Women's Behavioral Health Needs

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Introduction

Historically, teaching and research are structured around specific disciplines, each with its own nomenclature, conceptual approaches, literature base, target audiences, and application strategies. However, thus far, outside the field of public health, minimal efforts have been devoted to an interdisciplinary approach to solving health-care problems. One of the core concepts underlining a public health approach or perspective is a focus on the health of an entire population. Accordingly, a public health approach involves an emphasis on health promotion and disease prevention throughout the lifespan. It takes into consideration an interdisciplinary framework for examining both physical and behavioral health problems. The World Health Organization suggests a public health approach should include the following four steps:

1. "*Surveillance*: To define the problem through the systematic collection of information about the magnitude, scope, characteristics and consequences of the problem.
2. *Identify risk and protective factors*: To establish what the problem is and why it occurs using research to determine the causes and correlates, the factors that increase or decrease the risk of, and the factors that could be modified through interventions.
3. *Develop and evaluate interventions*: To find out what works to prevent the health issue by designing, implementing and evaluating interventions.

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4. *Implementation*: To implement effective and promising interventions in a wide range of settings. The effects of these interventions on risk factors and the target outcome should be monitored, and their impact and cost-effectiveness should be evaluated." (Violence Prevention Alliance, 2018, p. 11).

Hence, we suggest that a public health framework that encompasses an interdisciplinary approach to behavioral disorders and emphasizes opportunities for prevention, early detection, and intervention will be more likely to reduce the burden of both physical and behavioral health illnesses (Becker, Levin, & Hanson, 2010). Since a public health approach is population-based, it encompasses important social, cultural, economic, and environmental factors that affect women's health.

This chapter examines critical issues in women's behavioral health from an interdisciplinary public health perspective. The content focuses on the essential elements of a public health perspective and discusses some of the major concerns in improving women's health outcomes. This chapter has two objectives: (1) to discuss behavioral health (alcohol, drug abuse, and mental) problems of concern to women and (2) to review services delivery and services research issues related to women's behavioral health. We also include a discussion of current challenges in prevention and treatment for three selected areas: (1) HIV; (2) postpartum depression; and (3) trauma-informed care, which are significant public health concerns. The chapter concludes with an *Implications for Behavioral Health* section, discussing the relevance of each issue to the overall field of women's behavioral health and health-care policy.

The material in this chapter is particularly timely in that it provides new information from current research findings and discusses important reimbursement policy and service delivery challenges that must be addressed if women's health-care outcomes are to be improved. The chapter is also very comprehensive. Among other things, in addition to the major topics mentioned above, it includes a discussion of the global burden of disease, health disparities, comorbidity, trauma-informed services, and health literacy. In addition to examination of the relevant issues in women's mental health, this chapter emphasizes the importance of maintaining a public health perspective and using an interdisciplinary approach for the study of women's behavioral health. An interdisciplinary public health approach is preferred because it will encourage individuals from diverse disciplines to work together in future research to improve health-care outcomes for women.

Epidemiology

Behavioral health problems, which include mental health and substance use disorders, are major contributors to the global burden of disease. Worldwide, approximately 450 million people live with a behavioral disorder (GBD 2016 DALYs and HALE Collaborators, 2017). In developing countries, behavioral disorders are second only to cardiovascular diseases in contributing to lost years of life (World Health Organization, 2017). Although behavioral disorders have a serious impact upon all individuals, it is important to recognize gender differences in the rates, experience, and course of these disorders. For example, women are twice as likely

as men to suffer from major depression and rates of anxiety disorders, including post-traumatic stress disorder (PTSD), which are two to three times higher in women compared to men (Kessler, Berglund, et al., 2005; Office on Women's Health, 2009). Women also are at greater risk of poor self-care and poor adherence to treat (Rapaport, Clary, Fayyad, & Endicott, 2005).

To explore gender differences in health, researchers (Pratt & Brody, 2014) analyzed data from the National Health and Nutrition Examination Survey (NHANES), which is a continuous cross-sectional survey of the civilian, non-institutionalized US population, designed to assess the health and nutrition of Americans. Not only did females have higher rates of depression than males in every age group; the rate of depression increased by age, from 5.7% among girls aged 12–17 to 9.8% among women aged 40–59. Women aged 40–59 also had the highest rate of depression (12.3%) among all age groups and gender. The lowest rates of depression were for males aged 12–17 (4.0%) and for males 60 and over (3.4%). Nearly 90% of persons with depressive symptoms reported difficulty with work, home, or social activities. Just one-third of persons with severe depressive symptoms sought care from a behavioral health professional (Pratt & Brody, 2014).

