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Psychological Distress and Access to Care Among Midlife Women

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Abstract

Objective: The objective of this study is to examine unmet health care needs among midlife women (ages 50-64 years) in the United States by level of psychological distress.

Method: Using data for a nationally representative sample of midlife women ($N = 8,838$) from the 2015-2016 National Health Interview Survey, we estimated odds ratios of reasons for delayed care and types of care foregone by level of psychological distress—none, moderate (moderate psychological distress [MPD]), and severe (severe psychological distress [SPD]).

Findings: More than one in five midlife women had MPD (15.3%) or SPD (5.2%). Women with MPD or SPD had 2 to 5 times higher odds of delayed and 2 to 20 times higher odds of foregone care.

Conclusions: Midlife women with psychological distress have poorer health than those with no distress, yet they are less likely to get needed health care. There is a missed window of opportunity to address mental health needs and manage comorbid chronic conditions to facilitate healthy aging.

Keywords

access to care; mental health; midlife

Introduction

Over one quarter of adult females in the United States are midlife (ages 50-64 years; U.S. Census Bureau, 2018), a life stage of profound change and a critical period for promoting healthy aging. During midlife, women experience major life changes that can affect both physical and mental health. Gender differences in caregiving responsibility may create challenges for women in balancing the demands of parenting minor children, potentially caring for elderly parents or a spouse/partner, maintaining a career, and managing a

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household (Lahaie, Earle, & Heymann, 2013). Alternatively, midlife may be characterized by multiple losses, as adult children leave home, long-term (marriage/marriage-like) relationships are more likely to dissolve through divorce or death, job loss occurs at higher rates with poorer prospects of reemployment, and elderly parents often fall ill or die (Berg, Taylor, & Woods, 2015; Espinola, DeVinney, & Steinberg, 2017; Larkin, 2013). Ensuring women access to needed health care during this time is critical to maintaining their physical and mental health throughout midlife and into older age.

Despite sustained efforts to expand access to affordable health care, many adults experience unmet needs for both mental and physical health services, with cost most often cited as a barrier to seeking care (Mojtabai, 2009; Rowan, McAlpine, & Blewett, 2013). Work/family obligations and transportation have also been cited as reasons for delaying care (Allen, Call, Beebe, McAlpine, & Johnson, 2017). Furthermore, stigma and beliefs about mental health and health care have been cited as reasons for foregone mental health care (Alang, 2015; Walker, Cummings, Hockenberry, & Druss, 2015). Serious mental illness may further inhibit care-seeking, the ability to navigate the health care system, and the likelihood of maintaining a healthy lifestyle. Yet, little is known about the intersection between women's mental health status and their use of health care in midlife.

U.S. surveillance systems estimate that approximately 25% of U.S. adults have a current mental illness, while 50% of U.S. adults will experience a mental illness at some point in their lives (Centers for Disease Control Prevention, 2011). Women are more than twice as likely to have serious mental illness such as depression, anxiety disorders, or posttraumatic stress disorder compared with men (Eaton et al., 2012; Kuehner, 2017; Riecher-Rossler, 2017). Consequences of mental illness range from minor impact on daily activities to debilitating personal, social, and job-related impairments. Mental illness is one of the largest contributors to years lived with disability, second only to musculoskeletal disorders, with mental and behavioral disorders accounting for 27.1 years lived with disability (Murray et al., 2013) and US\$24 billion in disability benefits paid each year (Centers for Disease Control Prevention, 2011). Financial costs associated with mental illness exceed US\$300 billion annually, including US\$100 billion in health care expenditures (Centers for Disease Control Prevention, 2011). In addition to the direct costs of care, mental illness exacerbates chronic conditions and chronic disease morbidity, leading to substantial indirect costs (Centers for Disease Control Prevention, 2011; Insel, 2008). Due to experienced or anticipated stigma from health care providers, however, individuals with mental illness may be reluctant to seek care even for physical conditions, putting them at further risk for unmet physical and mental health needs (De Hert et al., 2011; Thornicroft, Rose, & Kassam, 2007).

Access to health care during midlife is critical for early identification and treatment of chronic health conditions, especially those (including mental illness) more likely to emerge during this life stage. Around 70% of midlife adults have at least one chronic condition, and nearly half have two or more (Smolka, Purvis, & Figueiredo, 2009). Women have higher prevalence of multiple (comorbid) chronic conditions, with cardiovascular disease, diabetes, arthritis, and depression more likely to emerge or exacerbate during this period (Dillaway & Lysack, 2010). Women also have unique biological and hormonal factors that contribute to both physical and mental health conditions (Ostan et al., 2016; Riecher-Rossler, 2017), as

well as differential patterns of health care access, utilization, and treatments prescribed (Cameron, Song, Manheim, & Dunlop, 2010). Understanding the relationship between mental illness and health care disparities that occur specifically in midlife women with psychological distress is crucial to identifying barriers to care in this vulnerable population and addressing a vital gap in our knowledge of health and health care across the life course.

