obsessive-compulsive personality disorder, body dysmorphic disorders, grooming disorders (trichotillomania, skin picking disorder), hoarding, presence of other obsessive-compulsive spectrum disorders

Family assessment: family history of psychiatric disorders, degree of support from relatives, degree of understanding of the disorder by relatives, ability of the relatives to participate in the treatment

Treatment: previous drug treatments (doses and duration), previous psychological therapies, response to previous treatments (remission, partial response, no response)

- the instruments for detecting and diagnosing the disorder;
- the examination of the obsessive-compulsive (OC) symptoms: the severity and type of symptoms, the level of insight, cognitive biases and behavioural analysis;
- the assessment of the suicide risk;
- the appraisal of neuropsychological functions;
- differential diagnosis;
- the presence of comorbid and related/spectrum disorders;
- the review of the course of the disorder: age of onset of OC symptoms, age at which the subject met diagnostic criteria for OCD, type of course of the disorder (e.g.

episodic, chronic with or without fluctuations, progressive worsening);
- the analysis of the response to previous treatments, including both clinical outcome and degree of disability of the patient's functioning.

Given that some of the components of the assessment are examined in other chapters, the present review will focus on the detection of OCD, the clinical rating of OC symptoms, the assessment of insight and the suicide risk, the differential diagnosis, and OC related and spectrum disorders.

DETECTING OCD

Many OCD sufferers experience shame about their symptoms or think that these will be misunderstood as 'madness', while others may even be afraid that their symptoms do actually mean that they are becoming 'mad'. For some patients these symptoms may be stigmatizing while others do not view their symptoms as a disorder, lacking insight of their morbid nature; others may think that they do not require treatment. All these beliefs and attitudes reduce the likelihood of disclosing their OCD symptoms to their physicians. A study of attitudes towards OCD symptoms [12] showed that the attitudes may vary across the different symptoms of the disorder, finding that obsessions related to harm were the most feared and unacceptable, followed by the washing behaviour, and then the checking behaviour. Therefore, fear of the meaning of the obsessions/compulsions, embarrassment about reporting them, viewing them as stigmatizing, or lacking insight into their nature, may all delay seeking help for them. This delay was evident in the study by Pinto *et al.* [7], which found that the time elapsed between the first symptoms and the first treatment was 17 years, and that

between meeting the diagnostic criteria for OCD and the first treatment was 11 years.

The importance of adequate recognition of OCD is reflected in a study in which only 30.9% of severe OCD cases received a specific OCD treatment [1], although 93% of the patients reported that they were receiving mental health treatment in some kind of health setting (general medical, mental health settings, human services or complementary/alternative medicine). The data were more striking in patients with moderate OCD, since only 2.9% of this group of patients were on specific OCD treatment while 25.6% of this group were receiving mental health treatment.

These data regarding attitudes to OCD symptoms, and therefore the delay in both receiving an OCD diagnosis and starting an adequate treatment, emphasize the importance of the strategies to detect OCD.

Screening in clinical interview

Some patients with OCD will describe their symptoms quite well, and diagnosing OCD will not be difficult provided that the physician knows the disorder. However, other patients will display other symptoms that may not be so apparently related to OCD, thereby making it more difficult to reach the diagnosis. For instance, some patients may describe general complaints of anxiety or depression, avoidance of specific situations, or excessive concerns about illnesses. In some cases, the presence of hand dermatitis may suggest repetitive hand washing due to contamination obsessions. Indeed, it is not unusual that patients see non-psychiatrist doctors such as dermatologists for dermatitis or trichotillomania, neurologists for tics, plastic surgeons for concerns about appearance (typically in body dysmorphic disorder), or other physicians for fear of cancer or HIV infection [13]. Therefore, it is useful to have some easy