Women with behavioral disorders not only have higher morbidity and mortality rates but are also at higher risk for underdiagnosis of major physical disorders (Becker et al., 2010; McCabe & Leas, 2008), while women who have depressive symptoms or anxiety are at higher risk for cardiovascular disease, which is the leading cause of death in women in developed countries (O'Neil et al., 2016).

The Global Burden of Disease Study (Whiteford et al., 2013) found behavioral disorders are one of the leading causes of disease burden. They are responsible for 7.4% of global disability-adjusted life years (DALYs) and 22.9% of global years lived with a disability (YLDs). Depression is the most predominant mental health problem followed by anxiety, schizophrenia, and bipolar disorder. Despite increased attention and promising advances in the science and practice of women's behavioral health, disparities based upon gender, race, ethnicity, age, and socioeconomic status persist, and women continue to have a higher risk than men for most behavioral disorders (Warner & Brown, 2011).

While there is now a greater recognition of the important role of behavioral health in the overall well-being of individuals and considerable progress in our understanding and treatment of behavioral disorders, there is an increased prevalence of behavioral disorders reported by women in the United States. Data show that almost one-half (48.5%) of American women report a lifetime experience of a mental disorder, and about a third (30.9%) report a disorder in the prior year (Kessler, Berglund, et al., 2005; Kessler, Chiu, Demler, Merikangas, & Walters, 2005).

Although the presence of multiple chronic conditions increases with age for both genders, women have a higher prevalence of multiple chronic conditions than men (Buttoroff, Ruder, & Bauman, 2017). In the most recent National Comorbidity Replication study, the individual profile for persons with any mental or substance use disorder in the prior year was being female, Hispanic, or African American; with less than a college education and low income; not currently cohabitating; and living in a rural area (Kessler, Berglund, et al., 2005). Behavioral disorders are among the

leading causes of mortality and morbidity for women and men. Furthermore, the negative impact of mental disorders on overall health and life is reported to be similar worldwide (Beaglehole, Irwin, & Prentice, 2004; Murray & Lopez, 1996).

According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014a, 2014b), about 44.7 million adults and 13.7 million children had diagnosable behavioral disorders in 2016 (Ahrnsbrak, Bose, Hedden, Lipari, & Park-Lee, 2017). Most individuals with behavioral health needs do not receive treatment, even though 80–90% of these disorders are treatable using medication and other evidence-based therapies (Kessler, Chiu, et al., 2005). Access and utilization barriers include lack of perceived need, lack of health insurance coverage, financial barriers, lack of transportation (Andrade et al., 2014), stigma (Brohan, Slade, Clement, & Thornicroft, 2010; Kakuma et al., 2011), lack of provider reimbursement, and other structural barriers (e.g., system fragmentation) (Corrigan, Druss, & Perlick, 2014). Since untreated behavioral health conditions are a serious public health concern, efforts are needed to reduce individual, community, and system level barriers to treatment.

Although prevalence rates for behavioral disorders vary depending upon the study, the age of the population, presence of co-occurring diagnosis such as HIV, and research methods used across the life span, researchers consistently report higher rates of behavioral disorders for females compared with males (Centers for Disease Control and Prevention (CDC), 2017). Researchers also note that starting in early adolescence, rates of these disorders increase for both genders, but the rates for adolescent females double and continue throughout women's lives (Kessler, Berglund, et al., 2005). Although gender differences might be attributed to women being more willing than men to report symptoms of depression and be more willing than men to seek treatment when they do have symptoms, studies have shown this is not the case and that gender differences do exist (Girgus & Yang, 2015). Depression in women is correlated with genes, hormonal changes, stress, and other factors and is pronounced during puberty, pregnancy, and perimenopause (Albert, 2015).

Substance Abuse

In recent years, there has been growing attention to the importance of gender in the treatment of substance use disorders in women. While past medical research mainly focused on men, there is now growing recognition that biologic and psychosocial differences between men and women influence the prevalence, presentation, comorbidity, and treatment of substance use disorders (Greenfield et al., 2007).

