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Mental health treatment preferences and challenges of living with multimorbidity from the veteran perspective

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Abstract

Objective—To explore middle-aged and older veterans' current disease-management practices, mental health treatment preferences, and challenges of living with multiple chronic health conditions (i.e., multimorbidity).

Methods—Semi-structured qualitative interviews and self-report measures were collected from 28 middle-aged and older (50 years of age or older) veterans with multimorbidity.

Results—Our sample of veterans with multimorbidity was, on average, mildly depressed and anxious with elevated stress and disability. Veterans acknowledged the interaction of physical and emotional symptoms, which caused greater difficulty with health care management and daily functioning. Veterans had many concerns regarding their physical and emotional health conditions, such as continued disease progression and the addition of other emotional and physical health complications. Veterans also identified specific self-care approaches for disease management (e.g., medication, healthy lifestyle practices, and psychological stress management techniques), as well

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as barriers to engaging in care (e.g., money, transportation, and stigma). Participants preferred a combination of medication, psychotherapy, and healthy lifestyle practices for mental health treatment. The majority of participants (88.5%) agreed that these mental health treatments would be beneficial to integrate into disease management for older veterans with multimorbidity. Lastly, veterans provided an array of recommendations for improving Veteran's Administration services and reducing mental health stigma.

Conclusions—These findings provide support for patient-centered approaches and integrated mental and physical health self-management in the Veteran's Administration for middle-aged and older veterans with multiple chronic conditions.

Keywords

multimorbidity; veteran; self-management; mental health; treatment preferences

A significant proportion of the rising numbers of older adults are veterans, with an estimated 9.3 million veterans ages 65 and older in the USA (U.S. Department of Veterans Affairs, 2014). Unfortunately, older veterans are particularly vulnerable to mood disorders and chronic health conditions compared to the general population (Chatterjee *et al.*, 2009; blinded for review). There is a significant bidirectional and additive relationship between depression and multimorbidity which negatively impacts quality of life and health outcomes in veterans. For instance, veterans are more likely than nonveterans to report fair or poor health (16 vs 10%) and to experience multimorbidity (19 vs 13%; Kramarow and Pastor, 2012). The mean number of chronic physical health conditions in older veterans is 5.5 ± 2.6 for men and 5.1 ± 2.6 for women, with the prevalence of most individual diseases and the total number of conditions increasing with advancing age (Steinman *et al.*, 2012). Moreover, according to the Veteran's Administration's National Registry for Depression, 11% of older veterans (age ≥ 65) have a diagnosis of major depressive disorder, a rate more than twice that found in the general population of older adults. As older veterans are particularly vulnerable to mood and chronic health conditions, incorporating veterans' perspective in the development and delivery of integrated mental and physical health treatment approaches is essential to improving patient outcomes.

Chronic health conditions and mood disorders rarely occur in isolation (Katon, 2011), and having either a health condition or mood disorder is a risk factor for developing the other (Gunn *et al.*, 2012; Smith *et al.*, 2014). The co-occurrence of depression and multimorbidity is associated with increased symptom burden, additive functional impairment, worse quality of life, poor adherence to health self-management regimens, and negative impact on the courses of medical illnesses, including morbidity and mortality (Katon, 2011), all of which subsequently lead to greater medical utilization and costs (Yoon *et al.*, 2014). Within the VA, veterans with multiple chronic physical and mental health conditions account for $13.7 billion total health care costs (Yu *et al.*, 2003). As such, the rapidly growing number of older veterans with the co-occurrence of depression and multimorbidity will affect the nation's public health care system by placing excessive demands on the provision of mental health care and aging-related services.

Despite national and VA initiatives to research and understand the needs of older veterans with multimorbidity (National Institute on Aging, 2007; Zeiss and Karlin, 2008), we lack an in-depth understanding of the current disease-management practices, mental health-treatment preferences, and challenges of living with multimorbidity from veterans' perspective. To guide the development of patient-centered treatment approaches for this complex population, the purpose of this study was to begin to fill this gap in the literature by conducting qualitative interviews with middle-aged and older veterans with multimorbidity. No a priori hypotheses were proposed for the qualitative analyses.