The purpose of this article is to address this gap by examining mental health status and unmet health care needs (reasons for delayed care and types of foregone care) among midlife women using a measure of nonspecific psychological distress (a global measure quantifying psychological and somatic symptoms that are common to many mental disorders but not specific to any particular disorder; McVeigh et al., 2006). The aims of this study are threefold: (a) to document differences in demographic characteristics among midlife women by level of psychological distress, (b) to identify differences in health status among midlife women by level of psychological distress, and (c) to examine delayed and foregone care among midlife women by level of psychological distress.

Methods and Materials

Data Source and Target Population

Data were from a nationally representative sample of midlife women, ages 50 to 64 years ($n = 9,340$, unweighted), who participated in the 2015-2016 National Health Interview Survey (NHIS). The NHIS is an annual household survey of the health and health care of the U.S. noninstitutionalized, civilian population that uses a multistage probability sample designed to be representative of the national U.S. population (Gentleman & Pleis, 2002; National Center for Health Statistics, 2017). Our analytic sample included midlife women who had complete data for all key variables ($N = 8,838$, unweighted; 95% of the total). Some differences between those included and excluded were noted. Those included were more likely to have psychological distress, to be non-Hispanic White, married or living with a partner, and less likely to live in poverty. There were no differences in age group, education, or employment status. Data were deidentified and publicly available, which do not meet the requirements for human subjects' research, so were exempt from review by the University of Minnesota institutional review board (IRB).

Measures

Our theoretical framework draws on an updated version of Andersen's Behavioral Model of Health Care Utilization (Andersen, 1995; Andersen & Aday, 1978). This model has been used to explain use of health services including mental health care (Babitsch, Gohl, & von Lengerke, 2012; Dhingra, Zack, Strine, Pearson, & Balluz, 2010). The model posits that use of health services is a function of the predisposition to use services, factors that enable use of services, and the need for health services. Predisposing factors include demographic variables, social status, and health beliefs. Enabling factors include insurance coverage, usual source of care (USOC), and income. Need factors include perceived health care needs or indicators of poor health status. All measures in the NHIS were developed and tested by the National Center for Health Statistics for use in population surveys. As this is a secondary analysis, we were constrained to the measures available.

Mental Health was defined using the K6 population screening tool. The K6 scale of nonspecific psychological distress was developed for use in the NHIS as a population indicator of serious mental illness (Kessler et al., 2002). It comprises six questions asking respondents how often they experienced symptoms of psychological distress in the past 30 days (i.e., felt sad, nervous, hopeless, restless, worthless, or that everything was an effort). Response options were 1 = all of the time, 2 = most of the time, 3 = some of the time, 4 = a little of the time, and 5 = none of the time. Responses were reverse coded from 0 to 4 and summed to yield an overall K6 score ranging from 0 to 24, with higher scores indicating greater severity of psychological distress (Kessler et al., 2003; Pirraglia, Hampton, Rosen, & Witt, 2011). We used cut-points 0 to 5 for no psychological distress, 6 to 12 for moderate psychological distress (MPD), and 13 to 24 for severe psychological distress (SPD), which were previously identified as the optimal K6 cut-points in studies with clinical diagnoses (Kessler et al., 2003; Prochaska, Sung, Max, Shi, & Ong, 2012). The K6 has demonstrated good prediction of mood disorders, such as depression and anxiety, and SPD is highly correlated with serious mental illness in validation studies. It is a useful population screen, as it does not require a doctor visit, captures mild and severe symptoms, and specifies the timing of distress (within 30 days of the interview; Andrews & Slade, 2001; Cairney, Veldhuizen, Wade, Kurdyak, & Streiner, 2007; Furukawa, Kessler, Slade, & Andrews, 2003). A follow-up question to the K6, for those who screen positive for psychological distress (K6 ≥ 6), asks how much these symptoms interfered with life in the past 30 days, with response options of a lot, some, a little, or none.

Health care outcomes.—We examined two types of health care outcomes: delayed care and foregone care. *Delayed care* includes a series of indicators representing reasons for delayed care in the past year: cost, unable to get appointment, limited office hours, too long of a wait in the waiting room, unable to get through on the phone, or transportation issues. *Foregone care* is represented by a set of variables indicating types of care needed but not received due to cost: medical, dental, mental health, prescription medications, eyeglasses, medical specialist, or follow-up care.