In the recent past, alcohol and substance dependence and abuse have predominately been seen as a male problem, as the research shows higher prevalence rates of drug and alcohol use disorders among men. The National Institute on Alcohol Abuse and Alcoholism's National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) found that men are twice as likely as women to meet lifetime DSM-V criteria for any drug use disorder (12.3% of men vs. 7.7% of women)

(Grant et al., 2016). Twelve-month prevalence rates of alcohol abuse are almost twice as high among men as they are among women (17.6% of men vs 10.4% of women) (Grant et al., 2015). On the other hand, research also shows the prevalence rates of prescription drug abuse in women closely approach that of men. The Office of the Surgeon (2016) reported 12.5 million Americans reported misusing prescription pain relievers in the past year. Twelve-month prevalence rates of abuse or dependence for non-medical use of pain relievers were 20.5% for men and 15.3% for women (Office of the Surgeon General, 2016).

Women and men differ in substance abuse etiology, disease progression, and adherence to treatment. Alcohol is the most common substance abused by both men and women. Although men have higher rates of use, women have more severe health consequences and are more likely to overdose due to continued use and higher rates of illicit drugs (Fernandez-Montalvo, Lopez-Goni, Azanza, Arteaga, & Cacho, 2017; Greenfield, Back, Lawson, & Brady, 2010; Greenfield et al., 2007; Picci et al., 2012; Substance Abuse and Mental Health Services Administration, 2014a).

Given the aging of the "baby boomer" generation who uses alcohol and other drugs at a higher rate than past generations, and longer lifespans overall, it is anticipated that society will need additional specialized screenings, interventions, and treatments for addiction. This is noteworthy and concerning; women have greater medical vulnerability and social consequences associated as their behavioral disorders continue across age groups. Women carry additional risks during pregnancy because of the effects medication, alcohol, and illicit drugs have on the developing fetus (Erol & Karpyak, 2015). Since explanations for gender, racial, and age differences in behavioral disorders are evolving, continued research is required.

Comorbidity

Co-occurring physical disorders may lead to an increased risk of mental disorders, and mental disorders may increase a person's risk for a medical disorder, yet many comorbidities often go undetected (Goodell, Druss, Walker, & Mat, 2011). Comorbidity, having more than one chronic health condition at a time, is a growing public health concern, with one in four adults in the United States having two or more chronic health conditions and disorders and complex comorbidities.

The NCS-R reported approximately 74% of adults having one or more disorders in the previous 12 months (Druss et al., 2009). Despite the prevalence and clinical importance of comorbid disorders, relatively little is known about the etiology of these disorders, and most of the epidemiological research on comorbidity is relatively recent. Additional research is clearly needed as comorbidity is increasingly associated with worse health outcomes, more complex clinical management, and increased health-care costs. Understanding the nature of comorbidity through research has great potential value, as it could help identify the targets for prevention and treatment interventions. If comorbidity arises because different mental and physical disorders share the same risk factors, then interventions addressing these

risk factors should help to reduce the prevalence and disability from frequently occurring comorbidities.

Mental and Substance Abuse Disorders

There are several gender differences in the relationship between mental and substance use disorders. Epidemiologic studies of treatment-seeking women indicate that gender differences in the patterns of comorbid mental disorders in substance users follow the same patterns experienced by women in the general population. Women with comorbid mental disorders are more likely to meet criteria for anxiety, depression, eating disorders, and borderline personality disorder and men more likely to meet criteria for antisocial personality disorder (Anker & Carroll, 2010; Grant et al., 2015; Grant et al., 2016; Greenfield et al., 2010; Lieber, 2000). A number of studies also indicate that for women, the onset of the mental disorder is more likely to antedate the onset of their substance use disorder (Back, Contini, & Brady, 2007; Greenfield et al., 2007; Mann et al., 2005).

Co-occurring Physical Illnesses

The typical woman with a behavioral disorder often has a co-occurring physical health condition (Becker & Gatz, 2005; Larson et al., 2005). Since co-occurring physical health disorders are more common in women than men, successful treatment requires an interdisciplinary approach to health care as well as health-care providers who are competent in recognizing, referring, and treating common co-occurring physical and behavioral disorders. Untreated or undertreated physical and behavioral health conditions can result in premature death, functional limitations, increased service utilization, and lowered quality of life for women with dual and triple diagnoses. The literature shows that women with behavioral disorders are at higher risk for both acute and chronic physical disorders (De Hert et al., 2011).

