

Polypharmacy in Psychiatry Practice
Volume I

Michael S. Ritsner
Editor

Polypharmacy in Psychiatry Practice Volume I

Multiple Medication Use Strategies

 Springer

Editor

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*I dedicate this book to my dear
grandchildren Ron, Miriam, Diana and
Daniel Ritsner who are funny, smart,
obstinate, and sometimes downright willful*

About the Editor



Michael S. Ritsner, M.D., Ph.D.

Dr. Ritsner, M.D., Ph.D. is a physician and scientist who spent his career of over 35 years caring for patients and studying the nature and treatment of mental illness. Dr. Ritsner is a Professor of Psychiatry at the Rappaport Faculty of Medicine, Technion – Israel Institute of Technology (Haifa), Israel.

Dr. Ritsner graduated from the Khabarovsk State Medical University, and received his PhD in Psychiatry from the Siberian State Medical University in 1975 (Tomsk, Russia). After gaining clinical practice as a neurologist and clinical psychiatrist he joined the Siberian State Research Center at the Russian Academy of Medical Sciences (Tomsk) as a Head of the Psychiatric Genetics Department in 1981. In 1990 he emigrated to Israel where he chaired a Psychiatry Department and the Research Unit at Talbieh Mental Health Center (Jerusalem). Since 1998

Dr. Ritsner directs the Acute Department of the Sha'ar Menashe Mental Health Center, and Cognitive & Psychobiology Research Laboratory affiliated to the Rappaport Faculty of Medicine, Technion.

Particular areas of interest include schizophrenia spectrum disorders, genetic epidemiology, neuropsychiatric biomarkers, the role of neurosteroids in schizophrenia, novel neuroprotective treatments, and cognitive and quality of life impairments. Dr. Ritsner's research has been supported by grants from the Stanley Foundation. He also currently serves as Principal Investigator of a multi-site research team searching and testing novel agents with neuroprotective properties for treatment of the debilitating effects of schizophrenia and related psychotic disorders.

Dr. Ritsner is the co-author of two books on neuropsychiatry and editor of three books and two handbooks, and has published more than 140 peer-reviewed journal articles, reviews, and more than 20 book chapters. He has given more than 200 presentations including as invited speaker at scientific conferences and medical education events.

This monograph is yet another milestone toward achieving his goals of providing a comprehensive up-to-date state-of-the-art overview of the literature that addresses the challenges facing clinical and biological psychiatry. This series follows 12 volumes:

1. *Quality of Life Impairment in Schizophrenia, Mood and Anxiety Disorders. New Perspectives on Research and Treatment.* Ritsner, Michael S.; Awad, A. George (Eds.), Springer, Dordrecht. The Netherlands, 2007, 388 p.
2. *Neuroactive Steroids in Brain Functions, and Mental Health. Novel Strategies for Research and Treatment.* Ritsner, Michael S.; Weizman A. (Eds.), Springer Science + Business Media, B.V., 2008. 559 p.
3. *The Handbook of Neuropsychiatric Biomarkers, Endophenotypes, and Genes.* Volumes I–IV. Ritsner, Michael S. (Ed.), Springer Science + Business Media, B.V., 2009.
 - Volume I: *Neuropsychological Endophenotypes and Biomarkers.* 231 pp.
 - Volume II: *Neuroanatomical and Neuroimaging Endophenotypes and Biomarkers.* 244 pp.
 - Volume III: *Metabolic and Peripheral Biomarkers.* 231 pp.
 - Volume IV: *Molecular Genetic and Genomic Markers.* 232 pp.
4. *Brain Protection in Schizophrenia, Mood and Cognitive Disorders.* Ritsner, Michael S. (Ed.), Springer Science + Business Media, B.V. 2010. 663 p.
5. *Handbook of Schizophrenia Spectrum Disorders.* Volumes I–III. Ritsner, Michael S. (Ed.), Springer Science + Business Media, B.V. 2011.
 - Volume I: *Conceptual Issues and Neurobiological Advances.* 494 pp.
 - Volume II: *Phenotypic and Endophenotypic Presentations.* 526 pp.
 - Volume III: *Therapeutic Approaches, Comorbidity, and Outcomes.* 461 pp.
6. *Polypharmacy in Psychiatric Practice.* Volumes I–II. Ritsner, Michael S. (Ed.), Springer Science + Business Media, B.V. 2013.