Covariates.—Following Andersen's model, covariates represent (sociodemographic) variables, need (health status) variables, and enabling (health care access) variables. Sociodemographic variables included age (50-54, 55-59, 60-64 years), race/ethnicity (non-Hispanic White, Black, American Indian/Alaska Native [AIAN] Asian or Pacific Islander, and Hispanic), educational attainment (less than high school, high school diploma or general educational development [GED], some college, college degree), marital status (married, separated/divorced/widowed, never married, living with partner), employment (employed, unemployed, not working due to health or disability, not working for some other reason, retired), and poverty (below 100% of the poverty threshold vs. above). Health care access variables included insurance (covered vs. not covered) and USOC (has a USOC vs. no USOC). Health status variables included self-reported health (fair/poor health vs. good/very good/excellent), functional limitations (limited in any way vs. not limited), and multiple chronic conditions (MCC): two or more of diabetes, hypertension, coronary heart disease, stroke, cancer, arthritis, hepatitis, kidney disease, asthma, or chronic obstructive pulmonary disease.

Analysis

First, we examined differences in sociodemographic and health status characteristics by level of psychological distress. Next, we examined differences in health care access by level of psychological distress using cross-tabulations with design-based *F* tests. Finally, we used a series of logistic regression models to examine differences in reasons for delayed care and types of foregone care by level of psychological distress adjusted for the covariates listed above. Analyses were conducted with Stata SE version 15 and accounted for unequal probability of selection and the complex sample design of NHIS (“Stata Statistical Software; Release 13.0,” 2013).

Results

Population Characteristics and Psychological Distress

Overall, more than one in five midlife women had MPD (15.3%) or SPD (5.2%). Table 1 shows the sociodemographic characteristics of the study population and differences by level of psychological distress for each characteristic. There were statistically significant differences across all characteristics with the exception of age. Non-Hispanic Black, AIAN, and Hispanic women were overrepresented in the SPD group. Women with SPD tended to be less educated, less likely to be married or living with a partner, less likely to be employed, and more likely to be living in poverty. Over half of women with SPD and 28% of women with MPD were not working due to health or disability, compared to 8% of women with no distress.

Health Status

Table 2 shows significant differences in the health status of midlife women by level of psychological distress for every health status measure, with the exception of ever having had cancer. Midlife women with MPD and SPD were significantly more likely to report fair or poor health and that they are functionally limited in some way. They were also more likely to report any of 10 specific chronic conditions (top four shown) and to have two or more comorbid health conditions.

Mental health symptoms were pronounced among women with SPD and MPD. Table 2 shows the prevalence of reporting that each of the six symptoms was experienced all of the time or most of the time in the past 30 days. Among women with SPD, 45% to 75% reported each of the six symptoms during this time. In addition, there was a positive association between the level that symptoms of psychological distress interfered with life in the past 30 days and the severity of psychological distress. Over half (58.6%) of women with SPD reported that symptoms interfered with life a lot compared with 10.7% of those with MPD.

Health Care Access

Compared to women with no psychological distress, midlife women with MPD or SPD were significantly less likely to report private health insurance coverage, more likely to report public (Medicaid or Medicare) coverage, and more likely to be uninsured (Table 3). Overall, 22% of all women reported at least one reason for delayed care; 52% of women with SPD had at least one compared with 17% of those with no distress. Cost was the most common

reason for delaying care at any level of psychological distress; however, this varied by level of psychological distress, with 20% of women with MPD and nearly a third (30%) of women with SPD reporting delayed care due to cost, compared with only 8% of women with no psychological distress.

Overall, 23% of all women reported at least one type of foregone care; 62% of women with SPD had at least one compared with 17% of those with no distress. Dental care was the most often type of care foregone at any level of psychological distress. Yet, it is substantially higher for those with MPD (28.6%) or SPD (43.1%) compared to those with no distress (9.4%). Among midlife women with SPD, 28.2% needed but did not get medical care, 24% did not get medical specialist care, and 20% did not get follow-up care. Mental health care was the least common type of foregone care; 17.5% of women with SPD needed but did not get mental health care compared with 6.9% of women with MPD, and <1% of those with no psychological distress.