Despite the high prevalence and negative impact of co-occurring physical and behavioral disorders, many primary care providers fail to detect these conditions, and some believe that women with behavioral disorders will not make good use of health-care services. This is unfortunate because women have a higher risk for a number of physical health conditions including cardiovascular disease and cancer. Thus, primary care clinicians should carefully screen for physical health conditions among women with a behavioral disorder. As a result of higher rates of serious physical illness and underdiagnoses of physical health conditions, women with behavioral disorders have higher rates of premature death (Olfson, Gerhard, Huang, Crystal, & Stroup, 2015).

Research shows that for up to half of all primary care patients, there are no physical explanations for their symptoms (Edwards, Stern, Clarke, Ivbijaro, & Kasney,

2010; Institute of Medicine, 2006; Lipsitt, Joseph, Meyer, & Notman, 2015). Data from the Medical Outcomes Study suggest that primary care clinicians fail to recognize 50% of patients with depression (Katon, 2003), a failing that continues today (Knickman et al., 2016). In addition, gynecologic care, pregnancy, family planning, and contraception are issues that deserve special attention in women with behavioral disorders. Treatment of behavioral disorders during pregnancy requires careful thought, as there is scant data on the use of psychotropic medication in this population (Byatt et al., 2018). Decisions about medication during pregnancy are complicated further due to the small number of adequate studies and relative absence of randomized control trials.

In response to current epidemiologic data, the principle that "there is no health without mental health" is gaining ground. Efforts to transform America's public behavioral health delivery systems to systems that are more person-centered, recovery-focused, evidenced-based, and quality-driven are intensifying. Due, in part, to the Surgeon General's reports on mental health and addiction (Office of the Surgeon General, 1999, 2016), the efforts of the World Health Organization (GBD 2016 DALYs and HALE Collaborators, 2016), and the President's New Freedom Commission on Mental Health (2003), a broader framework for health has been advocated which emphasizes the idea that disease extends beyond its clinical dimensions. This broader framework makes it essential that public health practitioners, policy makers, consumers, and advocates understand the extent and distribution of behavioral disorders and disability, so they can develop policies and practices that reduce health disparities and contribute to people's daily activities and participation in society (President's New Freedom Commission on Mental Health, 2003).

Health Disparities

Despite current efforts to close the gap between socioeconomic status between majority and minority populations, health disparities continue to exist (Peck & Denney, 2012; Primm et al., 2010). Health disparities occur across intersecting identities; include race/ethnicity, age, gender, socioeconomic status, disability status, sexual identify, and sexual orientation; and refer to differences between groups in health insurance coverage, access to and use of care, and quality of care (Chen, Vargas-Bustamante, Mortensen, & Ortega, 2016). *Healthy People 2020* defines a health disparity as:

> A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion. (The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020, 2008, October 28, p. 4646)

Data show that women from different ethnic and cultural groups, as well as other minority populations, such as LGBTQ (lesbian, gay, bisexual, transgender, queer/questioning), have multiple intersecting identities increasing health disparities and negative health outcomes (Adepoju, Preston, & Gonzales, 2015; National Academies of Sciences, Engineering, & Medicine, 2017). For example, over the past few decades, the gap in life expectancy between men and women is narrowing and is due, in part, to an increase in mortality for women (Arias, 2016; Chetty et al., 2016).

The challenges faced by women from minority and other underserved groups are well documented and include lower socioeconomic status, poorer health conditions, lower use of services, higher rates of premature death, disease, and disability status (Jang, Chiriboga, & Becker, 2010). The complex relationships among biological, physical, and social environmental factors influence access to care and affect population and individual health outcomes (Institute of Medicine, 2010). These challenges and the devalued status of minority and underserved women have important implications for behavioral health services provided to minority populations.

Women from an underserved population may present with somatic complaints or other symptoms not traditionally associated with a behavioral health diagnosis (Kohrt et al., 2014). In addition, women from an underserved population may be less trusting, less adherent, and more skeptical. Further, chronic physical illnesses may result in depression and or anxiety, and patients from minority populations may respond differently to medications. Since each patient's culture and ethnic background must be addressed when they present for behavioral health services, clinicians should always ask about cultural issues and determine if they are of concern in the treatment of their client (Kohrt et al., 2014). Good communication, clarity, and collaboration are key to successful patient-provider relationships and positive behavioral health treatment outcomes across diverse groups (Kohrt et al., 2014).

Location also is an important consideration, as there are significant differences in access to care for women who live in rural and urban areas, as the majority of behavioral health providers work in high population metropolitan areas (Ellis, Konrad, Thomas, & Morrissey, 2009). Women living in rural areas are more likely to be poor, lack health insurance, and often travel longer distances to access medical, dental, and behavioral health specialty services (Buzza et al., 2011). Rural women are also more likely than urban women to experience stressors related to behavioral health, yet they are less likely to receive behavioral health services (Weaver & Himle, 2017).