Dr. Ritsner served as Associate Editor, *Quality of Life Research* (an international journal of quality of life aspects of treatment, care and rehabilitation, Amsterdam, The Netherlands); Board Member, *American Journal of Neuroprotection and Neuroregeneration* (USA); *CNS & Neurological Disorders-Drug Targets* (Italy); and member of the Scientific Committee, International Society for the Study of Neuroprotection and Neuroplasticity (Romania). Referee activity: *CNS Drugs*, *Quality of Life Research*, *Psychiatry Research*, *Clinical Drug Investigation*, *Social Psychiatry and Psychiatric Epidemiology*, *Biological Psychiatry*, etc.

Web: http://md.technion.ac.il/lecturers/lecturer_desc.asp?lecturerID=393

Preface

To the best of my knowledge, this might be the first comprehensive, clinically oriented two-volume collection on the polypharmacy (co-administration of more than one medication) or the use of multiple preparations to treat psychotic, cognitive, mood and anxiety disorders. Despite the large number of psychotropic medications currently available, effective management of mental disorders continues to be a challenging task. Although monotherapy may be desirable, most patients require combinations of two or more psychotropic drugs. Polypharmacy aims to address different aspects of treatment resistance, especially insufficient response of positive and negative symptoms, cognitive disturbances, affective comorbidity, obsessive-compulsive syndromes and side-effects of antipsychotic agents. At the same time, evidence based guidelines in support of polypharmacy and augmentative strategies are scant.

This monograph is divided into four parts. Volume I contains two parts including chapters that serve as an introduction and overview of conceptual issues. Key topics include: a rational polypharmacy, receptor binding targets, drug interactions, preclinical and clinical investigation in this field, dosing regimens, multiple medication use in forensic psychiatry, a naturalistic trial, adjunctive strategies, and multiple medication use for the treatment of somatic symptom disorders.

Volume II contains two parts including chapters that focus on antipsychotic polypharmacy for schizophrenia; clinical practice in USA, Czech Republik, Ukraine, and Italy; polypharmacy and associated phenomena; clozapine combinations; and metabolic syndrome. The authors discuss combination therapy for bipolar disorder, major depressive disorder, obsessive-compulsive syndromes in schizophrenia, and potentially inappropriate medication use among elderly patients with dementia. Finally, each volume includes an Appendix that contains 'Annotated Bibliography on Polypharmacy' and 'List of Psychotropic Medications'.

Since many of the contributors to this collection are internationally known experts, they not only provide up-to-date state-of-the-art overviews, but also clarify some of the ongoing controversies and future challenges and propose new insights for future research. The contents of these volumes have been carefully planned, organized, and edited. Of course, despite the assistance provided by the contributors,

I alone remain responsible for the content of this monograph including any errors or omissions.

Editing this book has been an exciting journey that brought several incredible people into my life. First and foremost, I am grateful and thankful to all contributors for their excellent cooperation. I wish to thank the entire staff, heads of departments, and the medical director of the Shaar-Menashe Mental Health Center, Dr. Alexander Grinshpoon, MD, MHA, PhD, for their commitment, and support. Thanks to Peter Butler and Dr. Martijn Roelandse, publishing editors, who did their utmost to promote this project. And of course, I would like to thank my lovely wife Stella for her tolerance of me having my head stuck in my computer. Without her love, patience and support I would not have completed this project.

I sincerely hope that this book will extend the knowledge in the complex field of treatment of psychiatric disorders and will be of interest to a broad spectrum of readers including psychiatrists, neurologists, neuroscientists, endocrinologists, pharmacologists, general practitioners, geriatricians, graduate students, and health care providers in the field of mental health.

Haifa
September, 2012

Michael S. Ritsner

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