Delayed Care

Table 4 shows the adjusted odds ratios (AOR) for delayed care among midlife women by level of psychological distress. For all six reasons for delayed care, women with MPD or SPD were significantly more likely to have delayed care compared to women with no psychological distress. In most cases, women with MPD had similarly high odds of delayed care as women with SPD when compared to those with no distress. The largest difference was for delayed care because they had to wait too long in the doctor's office, where women with MPD had nearly 3 times higher odds (AOR = 2.8, 95% confidence interval [CI] = [1.9, 4.1], and women with SPD had more than 5 times higher odds (AOR = 5.2, 95% CI = [2.7, 9.9]) than women with no distress. Women with SPD also had nearly 4 times higher odds of delayed medical care (AOR = 3.7, 95% CI = [1.5, 8.8]) due to transportation issues compared to women with no psychological distress, while those with MPD were not significantly different from women with no psychological distress.

Foregone Care Due to Cost

Table 5 shows the odds ratios of foregone care due to cost by level of psychological distress. For all seven types of care examined, midlife women with MPD or SPD were significantly more likely to have foregone care due to cost compared to those with no psychological distress. Notably, women with SPD had significantly higher odds of needing but not getting mental health care (AOR = 19.7, 95% CI = [10.2, 37.8]), follow-up care (AOR = 5.4, 95% CI = [3.2, 9.2]), and specialist care (AOR = 5.4, 95% CI = [3.3, 8.8]). Women with MPD had between 2 and 6 times higher odds of all types of foregone care due to cost compared to women with no distress.

Discussion

Our study fills an important gap in the literature by documenting health care disparities at the intersection of midlife and mental health. More than 20% of midlife women have MPD or SPD. Moreover, midlife women with psychological distress have considerable unmet health care needs compared to women with no distress. Women with psychological distress

also have poorer physical health and mental health symptoms that interfere with life, yet they are the most likely to have delayed or foregone care. Notably, more than half of women with SPD report any reason for delayed care (52%) or type of foregone care (62%) in the past year, and they have significantly higher odds of reporting each reason for delaying care and each type of foregone care.

Women with psychological distress are sociodemographically different from those with no distress. Similar to other studies, they are characterized by considerable social disadvantage, such as low educational attainment, unemployment, and poverty, which are all associated with health status and access to care (Kim, Ford, Chiriboga, & Sorkin, 2012; Walker et al., 2015; Weissman et al., 2017). Importantly, we found that more than half of midlife women with SPD were out of work due to health or disability compared with 8% of midlife women with no distress. It is not clear from our data whether they were out of work due to mental distress, other comorbid health conditions, or both. In any case, being out of work can lead to social isolation, financial insecurity, loss of health insurance, and a lost sense of purpose, which can further compromise both health and well-being during a crucial period of transition into older age.

Indicators of health status such as fair or poor health, chronic conditions, and functional limitations by level of psychological distress were strikingly different. In our midlife sample, 70% of midlife women had at least one chronic condition, which is the same as the estimated rate for the nation (Smolka et al., 2009). More than one third of all midlife women had MCC, whereas two thirds of women with SPD had MCC. In contrast, a previous study of younger women found only 10% had MCC, compared with slightly more than one third of women with SPD. The prevalence of functional limitations we found among midlife women is higher than the 20% of all midlife adults reported previously (Smolka et al., 2009). Importantly, functional limitations are associated with significantly higher health care costs, especially in combination with MCC (Hayes et al., 2016). This further underscores the need for age-specific health care to manage risk factors for chronic conditions, provide early detection and treatment of chronic conditions, and address mental health needs before comorbid physical and mental health conditions lead to functional limitations.

Midlife women with psychological distress face considerable barriers to accessing needed health care compared to women with no psychological distress. We found notable differences in foregone mental health care. Yet, mental health was the least reported type of care foregone due to cost. It may be that women with psychological distress are better able to access mental health care due to the Mental Health Parity and Addiction Equity Act (MHPAEA) and the Patient Portability Affordable Care Act (ACA). Alternatively, they may not perceive the need for mental health care if they do not have a mental health diagnosis. It is also possible that there is perceived need for mental health care, but it is foregone due to reasons other than cost. Previous studies suggest that beliefs about mental health and health care, along with fears of stigma, are other reasons that those with serious mental illness do not access mental health services (Alang, 2015; Walker et al., 2015).

Previous research on mental health and access to health care reports mixed findings. We found significantly less access to mental health care by level of psychological distress,

which is consistent with previous studies (Alang, 2015; Mojtabai, 2009; Walker et al., 2015; Weissman et al., 2017). In addition, we found less access of other types of health care, including general medical care, follow-up care, and specialty care, by level of psychological distress. In contrast, other studies suggest that those with SPD are more likely to have excess health care utilization, as well as greater perceived unmet health care needs (Fogarty, Sharma, Chetty, & Culpepper, 2008; Weissman et al., 2017). Specifically, those with SPD are likely to have multiple health care visits and inappropriate use of emergency department care due to their inability to assess their own symptoms and actual need for health care or due to psychosomatic symptoms in the absence of a mental illness diagnosis (Fogarty et al., 2008).

