Population Mental Health

Evidence, policy, and public health practice

Edited by Neal Cohen and Sandro Galea



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Population Mental Health

Over the last century public health efforts, such as immunization, safer food practices, public health education and promotion, improved sanitation, and water purification have been tremendously successful in eradicating and controlling a host of diseases. The result has been a dramatic improvement in population health and life expectancy. However, public health has paid far less attention to the impact of mental illness on individuals and society as a whole.

This pioneering volume examines the evidence-base for incorporating mental health into the public health agenda by linking the available research on population mental health with public mental health policy and practice. Issues covered in the book include the influence of mental health policies on the care and well-being of individuals with mental illness, the interconnectedness of physical and mental disorders, the obstacles to adopting a public health orientation to mental health/mental illness, and the potential application of public health models of intervention.

Setting out a unique and innovative model for integrated public mental health care, *Population Mental Health* identifies the tools and strategies of public health practice – surveillance and screening, early identification, preventive interventions, health promotion and community action – and their application to twenty-first century public mental health policy and practice.

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This book is dedicated to Ilene, who has inspired so many to deliver quality mental health care in the public sector (NC).

This book is dedicated, as always, to Margaret, Oliver Luke, and Isabel Tess (SG).

Neal Cohen and Sandro Galea

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1 Population mental health

Evidence, policy, and public health practice

Neal Cohen and Sandro Galea

Introduction

The past 150 years have seen dramatic and continuing improvements in health and life expectancy. In the last century alone, life expectancy increased by three decades (Centers for Disease Control and Prevention (CDC), 1999), largely due to the control of infectious diseases through a number of systematic public health efforts, including air, water, and food safety enhancements, as well as population level health education and promotion initiatives (Greene, 2001). Formulating a 21st century public health agenda to address the increasing burden of chronic diseases worldwide will require the same innovation and perseverance.

The past 20 years have seen some advances toward a population approach to mental health. For example, the issuance of the Global Burden of Disease Study (Murray & Lopez, 1996) introduced new methods for measuring the contribution of chronic diseases to human suffering and the global burden of mental illnesses. In the United States, the release of a series of Surgeon General Reports on Mental Health (U.S. Public Health Service, 1999a; 1999b; 2000; 2001) further underscored the public health significance of mental health. Additionally, in the first decade of the 21st century new models and approaches to psychiatric epidemiology are quantifying the prevalence and burden of mental disorders, the adequacy of service delivery models, and the risk factors that contribute to morbidity and premature mortality (Susser, Schwartz, Morabia, & Bromet, 2006). However, population-based research into mental health continues to receive far less attention than the clinically based discoveries that have deepened our understanding of mental illness and brought about a range of safe, effective, and well-documented treatments for most mental disorders.

Incorporating mental health into the "mainstream" public health agenda means applying the tools and strategies of the public health field (e.g., surveillance, screening and early identification, preventive interventions, health promotion, and community action) to 21st century public mental health policy and practice. Thus, the goal of this book is to place

population-level mental health within a broader public health framework. Specifically, we aim to highlight the centrality of mental health to public health, with a particular focus on the relevant aspects of policy and public health practice that ameliorate the mental health of populations.

The emergence of psychiatric epidemiology and population mental health

In the early 19th century, the sociologist Emile Durkheim helped establish the early roots of psychiatric epidemiology with his seminal work Le Suicide (1897). Durkheim posited a link between social processes, such as poor economic conditions and community religious affiliations, and psychopathology outcomes such as suicide. In the early 20th century, Faris and Dunham (1939) looked at associations between social processes and rates of schizophrenia and substance abuse in Chicago. Psychiatric epidemiology became more fully emerged as a distinct discipline in the mid 20th century, spurred on in part by military screening for psychological symptoms and impairments during the Second World War (Tohen, Bromet, Murphy, & Tsuang, 2000). Community surveys - notably the Midtown Manhattan Study (Srole, Langer, Michael, Kirkpatrick, Opler, & Rennie, 1962) and the Stirling County Study (Leighton, 1959) - ushered in a new era of descriptive psychiatry and the assessment of psychopathology prevalence in the general population (Susser, Schwartz, Morabia, & Bromet, 2006).

However, ongoing lack of clarity about diagnostic criteria for psychopathology continued to limit the field until the publication of the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) (American Psychiatric Association (APA), 1980). The DSM-III was the first edition of the manual to be based on empirical data rather than theory and conjecture, allowing a clearer conceptualization of mental illness. At the same time, the first surveys specifically designed to assess mental disorders in the general population, consistent with DSM criteria, such as the Schedule for Affective Disorders and Schizophrenia, were being developed (Luppino et al., 2010; Susser et al., 2006). These instruments led to other instruments such as the Diagnostic Interview Schedule (DIS) and the Composite Internal Diagnostic Interview (CIDI), which were applied in large, national, population-based studies such as the Epidemiologic Catchment Area study (Regier et al., 1984) and the National Comorbidity Surveys (Kessler et al., 1994) that provided national estimates of psychopathology that inform population mental health research and practice to this day.

The Epidemiologic Catchment Area study, for example, estimated that the 12-month prevalence of any DIS disorder was 21.7%, with higher prevalences reported for substance use and anxiety disorders compared to other disorders (Bourdon, Rae, Locke, Narrow, & Regier, 1992). The National Comorbidity Survey, using a revised version of the CIDI, found

12-month prevalence of any measured disorder to be 29.5%, with higher prevalences reported for anxiety disorders compared to other disorders (Kessler et al., 1994). On a global scale, the World Mental Health Surveys estimated the 12-month prevalence of mental disorders for several high-and lower-income countries; estimates for any disorder ranged from 8.2 to 26.4% in high-income countries and 4.3 to 20.5% in lower-income countries. In all countries, the 12-month prevalence of anxiety disorders was greater compared to mood, impulse-control, and substance use disorders (Demyttenaere et al., 2004).

