Public Health, Prevention, and Community Psychiatry

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Introduction

Community psychiatrists have traditionally approached their work from diverse perspectives. Although the biopsychosocial model is more consistent with this approach than the more widely practiced medical model, the public health model—focusing on entire communities and populations—is also consistent with the eclectic values and practices of the field of community psychiatry. Several disciplines within public health, such as behavioral sciences, health education and health communication, epidemiology and health services research, health policy, and health services administration and management, help to define the field of community psychiatry. Additionally, community psychiatrists have a significant focus on mental health promotion among individuals and communities, as well as the various aspects of prevention of mental illnesses, for which two classifications are described in this chapter. The public health perspective is an essential aspect of community psychiatry, and the field will be strengthened through opportunities for community psychiatrists to deepen their involvement in these activities.

The Medical Model and the Public Health Model

The *medical model* is characterized by a primary focus on disease as a disruption of biological processes, and health care as a set of interventions and services meant to correct, and ideally cure, such biological disruptions. Engel's improvement upon the medical model, the *biopsychosocial model*, familiar to most psychiatrists, provides a "basis for understanding the determinants of disease and arriving at rational treatments and patterns of health care," while taking into account "the patient, the social context in which he lives, and the complementary system devised by society to deal with the disruptive effects of illness, that is, the physician role and the health care system" (Engel 2002, pp. 56–57). The ideology and intentions of community psychiatrists undoubtedly resonate with the biopsychosocial model, though given their reach beyond individual treatment to engagement with communities, the *public health model* is also pertinent to their work.

Public health can be considered to be "one of the efforts organized by society to protect, promote, and restore the people's health; it is the combination of sciences, skills, and beliefs that is directed to the maintenance and improvement of

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the health of all the people through collective or social actions; the programs, services, and institutions involved emphasize the prevention of disease and the health needs of the population as a whole" (Last 2001, p. 145). As such, the public health approach is focused much more at the level of the population than at the level of biological disruptions within individuals. Health, hygiene, and prevention are emphasized to a greater extent than treatment and curative efforts for individuals. When specific diseases are the focus of the public health approach, they are usually considered in terms of their occurrences and effects among communities or entire populations, rather than within a particular individual.

Key Domains of Public Health

Behavioral Sciences

Many schools of public health have entire departments focused on behavioral sciences, seeking to understand and enhance human behavior as it relates to health and disease. This discipline typically combines perspectives from health psychology, social science, anthropology, and sociology, aiming to develop and analyze models and theories that explain health-related behaviors and ways to modify such behaviors for the goal of health promotion and disease prevention. Such models include, but are not limited to, the Health Belief Model (Becker 1974; Harrison et al. 1992; Champion and Skinner 2008), the Theory of Planned Behavior (Ajzen 1991; Godin and Kok 1996; Armitage and Connor 2001), Diffusion of Innovations (Rogers 1995, 2002; Greenhalgh et al. 2005), as well as the Transtheoretical Model of Stages of Change (Prochaska and DiClemente 1984; Prochaska and Velicer 1997; DiClemente and Prochaska 1998), the latter having heavily influenced motivational interviewing approaches (DiClemente 1991; Swanson 1999; Rubak et al. 2005) in the clinical setting. The field of community psychiatry gains substantially from the behavioral sciences discipline of public health, given that psychiatrists' focus—both at the individual and the community level—commonly pertains to facilitating behavioral change (e.g., improved medication adherence, greater attention to healthy habits, better engagement in physical health screenings).

Health Education and Health Communication

Whereas the discipline of behavioral science largely focuses on developing and analyzing theory, health education and health communication tend to be a more applied field, seeking to increase health literacy (Nutbeam 2000), educate about health and disease, and communicate health messages to individuals and communities in the most effective ways. Relying heavily on cognitive and organizational psychology, communications, and marketing, key principles of health education and health communication come from Social Cognitive Theory (Bandura 1998, 2001; McAlister et al. 2008), Social Marketing (Lefebvre and Flora 1988; Hastings and Haywood 1991; Grier and Bryant 2005), and ecological models that focus attention on both individual and social environmental factors as targets for health promotion interventions (McLeroy et al. 1988; Stokols 1996; Sallis et al. 2008). Such theories aid in the development and dissemination of community-wide education programs that encourage people to make healthy choices. Again, this discipline is highly relevant to the work of community psychiatrists in light of its overarching goal to promote the mental and physical health of a community. Furthermore, psychoeducational approaches (developed to increase patients' knowledge of, and insight into, their illness and its treatment, Pekkala and Merinder 2002; Colom et al. 2003) have much to gain from recent advances in health education and health communication. Such advances include the use of low-text, visually engaging, interactive educational tools, as well as emerging eHealth (the use of electronic processes and communication to support healthcare services and practices) and mHealth (using mobile communication devices, such as smartphones, to promote health care and health communication) technologies.