Differences in delayed and foregone care are significant even after adjusting for predisposing, enabling, and need factors. However, it is unclear whether delays in care are associated with health care delivery systems, provider-level factors, psychological distress itself, or other structural barriers like cost and transportation. One previous study reported that 86% of uninsured adults with serious mental illness reported structural barriers to treatment, compared with 67% of those with private insurance (Walker et al., 2015). This notable difference suggests that these barriers to care are profound regardless of insurance status. In contrast, 58% of patients with private insurance reported attitudinal barriers to mental health care (e.g., did not think treatment would help, concerns about medication) compared with only 29% of the uninsured (Walker et al., 2015).

Implications for Policy and/or Practice

Foregone mental health care due to cost suggests gaps in mental health parity laws, such as the MHPAEA, which was intended to make mental health care coverage comparable with other medical care coverage. MHPAEA, however, does not guarantee adequate mental health care coverage in all circumstances. For example, mental health parity only requires comparability with medical care coverage within a specific plan. If medical care coverage is limited, mental health coverage will be too. There are likely system-, provider-, and patient-related factors that contribute to health care disparities, many of which the MHPAEA and Medicaid expansions under ACA do not comprehensively address. Taking a “health in all policies” approach to mental health care may be needed to address barriers to care that stem from lack of transportation, stable housing, education, work and family obligations, and access to general social safety nets (Mechanic & Olfson, 2016). Midlife women with psychological distress may be at particular risk of losing health insurance, as their mental health status is strongly associated with being out of work. Job loss may lead to loss of employer-sponsored health insurance and leave them with limited options. Medicaid expansion policies have not been enacted in all states, leaving a large portion of adults with no dependent children, which is more likely in midlife as children age, ineligible for Medicaid altogether. Where enacted, Medicaid expansions have increased health care coverage, yet they have not increased the use of mental health services (Golberstein & Gonzales, 2015). In addition, applying for Medicaid or Medicare coverage on the basis of disability requires substantial effort that women with mental illness may not have the ability to navigate.

Access to all types of health care, including mental health care, must be addressed. Cost was the most often cited barrier to care, which could be due to uninsurance or underinsurance, high deductible health plans, or lack of in-network providers. This is especially important given the limited network of providers that accept Medicaid (one third of all medical providers in the United States do not; Decker, 2012) or Medicare assignment (U.S. Centers for Medicare & Medicaid Services, 2017), forms of public insurance that nearly two thirds of our midlife population had. In addition, this varies by specialty, with only 64% of psychiatrists accepting new patients with Medicare and 44% accepting Medicaid (Boccuti, Swoope, Damico, & Neuman, 2013). The second most often cited barrier to care was not being able to get an appointment soon enough. This likely refers to providers of all types, but may be especially salient for mental health care. Specifically, there is a severe shortage of mental health providers (Mechanic & Olfson, 2016; Olfson, 2016). Incentives to increase the number of people pursuing mental health professions could ameliorate long waits to get appointments, which women with psychological distress in our study were more likely to cite as a reason for delayed care. Mental health providers could also be more accessible through expanding the range of providers that are covered in network, especially by public insurers such as Medicaid and Medicare, as well as by diversifying the settings where mental health care is provided (e.g., primary care clinics or community settings), which could partially address transportation, referral, and other logistical issues.

Creative solutions to address access to early and adequate screening and treatment for both physical and mental health conditions during midlife are essential to easing the burden of ill health and unhealthy aging on midlife adults and their families, as well as relieving an overloaded health care system and reducing excess health care costs (Mechanic & Olfson, 2016). Primary care providers may lack the necessary training to address serious mental illness. An adequate supply of mental health providers at all levels (e.g., psychiatrist, psychologist, social workers, licensed counselors) and easier means of referral could ease the burden on primary care while increasing the likelihood that those with psychological distress get needed care. In particular, clinicians who provide preventive health services to midlife and aging women should consider incorporating basic screening for psychological distress and other mental health conditions into routine clinical evaluations, as well as at specialty care visits or in urgent care and emergency care settings. Although some providers do screen patients at annual visits, the overall rate of screening for depression remains low (Akincigil & Matthews, 2017). Moreover, depression is only one of many mental illnesses that afflict midlife adults. Mental health providers could also conduct cardiometabolic screening and referral, given a higher incidence of metabolic dysfunction in patients with SPD, which can lead to chronic diseases like cardiovascular disease, diabetes, and stroke (Viron & Stern, 2010).