Increasingly, epidemiologists have combined efforts to document the prevalence and incidence of mental disorders with efforts to document the impairment and disability that accompanies these disorders. Two observations have emerged. First, recent work has been fruitful in drawing explicit links between psychopathology and physical illness. Although the direction of this association is still unclear, several studies indicate that mental illnesses are associated with physical illnesses, including asthma, cardiovascular disease, and obesity, among others (Kuper, Marmot, & Hemingway, 2002; Luppino et al., 2010; Oraka, King, & Callahan, 2009; Prince et al., 2007; Roy-Byrne et al., 2008). Thus, a failure to consider population-level mental illness may hinder public health efforts to improve physical health. Second, it has become clear that the disability and impairment that mental illness causes is equal to or surpasses that of many other diseases but receives far less attention on the public health agenda. In 2002, unipolar depressive disorders were the fourth leading cause of disability-adjusted life years (DALYs) worldwide; by 2030 they are expected to be the second leading cause of DALYs in the world and first in high-income countries (Mathers & Loncar, 2006). Furthermore, in 2005, 13.5% of the total DALYs were attributable to neuropsychiatric conditions, which is projected to increase to 14.4% by 2030 (Prince et al., 2007). The relationship between poor mental health and overall morbidity further highlights the importance of establishing population mental health as a core element of the public health paradigm.

Organization and content of the book

This book has been organized into three parts. In the first part, five chapters highlight the public health significance of mental health by focusing on the evidence and epidemiology of the burden, influences on population mental illness, as well as disparities and stigma. In the first chapter, Kessler and colleagues discuss morbidity attributable to mental illnesses worldwide and argue that the far-reaching health consequences of mental illness render these disabilities and disorders a central public health challenge. They argue that mental health research should be merged with public health research as a whole so that public mental health has greater connection to, and can benefit more fully from, scientific advances in public

health. Next, Susser and Smith discuss the epidemiology of mental illness, highlighting the important contributions of the Epidemiological Catchment Area study and the National Comorbidity Study. He further discusses a shift in the field from classic psychiatric epidemiological measures of prevalence and incidence toward measurement of impairment and quality of life. In the next chapter, Goldmann and Galea summarize past research findings and theories on the mechanisms through which social and environmental factors influence mental illness. They discuss how changing demographics, including increased urbanization and migration, may shape future research. In the fourth chapter, Aguilar-Gaxiola and colleagues highlight differences in mental health and illness based on race/ethnicity. A focus of this chapter is the disparity in utilization of and access to mental health care. Lastly, Corrigan and Ben-Zeev conclude this section by addressing one of the consequences of stigma associated with mental illness - the underutilization of care. Recommendations and directions are given for decreasing the influence of stigma in mental health care utilization.

In the second part, four chapters address the policy aspects central to population mental health, including the mental health care system, laws and regulations, and the global effort to improve the mental health of populations. In the first chapter, Mechanic and Grob detail the history of mental health care and discuss the consequences of deinstitutionalization. particularly how social policies toward mental illness changed as a result of mental health care financing. Next, Petrila and Swanson expand on the results of deinstitutionalization, focusing on the relation between mental illness and crime and incarceration. They further discuss mandated treatment and emphasize the importance of evidence-based alternatives. In the third chapter, Roe and Mueser discuss the shift in public mental health systems from support and rehabilitation to recovery from mental illness. This chapter calls for more research on recovery and provides recommendations toward a recovery-oriented perspective. Lastly, Tomlinson, Swartz, and Daniels conclude the section by noting the implications of mental illness for worldwide disability. They call for a global initiative to address the need for a care infrastructure to respond to an increase in mental illness worldwide.

In the final part, six chapters focus on public health practice as it applies to mental health care utilization of the population as whole, as well as vulnerable subpopulations, such as children and the elderly. In the first chapter, Druss, Wang, and Kessler summarize the history of mental health care utilization from institutionalization to community and outpatient delivery systems. They discuss the current system, based on tiers of providers, as well as lack of utilization by those with mental illness. In the second chapter, Karpati considers the growing integration of public mental health into a broad public health context. He comments on both the potential future directions and limitations of this approach. Next, Mills, Mulloy, and Weist focus on the mental health of children, noting that the main

population-based approach has concerned itself with healthy early development. They address the need for a comprehensive, school-based approach for improving the mental health of children. In the fourth chapter, Fahs, Cabin, and Gallo discuss the lack of attention paid to mental health care for the elderly. They address the challenges facing research focused on determinants of mental and physical well-being among the elderly, as well as the role that other systems, such as long-term care, can play in meeting the need for a more comprehensive mental health care system. Next, Cohen identifies the role of community and intimate partner violence in shaping the health of women and families. He summarizes the consequences of such stressors to inform new public mental health policy and programs that may address them. Lastly, Caine, Knox and Conwell conclude this section by focusing on the role of public health in preventing suicides. They discuss prevention strategies, in particular the use of a population-level approach in reducing the risk of suicides.

We conclude the book by remarking on key challenges in preventing mental illness and promoting mental health in a population-based framework. We aim for this book to catalyze discussion about mental health in a population health context and would like it to contribute to discussion and research in the area.

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