Epidemiology, Biostatistics, and Health Services Research

The more numerical side of public health involves epidemiology, biostatistics, and health services research. Epidemiology, which arguably lies at the heart of the public health approach, includes the study of the distribution (e.g., incidence, prevalence, and course), determinants (e.g., biological, behavioral, and social factors that elevate risk), and outcomes (e.g., disability, morbidity, and mortality) of illness and injury within a population. Epidemiology as a field also develops and analyzes large datasets such as those derived from state and national surveys of health and disease (e.g., the National Health Interview Survey, the National Health and Nutrition Examination Survey, and the Behavioral Risk Factor Surveillance System). Along with epidemiology and biostatistics, health services research provides for empirical examinations of diverse problems relating to health, disease, and healthcare resources. Health services research is part of what defines community psychiatry, in effect being the "basic science" of the discipline. Community psychiatrists are ideally suited to this type of research given their interest in the provision of mental healthcare services—and improvements upon such services—for entire communities rather than just for individuals.

Health Policy and Health Services Administration and Management

Unlike traditional medical education and training, schools of public health commonly emphasize education and practical training experiences in health policy, as well as health services administration and management. Health promotion and disease prevention are commonly best effected through policy interventions, exemplified by taxation of tobacco products, seatbelt laws, improved safety engineering features of motor vehicles and other machinery, and rules requiring preschool immunizations. The field of health services administration entails policy and business administration skills required to manage the human and fiscal resources involved in delivering healthcare services. Again, because many community psychiatrists have an enduring interest in policy and leadership, they are particularly well aligned with this aspect of public health. Community psychiatrists may have well-defined administrative positions, such as being medical director of a program, service, agency, or organization. Although this is not as often the case today as it was in the past, when they do hold such positions, they are ideally situated to apply the prevention paradigms discussed below through these administrative roles (Compton 2007). Knowledge and application of public health and prevention principles may, in fact, play a part in helping to expand the roles of community psychiatrists to include more leadership activities.

Other Domains of Public Health

Other domains of public health may relate, though less obviously, to the work of community psychiatrists. In the public health arenas involving international and global health; environmental and occupational health; family, reproductive, maternal, and child health; exercise science; and nutrition, the focus once again pertains to communities and populations much more so than single individuals. Among psychiatrists, community psychiatrists are most likely to value and embrace these diverse domains included within the public health model, even though they may appear to lie outside the scope of the medical or biopsychosocial models to which most physicians ascribe.

Key Domains of Prevention

Several recent documents provide in-depth overviews of the field of mental health promotion and the prevention of mental illnesses. The extensive 2009 Institute of Medicine (IOM) report entitled *Preventing Mental, Emotional, and Behavioral Disorders among Young People: Progress and Possibilities* (Institute of Medicine 2009) provides an update to the sentinel 1994 IOM report,

Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research (Institute of Medicine 1994). Worldwide approaches have been described in two key World Health Organization (WHO) publications, *Prevention of Mental Disorders: Effective Interventions and Policy Options* (World Health Organization 2008a) and *Promoting Mental Health: Concepts, Emerging Evidence, and Practice* (World Health Organization 2008b). These resources provide in-depth coverage of the various domains of prevention and mental health promotion that are briefly summarized below.

Primary, Secondary, and Tertiary Prevention

In the traditional public health classification of prevention, *primary prevention* refers to preventing a disease or adverse outcome from occurring, thereby reducing the incidence of a disorder. Primary prevention is exemplified by vaccinations to reduce the incidence of communicable diseases, fortification of food products to prevent nutritional deficiencies and related health consequences, and fluoridation and chlorination of public water supplies to reduce the incidence of dental carries and prevent enteric infectious diseases, respectively.