Our finding that midlife women with SPD were disproportionately out of work due to health or disability was striking. Workplaces can contribute to psychological distress through high stress jobs, work overload, poor relationships between employees and supervisors, and unhealthy physical and mental health environments (Kreitzer, Delagran, & Uptmor, 2014). They can also serve as a potential safety net for intervening. Workplace wellness programs are increasingly available to enhance both physical and mental health of employees as well as improve organizational well-being (Kreitzer et al., 2014). Early identification using

workplace wellness programs to screen for psychological distress, in addition to screening for risk factors for chronic disease and deficiencies in healthy lifestyle, could be used to connect those with mental distress to employee support programs, disability services, or referral to health care.

Efforts to increase awareness and decrease stigma associated with mental illness in the workplace are sorely needed to enhance both knowledge and compassion in supervisors to increase disclosure of mental health problems in the workplace (Brohan et al., 2012), which in turn can lead to accommodations that allow those struggling with mental illness to remain employed. Workplace policies could also provide assistance for employees in navigating the use of Family and Medical Leave Act (FMLA) and disability benefits, communicating between providers and human/disability resources, strategies for preventing discrimination due to mental illness, and training for supervisors on how to make appropriate and sincere efforts to provide reasonable accommodations. Taken together, these workplace policies may facilitate the use of needed mental health care through workplace screening and provision of compensated time for medical visits that enable workers with psychological distress to remain employed, allowing them to keep their needed health care coverage and maintain a sense of purpose. Continued employment is also critical to reducing social isolation, which is known to impact health, especially for midlife women who do not have children, a significant other, or a network of friends to provide social support (Berkman, Glass, Brissette, & Seeman, 2000; Kreitzer et al., 2014; Yang et al., 2016).

Limitations

The findings must be considered in light of potential limitations. First, the NHIS restricts its sample to the noninstitutionalized population, so we may be missing midlife women institutionalized with serious mental illness or those who have already moved into senior or assisted living. However, if institutionalized, these women are more likely to be receiving needed care. Second, our psychological health measure, the K6, measures nonspecific psychological distress, which focuses on depression and anxiety symptoms, and thus may not capture all women with mental illness. But, as the K6 is based on self-report of symptoms, it is more likely to capture women with current or recent serious psychological distress than using reports of ever having a clinical diagnosis. Third, NHIS questions about foregone care ask specifically about unmet health care needs due to cost. It is likely that women with psychological distress also had unmet health care needs for other reasons. Thus, unmet needs may have been underestimated due to the focus on cost as the sole barrier. In addition, we only examined self-reported barriers to care and foregone care due to cost, which is not a direct representation of the actual care received. We acknowledge that our findings do not reflect health care utilization itself. However, we do report substantial perceived barriers, which are likely associated with limited access and utilization. Fourth, the recall period for psychological distress is 30 days, while the recall period for delayed and foregone care is the past 12 months. Therefore, we cannot be certain that findings on past delayed or foregone care are related to current psychological state. However, serious mental illness is rarely intermittent. Women classified with SPD are likely to have been in this state for more than just the 30-day reference period. Finally, the cross-sectional nature of these data does not allow us to infer a causal relationship between SPD and unmet health care

needs. While the strong associations that we found suggest that psychological distress affects access to health care, it is also possible that barriers to care and foregone care contribute to psychological distress.

Conclusion

Midlife women with psychological distress face considerable structural barriers to accessing health care. Even after adjusting for predisposing, enabling, and need factors, midlife women with MPD or SPD are more likely to delay or forego needed health care than their counterparts with no psychological distress. This is a missed window of opportunity to address mental health issues along with identifying and managing risk factors for chronic conditions to facilitate healthy aging. There are serious unmet health care needs among midlife women with mental health issues and greater attention to both the physical and psychological health of midlife women is warranted. Approaches to both health policy and practice need to consider that women with psychological distress may have difficulty navigating the health care system or advocating for themselves. Despite recent policy advances such as the Affordable Care Act, additional efforts by policy makers and providers are crucial to address the potentially complex health care needs of this population at a critical stage of the life course.

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Table 1. Characteristics of Midlife Women (50-64 Years) by Level of Psychological Distress, 2015-2016.