Barriers to behavioral health care are a major concern. An estimated 40% of women in rural areas seek mental health treatment in a primary care setting rather than a behavioral health-care setting, yet stigma is a significant barrier when living in small communities (Smalley et al., 2010). Rural populations have higher rates of behavioral and somatic health conditions (i.e., substance abuse, smoking, and obesity) compared to urban populations. Further, up to 40% of rural women have comorbid substance use and mental disorders and higher rates of suicide (Smalley et al., 2010). While there have been some policy changes to improve health services

delivery, outcomes have not been sufficient in meeting the health needs of this population. Additional policies need to be developed to address the needs of underserved populations (Smalley et al., 2010).

Selected Issues in Women's Behavioral Health

Understanding, preventing, and managing women's health involve understanding their unique health needs in relation to specific physical and behavioral health conditions. The next section discusses issues related to women diagnosed with human immunodeficiency virus (HIV), postpartum depression (PPD), and women who have experienced trauma. These three conditions have a major impact on women's behavioral health, and they are a particular problem for women living in poverty. Despite their prevalence and association with poorer health-care outcomes, they are an under-researched population and require more attention and additional research.

Women and HIV

The burden of behavioral health conditions among women living with human immunodeficiency virus (WLHIV) is a significant public health concern. Innovative methods of detecting and treating the complex physical and behavioral health conditions of WLHIV are needed to improve health outcomes and women's quality of life. Over the past 35 years, public health has made tremendous accomplishments in the prevention and treatment of HIV and acquired immunodeficiency syndrome (AIDS). In the early days of the epidemic, HIV was seen as a death sentence. Today, HIV is considered a chronic health condition that can be controlled with medications (Brooks et al., 2017; Cohen et al., 2016; Rodger et al., 2016).

Although HIV in women is life changing and significantly increases morbidity and mortality (Quinlivan et al., 2015), access to highly active antiretroviral therapy (HAART) for the treatment of HIV increases life expectancy, improves quality of life, and has the potential to reduce transmission of HIV (Rodger et al., 2016). However, women are less likely to use or have access to HAART, and WLHIV often face an array of co-occurring physical and mental health conditions as well as socioeconomic hardships that impede their ability to maintain access to care and treatment (Beer, Mattson, Bradley, & Skarbinski, 2016).

Globally, women account for more than 50% of the 36.7 million persons living with HIV (PLHIV), with approximately 380,000 new HIV infections occurring among girls and women aged 15–24 each year (UNAIDS, 2017). In the United States, women represent approximately 25% of the 1.2 million PLHIV, and women of color are disproportionately affected by HIV (CDC, 2017). Even though women of color account for less than 30% of the US population, they represent nearly 80% of all WLHIV (CDC, 2015). Not only are they less likely to engage in care; women

of color are at a higher risk for morbidity and mortality compared with men and white women (Quinlivan et al., 2015).

Although many WLHIV are living longer healthier lives, an HIV diagnosis impacts physical, psychological, and social well-being, and WLHIV experience an increased prevalence of behavioral health conditions when compared to men (Orza et al., 2015) and the general population (Chapin-Bardales, Rosenberg, & Sullivan, 2017). WLHIV have high levels of emotional distress and report more psychological and psychosocial problems including fear, loss, grief, hopelessness, guilt, low self-esteem, anxiety, depression, denial, and anger (Fabianova, 2011). In addition, WLHIV are affected by high rates of sexual and physical trauma in childhood and as adults. A recent meta-analysis reports the estimated rate of recent post-traumatic stress disorder (PTSD) in WLHIV is 30.0%, over five times the national rate for women. In addition, intimate partner violence (IPV) among WLHIV was estimated at 55%, twice the national rate (Machtinger, Wilson, Haberer, & Weiss, 2012).

A large-scale study conducted in the southeastern United States found as high as 60% of PLHIV report symptoms of mental illness, 32% report substance use problems, and 23% are triply diagnosed with HIV, substance abuse, and a mental health problem, with women reporting a higher number of mental illness symptoms (Whetten et al., 2005). Clinical management of HIV for these triple diagnoses requires integrated treatment services that address both mitigation of substance use and psychiatric and medical symptoms and other health behaviors (Durvasula & Miller, 2014).