The field of mental health remains aspirational in terms of primary prevention, with few examples available to date. Nonetheless, preventive measures that reduce the onset of certain nutritional deficiencies (e.g., pellagra) and infectious processes (e.g., tertiary syphilis) associated with mental disorders undoubtedly have secondary effects in terms of minimizing associated psychiatric complications. Primary prevention in mental health may also occur via measures to reduce risk factors that are thought to be component causes of some psychiatric illnesses (i.e., neither necessary nor sufficient causes, but part of the constellation of risks associated with some cases of illness). For example, adverse childhood experiences are clearly risk factors for a number of psychiatric disorders (Chapman et al. 2007) and cannabis use in adolescence is thought to be a component cause of schizophrenia and related psychotic disorders (Ramsay and Compton 2011). Both of these risk factors can be prevented, and doing so could lead to a reduction in the incidence of mental illnesses (i.e., primary prevention).

Mental health promotion, which includes strategies and interventions that enable positive emotional adjustment and adaptive behavior, is intimately linked to primary prevention of mental disorders. It has been noted that the best opportunities for mental health promotion likely come through integration with broader wellness and health promotion efforts (Druss et al. 2010). Because mental health promotion goes beyond a focus on the individual (such that decisions made by businesses and government play a central role, Power 2010), like policymakers, community psychiatrists likely have the ability to influence mental health promotion within communities.

The goal of *secondary prevention*, which refers to early detection and screening, is ultimately to effect a reduction in the prevalence of a condition or disease. That is, if a disease is detected early, it can be treated promptly and ideally resolved; thus, early detection and intervention decreases the time the person has the disease, reducing the number of people having the disease at any given time (Compton et al. 2009). In general medicine, secondary prevention is exemplified by cancer screening measures (e.g., mammography, Papanicolaou (Pap) smears, and colonoscopy) and cardiovascular disease screening (e.g., assessment of body mass index, blood pressure, and lipid levels). Secondary prevention is an entirely feasible goal in psychiatry, as exemplified by screenings in the general public for symptoms of depression and screenings for suicidal ideation on college campuses.

Mental health professionals are not at all unfamiliar with *tertiary prevention*, which consists of rehabilitative treatments that reduce disability. Tertiary prevention is exemplified in general medicine by rehabilitation after a cerebrovascular accident to minimize functional impairment. In psychiatry, tertiary prevention involves preventing relapse, reducing the likelihood of developing comorbidities, and providing treatments to

enhance psychosocial functioning (Compton et al. 2009), such as assertive community treatment, family psychoeducation, integrated substance abuse treatment, social skills training, supported employment, and supportive housing.

Indicated, Selective, and Universal Preventive Interventions

The 1994 and 2009 IOM reports mentioned above further classified primary prevention by emphasizing the target population addressed by the intervention. In this newer classification, primary prevention is subdivided into universal, selective, and indicated preventive interventions. Most broadly, *universal preventive interventions* target the entire population without regard to each individual's level of risk, as exemplified by fluoridation and chlorination of drinking water, fortification of food products, and legislation prohibiting the use of handheld electronic mobile devices while driving. In the mental health field, such interventions may include public service announcements or media campaigns designed to reduce the initiation of substance abuse.

Individuals within a subgroup of the population whose risk of developing a specific disorder is substantially higher than average would benefit from *selective preventive interventions*, such as lifestyle and pharmacologic management of hyperlipidemia to prevent cardiovascular disease among those at elevated risk by virtue of their Framingham score. In mental health, an example of a selective intervention is one designed specifically for children at high risk for depression due to having a parent with an affective disorder (Beardslee et al. 1997).

Finally, *indicated preventive interventions* target particularly high-risk individuals who do not yet meet diagnostic criteria for the illness but can be identified as having a biological or psychological marker indicating a definite predisposition to the disorder. One example within psychiatry is the identification and treatment of individuals at "ultra-high risk" for schizophrenia (i.e., those with symptoms consistent with the prodrome), though they do not yet meet criteria for a psychotic disorder diagnosis (McGorry et al. 2009).