	Nonspecific psychological distress					Total	p value
	None K6 < 6	Moderate K6 = 6-12	Severe K6 13				
Weighted population	24,425,102	4,709,893	1,590,752	30,725,746			
Row % of weighted population	79.5%	15.3%	5.2%	100%			
Age group							
50-54 years	34.5%	36.1%	35.9%	34.8%		.074	
55-59 years	34.3%	30.9%	38.6%	34.0%			
60-64 years	31.2%	33.0%	25.4%	31.2%			
Race/ethnicity							
White	70.7%	68.4%	70.9%	70.4%		<.001	
Black	11.9%	13.1%	13.1%	12.2%			
AIAN	0.7%	0.8%	1.1%	0.7%			
Asian	5.8%	3.1%	1.2%	5.1%			
Hispanic	10.9%	14.6%	13.7%	11.6%			
Educational attainment							
Less than a high school diploma	9.2%	16.1%	24.1%	11.0%		<.001	
High school diploma	23.1%	28.8%	33.8%	24.5%			
Some college	17.2%	17.6%	17.2%	17.2%			
College degree	50.6%	37.6%	25.0%	47.3%			
Marital status							
Married	65.6%	48.9%	44.3%	61.9%		<.001	
Separated, divorced, widowed	23.3%	35.3%	41.5%	26.1%			
Never married	7.2%	9.9%	9.6%	7.7%			
Living with partner	4.0%	5.9%	4.6%	4.3%			
Employment status							
Employed	66.8%	49.3%	23.4%	61.9%		<.001	
Unemployed	2.7%	4.9%	6.2%	3.2%			
Not working, other	11.0%	10.6%	12.4%	11.0%			
Retired	11.5%	7.4%	6.8%	10.6%			

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Nonspecific psychological distress					
	None K6 < 6	Moderate K6 = 6-12	Severe K6 = 13	Total	p value
Not working, health or disability	8.1%	27.8%	51.2%	13.3%	
Poverty status					
At or above 100% FPL	92.8%	82.2%	67.1%	89.9%	<.001
Below 100% FPL	7.2%	17.8%	32.9%	10.1%	

Note: AIAN = American Indian/Alaska Native; FPL = federal poverty level.

Table 2. Health Status of Midlife Women (50-64 Years) by Level of Psychological Distress, 2015-2016.

	Nonspecific psychological distress				Total	p value
	None K6 < 6	Moderate K6 = 6-12	Severe K6 13			
Self-reported health status						
Excellent/very good/good	88.9%	62.3%	36.6%	82.1%	<.001	
Fair/poor	11.1%	37.7%	63.4%	17.9%		
Any functional limitation						
No limitation	56.3%	24.7%	10.8%	49.1%	<.001	
Limited in any way	43.7%	75.3%	89.2%	50.9%		
Ever told had chronic health condition ^a						
Hypertension	37.1%	47.9%	59.1%	39.9%	<.001	
Arthritis	33.2%	53.6%	62.5%	37.8%	<.001	
Diabetes	13.8%	24.0%	27.1%	16.1%	<.001	
Cancer	12.2%	14.7%	15.0%	12.7%	.076	
Chronic obstructive pulmonary disease	3.2%	9.6%	18.6%	5.0%	<.001	
Multiple chronic health conditions						
<2 chronic conditions	67.5%	45.1%	30.9%	62.2%	<.001	
2 or more chronic conditions	32.5%	54.9%	69.1%	37.8%		
Experienced symptoms all or most of the time, past 30 days ^d						
Felt everything was an effort	0.9%	20.3%	73.8%	7.6%	<.001	
Felt restless/fidgety	0.7%	19.8%	72.4%	7.4%	<.001	
Felt nervous	0.5%	18.2%	72.4%	6.9%	<.001	
Felt so sad nothing cheers you up	0.4%	8.3%	56.1%	4.5%	<.001	
Felt hopeless	0.0%	3.8%	49.9%	3.2%	<.001	
Felt worthless	0.0%	3.1%	45.0%	2.8%	<.001	
Symptoms interfered with life						
None	100.0%	35.1%	2.7%	85.1%	<.001	
A little	0.0%	24.3%	9.0%	4.2%		
Some	0.0%	29.9%	29.7%	6.1%		

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Nonspecific psychological distress					
	None K6 < 6	Moderate K6 = 6-12	Severe K6 13	Total	<i>p</i> value
A lot	0.0%	10.7%	58.6%	4.7%	

^aCategories not mutually exclusive.

Health Care Access of Midlife Women (50-64 Years) by Level of Psychological Distress, 2015-2016.

Table 3.