Health-care systems around the world are now making an effort to integrate behavioral health services with primary health care. Integration can increase access to mental health and substance abuse services and improve adherence to lifesaving HIV treatment. There is a need to educate both primary care and HIV specialists about the importance of routine screening of WLHIV for depression, anxiety, substance use, and other mental health conditions.

Postpartum Depression

Postpartum depression (PPD) is a serious mental health condition and a major concern for women. About half of postpartum women experience the "baby blues," whereas about 10%–15% of new mothers experience PPD (Yim, Tanner Stapleton, Guardino, Hahn-Holbrook, & Dunkel Schetter, 2015). PPD, also called postnatal or perinatal depression, is a type of mood disorder associated with childbirth. The postpartum period begins immediately following childbirth and continues for 6 weeks. The exact cause of PPD is unclear; however, it is believed to be a combination of physical and emotional factors that may include hormonal changes in addition to sleep deprivation and other stressors associated with a new infant in the family (Jevitt, Groer, Crist, Gonzalez, & Wagner, 2012). Risk factors include prior episodes of PPD, bipolar disorder, a family or personal history of depression,

psychological stress, complications of childbirth, lack of social support, history of violence, or a drug use disorder (Dennis & Vigod, 2013).

Symptoms of PPD can include extreme sadness, low energy, anxiety, crying episodes, irritability, and changes in sleeping or eating patterns. PPD can affect the health of the mother as well as the health and development of her child(ren). Maternal bonding with her new infant may be impaired, leading to attachment and developmental delays for the child (Howard et al., 2014). Onset is typically between 1 week and 3 months following childbirth and affects up to 15% of women around childbirth and, in some women, leads to postpartum psychosis (Pearlstein, Howard, Salisbury, & Zlotnick, 2009; Spinelli, 2004).

Postpartum psychosis is a more severe form of postpartum mood disorder that occurs in about 1−2 women per 1000 following childbirth. Postpartum psychosis is one of the leading causes of the murder of children less than 1 year of age. In the United States, this occurs in about 8 per 100,000 births (Spinelli, 2004).

Review of antidepressant medication use during pregnancy suggests these medications increase perinatal disorders, including congenital malformations and neurologic injury (Yaeger, Smith, & Altshuler, 2006), and women often stop their use during pregnancy (Petersen, Gilbert, Evans, Man, & Nazareth, 2011). Research on PPD also suggests that serotonin reuptake inhibitors (SSRIs) can increase the risk of congenital heart defects (Chambers, Moses-Kolko, & Wisner, 2007). There are fewer studies on postpartum psychosis, so clinicians know less about the health outcomes of antipsychotic medication use during pregnancy among women with PPD. Both pharmacological and non-pharmacological treatment options (e.g., interpersonal therapy and cognitive behavioral therapy) are important because, without treatment, PPD can last for months or years. In addition to its effects on the mother's health, PPD can interfere with the mother's ability to nurture and connect with her baby, which may cause the baby to have problems with sleeping, eating, and behavior as he or she grows.

Trauma-Informed Services

Trauma, stigma, and discrimination are also factors that influence health-care outcomes for women. There is ample evidence regarding the high prevalence of trauma, violence, and abuse against women, which increases the prevalence of behavioral disorders and the need for trauma-informed services. Trauma-informed care (TIC) is an intervention and approach to services that focuses on how trauma may affect a women's life and her response to behavioral health services from prevention through treatment. Trauma refers to extreme stress that overwhelms a person's ability to cope. Clinicians meet with various clients in a wide range of settings, and while each client has different needs and goals and requires different care approaches, the common thread is awareness of the need for trauma-informed care (Muskett, 2014).

According to SAMHSA (2014a, 2014b), trauma-informed services are based on an understanding of the vulnerabilities or triggers of trauma survivors that traditional

service delivery approaches may exacerbate. Thus, trauma-informed services are designed to be very supportive and avoid any potential re-traumatization of the client. Trauma-informed care can also be viewed as an overarching philosophy and approach, or a set of universal precautions, designed to be both preventive and rehabilitative in nature, in which the relationship among environment, triggers, and perceived dangers are noted and addressed.

Trauma-informed care is based on the understanding that many clients have suffered traumatic experiences, and the provider is responsible for being sensitive to this fact, regardless of whether a person is being treated specifically for the trauma (Huckshorn & LeBel, 2013). Therefore, all clinicians should approach their clients as if they have a trauma history, regardless of the services for which the clients are being seen.