Benefits of Incorporating the Public Health Approach

In 1964, Caplan stated that "the public health approach of organized community planning for comprehensive programs to include prevention, treatment, and rehabilitation of mental disorders and to be coordinated with other community programs in the health and welfare fields has found a ready ear among many psychiatrists" (Caplan 1964, p. 10). While the previous sections have suggested that contemporary community psychiatrists already resonate with many aspects of the public health model, a more intensive embrace of the public health approach would benefit the field of not only community psychiatry but also public health. The work of community psychiatrists is enhanced through close ties with diverse disciplines within public health. For example, the development of psychosocial interventions for patients with serious mental illnesses is assisted by the application of behavioral science models and theory; modern psychoeducational programs benefit from collaboration with professionals involved in health education and health communication; and the evaluation of community mental health services is advanced through partnerships with health services researchers housed in schools of public health.

Practicing the Principles of Prevention

The field of community psychiatry has an enduring interest in prevention. The Kennedy-era community mental health movement incorporated proposals of prevention, though they may have been overly optimistic at the time (Bachrach and Clark 1996), and sustained funding for preventive efforts was not available in the ensuing years. At present, it would appear that cautious optimism remains warranted with regard to primary prevention (Paykel 1994), though secondary and

tertiary prevention are more advanced and more extensively implemented. Thus, while additional research on the primary prevention of mental illnesses accumulates, all other aspects of prevention are ready for further development and implementation, and community psychiatrists are ideally suited to lead these efforts.

A previously outlined list of eight principles that mental health professionals should consider in their effort to become prevention-minded mental health professionals seems particularly relevant to the work of community psychiatrists (Compton et al. 2009):

1. Knowledge of epidemiology is the basis for the application of preventive efforts in mental health.
2. Practicing prevention in the field of mental health requires an understanding of risk factors and protective factors.
3. Evidence-based preventive interventions can be applied in the clinical setting.
4. Important goals for patients with established psychiatric illnesses include the prevention of relapse, substance abuse, suicide, and unhealthy behaviors that lead to physical illnesses.
5. Clinic-based preventive efforts should include family members of individuals with psychiatric illnesses in addition to the individual themselves.
6. Primary and secondary prevention efforts can take place in schools, the workplace, and community settings.
7. Mental health professionals should have a role in broad prevention activities (beyond the prevention of mental illnesses), such as the prevention of delinquency, bullying, physical health problems, teenage pregnancy and/or unwanted pregnancy, and the prevention of intentional and unintentional injuries.
8. Mental health professionals should play a role in mental health promotion, overall health, and wellness.

Community psychiatrists take part in diverse activities in which these principles are applied, such as conducting health services research to inform the epidemiology and treatment service needs around mental illnesses; having a commitment to engaging families in the care they provide to individual patients; serving on and lending expertise to boards of local agencies and organizations; and attending to the whole health of their patients, including various psychosocial issues.

Toward Further Integration of Public Health, Prevention, and Community Psychiatry

As described in other chapters throughout this book, much of the work of community psychiatrists pertains to providing services to individual patients and their families. In doing so, community psychiatrists aim to enhance outcomes and quality of life, promote recovery and resilience, and partner with patients as they work toward developing a meaningful life despite the presence of a mental illness. Yet, community psychiatry also has broader goals pertaining to the community at large. The embrace of the public health model and the principles of prevention effectively advance these goals. In recent years, some community psychiatry fellowship training programs have explicitly set out to combine the medical model and the public health approach, and have provided fellows with graduate training in the public health disciplines (Kotwicki and Compton 2010). These and other formal associations between community psychiatry and public health and prevention enrich the work of community psychiatrists, advance programs intended to enhance the recovery of their patients, and benefit society at large through the collective actions of this strengthening subspecialty within psychiatry.

While the field of community psychiatry is intimately tied to the public health and prevention perspective, this perspective is not incorporated into common practices as much as it could be. This is driven to a large extent by the ways that systems of care are organized, which is in turn determined largely by healthcare financing. Many public health departments are quite separate from, and often have minimal communication with, public mental health departments. Financing of preventive services is complex and controversial. The cost of providing preventive

services is substantial without clear evidence, in many cases, for the economic advantage of providing them. While the humanitarian argument may be more convincing (Rose 2008), not everyone values this ideology. Despite this, with its strong commitment to social justice, community psychiatry is uniquely positioned within the field of mental health to have a significant impact on the implementation of the principles and practices of public health and prevention. Indeed, the tenets of public health and prevention are essential aspects of community psychiatric practice, despite some significant obstacles to realizing their full potential. Ways of transcending obstacles related to separation of mental health from other public health services—and financial constraints—rest largely upon changing mindsets and changing policy, which are active goals of the community psychiatry discipline.

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