Insurance types ^a	Nonspecific psychological distress				Total	p value
	None K6 < 6	Moderate K6 = 6-12	Severe K6 13			
Private	79.8%	58.2%	39.6%	74.4%	<.001	
Medicaid	8.8%	21.5%	31.4%	11.9%		
Medicare	5.4%	16.1%	30.8%	8.3%		
Usual source of care						
Has a usual source	94.4%	93.1%	91.8%	94.1%	.103	
No usual source	5.6%	6.9%	8.2%	5.9%		
Delayed care in past year ^a						
Due to cost	7.9%	20.0%	29.7%	10.9%	<.001	
Couldn't get appointment soon enough	5.8%	14.4%	20.8%	7.9%	<.001	
Wait too long in doctor's office	3.4%	10.1%	17.1%	5.1%	<.001	
Couldn't get through on phone	2.2%	7.3%	9.4%	3.4%	<.001	
Office not open when you could go	2.3%	5.6%	9.0%	3.2%	<.001	
No transportation	1.6%	5.0%	15.3%	2.8%	<.001	
Needed but did not get due to cost in past year ^a						
Dental care	9.4%	28.6%	43.1%	14.1%	<.001	
Eyeglasses	6.4%	20.6%	36.9%	10.2%	<.001	
Prescription medicine	5.9%	17.6%	33.1%	9.1%	<.001	
Medical care	5.4%	15.5%	28.2%	8.1%	<.001	
Medical specialist	3.4%	12.9%	24.0%	5.9%	<.001	
Follow up care	2.8%	9.4%	20.1%	4.7%	<.001	
Mental health care	0.9%	6.9%	17.5%	2.6%	<.001	

^aCategories not mutually exclusive.

AOR of Uninsurance and Delayed Care for Midlife Women (50-64 Years) by Level of Psychological Distress (Referent: No Distress), NHIS 2015-2016.

Table 4.

	AOR	LCI	UCI	p value
Delayed due to				
Medical care delayed due to cost, past 12 months				
Moderate distress	2.0	1.5	2.6	<.001
Severe distress	2.9	2.0	4.4	<.001
Delayed care because couldn't get through by phone				
Moderate distress	3.0	1.9	4.8	<.001
Severe distress	2.7	1.4	5.4	.004
Delayed care because couldn't get appointment soon enough				
Moderate distress	2.3	1.7	3.1	<.001
Severe distress	3.2	1.9	5.2	<.001
Delayed care because waited too long in doctor's office				
Moderate distress	2.8	1.9	4.1	<.001
Severe distress	5.2	2.7	9.9	<.001
Delayed care because doctor's office not open				
Moderate distress	2.1	1.4	3.2	.001
Severe distress	3.3	1.6	6.7	.001
Delayed care because lacked transportation				
Moderate distress	1.7	0.9	3.2	.077
Severe distress	3.7	1.5	8.8	.004

Note. All models adjusted for age, race/ethnicity, education, marital status, employment status, poverty, health status, multiple chronic conditions, functional limitations, insurance status, and USOC. AOR = adjusted odds ratios; NHIS = National Health Interview Survey; LCI = lower confidence interval; UCI = upper confidence interval; USOC = usual source of care.

Table 5.

AOR of Foregone Care Due to Cost for Midlife Women (50-64 Years) by Level of Psychological Distress (Referent: No Distress), NHIS 2015-2016.

	AOR	LCI	UCI	<i>p</i> value
Needed but couldn't afford medical care, past 12 months				
Moderate distress	1.9	1.3	2.6	<.001
Severe distress	4.1	2.7	6.4	<.001
Needed but couldn't afford follow-up care, past 12 months				
Moderate distress	2.0	1.3	3.1	<.001
Severe distress	5.4	3.2	9.2	<.001
Needed but couldn't afford to see a specialist, past 12 months				
Moderate distress	2.4	1.6	3.6	<.001
Severe distress	5.4	3.3	8.8	<.001
Needed but couldn't afford mental health care, past 12 months				
Moderate distress	6.1	3.3	11.2	<.001
Severe distress	19.7	10.2	37.8	<.001
Needed but couldn't afford prescription medicines, past 12 months				
Moderate distress	2.2	1.6	2.9	<.001
Severe distress	4.1	2.7	6.3	<.001
Needed but couldn't afford dental care, past 12 months				
Moderate distress	2.6	2.0	3.4	<.001
Severe distress	4.9	3.3	7.4	<.001
Needed but couldn't afford eyeglasses, past 12 months				
Moderate distress	2.4	1.8	3.3	<.001
Severe distress	5.4	3.4	8.4	<.001

Note. All models adjusted for age, race/ethnicity, education, marital status, employment status, poverty, health status, multiple chronic conditions, functional limitations, insurance status, and USOC. AOR = adjusted odds ratios; NHIS = National Health Interview Survey; LCI = lower confidence interval; UCI = upper confidence interval; USOC = usual source of care.