Women of special concern who require trauma-informed services include the growing population of incarcerated women, female veterans, and active female military personnel who are often exposed to trauma, violence, and abuse (Friedman, Collier, & Hall, 2016; Lehavot, O'Hara, Washington, Yano, & Simpson, 2015; Mustillo et al., 2015). Unfortunately, these women frequently have limited access to behavioral health services and often suffer from post-traumatic stress disorder (PTSD). For example, it has been reported that as many as 30 percent of women were raped during their military services; this compounds the heavy burden already experienced by female veterans and their families (Zinzow, Grubaugh, Monnier, Suffoletta-Maierle, & Frueh, 2007). Thus, there is a critical need for new initiatives to address both the short- and long-term effects of trauma, violence, and abuse experienced by female veterans and women suffering from interpersonal violence.

Services Delivery

Community behavioral health-care programs face many challenges and incur skyrocketing costs. Persons with behavioral health problems often do not receive the behavioral health-care services they need and those with serious chronic disorders die, on average, 25 years earlier than persons without behavioral health problems (Olfson et al., 2015). The seminal US President's New Freedom Commission on Mental Health (2003) identified fragmentation of health delivery systems as one of the three major obstacles impeding the treatment of behavioral disorders in the United States. The observed system fragmentation that characterizes the American health-care systems has direct implications for access to services and the utilization of effective health care for both primary and behavioral health-care consumers.

Successful models of behavioral health care most often use a "strengths-based" model or approach to service delivery that promotes the well-being of both clients and society (Tse et al., 2016). In a strength-based approach, the professional tells the client to think about problems, responses, or situations they solved in the past. This reflective approach promotes the well-being of the client because it helps the client realize their strength(s) and the possibilities they have to deal with their problems.

The strength-based approach helps the client identify successful solutions to cope with their behavioral health problems and assists communities and individuals to solve their behavioral health service delivery challenges.

Integrated health care is another model or approach to services delivery promoted to improve health-care outcomes and reduce costs. Integrated care is the systematic coordination of physical and behavioral health care. Since physical and behavioral health problems often occur simultaneously, integrating services to treat both will yield the best results and be the most acceptable and effective approach for those being served (Kuramoto, 2014). In addition to service system fragmentation, health literacy affects health outcomes for women and is an issue of increasing concern, as clients are expected to take more responsibility for their own treatment outcomes.

Health Literacy

Title V of the Patient Protection and Affordable Care Act of 2010 is "the degree to which an individual has the capacity to obtain, communicate, process, and understand health information and services in order to make appropriate health decisions" (§5002(b)(21), p. 473). Low health literacy is associated with poorer health outcomes and poorer use of health-care services which is why health literacy and health literacy skills are important and should be developed (Berkman, Sheridan, Donahue, Halpern, & Crotty, 2011). Health literacy skills are used by people to realize their potential in health situations. Anyone who needs health information and services needs health literacy skills to obtain needed behavioral health information and services. Therefore, health literacy is vital to improving behavioral health outcomes for women.

In general, health literacy in America is quite low; approximately 80 million adults have low basic health literacy (Berkman et al., 2011). Basic health literacy allows women to understand information (e.g., diagnostic, treatment, medication, and lifestyle change) provided by a health and behavioral health-care professional (e.g., physician, social worker, nurse practitioner, pharmacist, and rehabilitation specialist). An expanded model of health literacy includes the ability of consumers to generate questions about their health, understand the health information provided, and be able to engage effectively with treatment protocols and procedures. As treatment becomes more complex with the adoption of evidence-based practices, such as new psychopharmacological agents, health literacy will become even more important in the treatment of both physical and behavioral disorders.

Making information useful to particular clients begins with identifying the intended users of the health information and services. Clinicians should evaluate users' understanding before, during, and after providing health information and services. They should also be sure the materials and messages reflect the age, social and cultural diversity, language, and literacy skills of the intended users. Other components to consider are patients' economic contexts, access to services, and life experiences.

Beyond demographics, culture, and language, clinicians must consider the communication capacities of the intended users. Approximately one in six Americans has a communication disorder (Black, Vahratian, & Hoffman, 2015). These individuals require communication strategies tailored to their specific needs. Hence, clinicians should determine what information patients need to know and how they will be used. Clinicians can then pretest the information, receive feedback, and refine the information so that it is useful for the client. Plain language helps patients understand the information communicated to them and how they should proceed or continue with an effective treatment plan.

Implications for Behavioral Health

In the United States, attention to improving women's behavioral health outcomes is recent. Collaborative efforts by federal agencies to effect positive changes and promote progress to improve the overall health of the nation's women and girls were detailed first in *Action Steps for Improving Women's Mental Health* (Office on Women's Health, 2009). This comprehensive groundbreaking report, issued by the National Mental Health Information Center, foreshadow international action plans suggested by the World Health Organization (World Health Organization, 2015, 2017). Among other things, the action steps encouraged nations to "Promote a recovery-oriented, strengths-based approach to treatment for women…" and "Build resilience and protective factors to promote the mental health of girls and women and aid recovery" (Office on Women's Health, 2009, p. iiiiii). These action steps support the goals of the World Health Organization (World Health Organization, 2015, p. 1111) to (1) "provide comprehensive, integrated and responsive mental health and social care services in community-based settings" and (2) "implement strategies for promotion and prevention in mental health." Both of these documents are a response to research that documented low rates of health-care services available to women with behavioral disorders and evidence that medical care for women needed to be improved.

To improve health-care outcomes for women with behavioral health needs, health-care policies and delivery systems around the world need to integrate behavioral and physical health services. Integrated care would not only increase access to behavioral and physical health-care services but could also improve adherence to lifesaving physical and behavioral health treatment.

Despite the increase in life expectancy and development of new medications for more effective treatment of behavioral disorders, women continue to face increased vulnerability and gender-based risks for major depression, PTSD, anxiety, and eating disorders. In addition, women with behavioral disorders face significant social stigma and discrimination.

Overcoming the stigma and discrimination associated with behavioral disorders must become a national priority. Research suggests that women may neglect care for their mental disorder because of stigma and discrimination associated with these

disorders (Corrigan et al., 2014). In an effort to avoid being shamed, or because of self-doubt brought on by shaming, women with a mental or substance use disorder may try to hide their disorder from family or avoid disclosing their symptoms to their doctor. The signs of alcohol and other drug abuse, anorexia, bulimia, anxiety, and depression often are concealed until a life-threatening incident occurs. Therefore, delaying behavioral health care can have serious negative consequences. Designing health-care systems to integrate behavioral health into physical or primary health care could reduce stigma and free women with behavioral disorders from any shame or discrimination from their conditions that they or their family may have experienced. Integrated health care can break through the barrier of stigma and help clients know that help is available without criticism or blame. Although much outreach needs to be done to overcome mental health stigma, the growing adoption of integrated care is making real gains in reducing stigma in the communities we serve.

Lastly, to improve both access and quality of health-care services, a radical transformation of health-care systems will be needed to eliminate disparities in health-care outcomes that currently exist in both behavioral and physical health-care services. To provide essential behavioral health education and disease prevention, an integrated information technology and communications infrastructure is critical. An effective communication infrastructure, at a minimum, would include the integration of medical records, the use of interdisciplinary teams, and use of surveillance systems for tracking health-care progress and treatment outcomes.

Since behavioral disorders begin in childhood and adolescence, successful behavioral health policy and efforts in prevention and early intervention should be targeted toward this critical period. Currently, there is also a growing need for the provision of behavioral health policies and services for women who are incarcerated in jails and prisons as well as the increasing number of women in the military. These at-risk populations create an increased demand for communities, states, and federal health-care systems to provide greater access to effective and affordable behavioral health-care services for women.

As acknowledged by the multiple World Health Organization reports cited in this chapter and discussed in *Action Steps for Improving Women's Mental Health* (2009), there is an opportunity and an urgent need to improve access, utilization, and quality of behavioral health services for women in the United States and worldwide. However, given global budgets for health care and the dramatic reductions in state and federal (financial) support for health, education, and social services in the United States, it remains to be seen if the opportunity will be realized. Nevertheless, the recommendations of the *President's New Freedom Commission* (2003), the *Action Steps for Improving Women's Mental Health* (2009), and the recent National Academies workshop on *Women's Mental Health Across the Life Course Through a Sex-Gender Lens* (National Academies of Sciences, Engineering, & Medicine, 2018) provide a blueprint for progress in improving women's behavioral and physical health that could be realized with adequate leadership and financial support.

In support of integrated care, there is a need for reimbursement policies that provide for care management services which are needed by women with complex

co-occurring disorders. Finally, providing quality health care for women with complex health-care needs requires additional training, collaboration between specialists, and the provision of case management services, which will increase the costs of care and require additional reimbursement policy to pay for these services.

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