Methods

Patient population

Participants were middle-aged and older veterans who were receiving care through the primary care and/or behavioral health clinics at VA Pittsburgh Healthcare System (VAPHS). The minimum age for inclusion in the study was 50 years. The minimum age was established based on inclusion criteria for similar VA studies (Kasckow *et al.*, 2014) to increase recruitment and to facilitate intake of younger veterans with greater medical comorbidity that are at-risk for needing mental health treatment later in life. To recruit veterans with multimorbidity, the participants were required to have a score of at least 2 in three or more organ systems on the Cumulative Illness Rating Scale for Geriatrics (CIRS-G; Linn *et al.*, 1968), with a score of 2 indicating moderate disability or morbidity that requires "first line" therapy. The participants were excluded if they had cognitive impairments (mini-mental state examination (MMSE) ≤ 24; Kurlowicz and Wallace, 1999), had deficits in language skills, or had a history of bipolar disorder, other chronic psychotic disorders, or neurodegenerative disorders.

In a meta-analysis of 560 qualitative research studies, Mason (2010) reported that the mean sample size was 31 participants. However, the appropriate sample size for qualitative research is also dependent on many factors, and the ultimate goal should be thematic saturation. Based on Mason's (2010) findings, it was expected that 35 participants would be an acceptable sample size to reach thematic saturation. We had to stop enrolling participants at 34 because of budget constraints, and six recordings were deleted during the upload process. Therefore, final analyses were completed with data from 28 participants.

Recruitment

Participants were recruited between July and August 2015 through patient chart reviews and referrals from primary care and behavioral health providers. As an incentive for participation, each participant was given $65 upon completion of the self-report measures and qualitative interview.

Measures

Self-report assessments—Screening of the participants was completed with the CIRS-G and the MMSE. The CIRS-G provides a comprehensive review of common medical problems experienced by older adults. The CIRS-G scores diseases in 14 organ systems based on a 0 through 4 severity rating. Because we assessed mood with other self-report

measures, we chose to eliminate psychiatric symptoms from the CIRS-G, leaving 13 systems to comprise a total score. Data for scoring were compiled from comprehensive patient interviews conducted by a psychiatrist as well as thorough review of medical history, patient records, and tests. In addition to a total score, a severity index was calculated by dividing the total score by the total number of categories endorsed. The MMSE was used to assess the participants' mental status, and scores can range from 0 to 30, with lower scores indicating increasing severity of cognitive impairments.

The World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0; Rehm *et al.*, 1999) was used to assess the participants' disability level, and summary scores can range from 0 to 100, with higher scores indicating greater disability. The Perceived Stress Scale (PSS; Cohen *et al.*, 1983) was used to assess the participants' perception of stress, and scores can range from 0 to 40, with higher scores indicating higher perceived stress. PSS norms for middle-aged and older adults are 11.9± 6.9 for 55–64 years of age and 12.0 ± 6.3 for 65 years of age and older (Cohen *et al.*, 1983). The Generalized Anxiety Disorder Seven-Item Scale (GAD-7; Spitzer *et al.*, 2006) was used to assess the participants' anxiety, and total scores can range from 0 to 21, with greater scores indicating greater anxiety severity. The Patient Health Questionnaire (PHQ-9; Kroenke *et al.*, 2001) was used to assess the participants' depression, and total scores can range from 0 to 27, with higher scores indicating greater depression severity.

Qualitative interviews—A semi-structured interview guide was developed by the research team. It included a series of open-ended questions to elicit the participants challenges related to living with multiple chronic conditions, disease management strategies, and mental health-treatment preferences. To elicit any additional information of importance to patients, each participant was asked at the end of each interview, "is there anything else that you would like me to know?" The length of the interviews ranged between 15 and 54 min.

Design and procedure

A trained member of the research team met with interested veterans to provide additional information about the study and to screen them for eligibility. If interested and eligible, a member of the research team initiated the informed consent process. Once enrolled, the participants were guided through a semi-structured interview by the principal investigator. All interviews were audiotaped using a 9600 series digital audio recorder with digital encryption to ensure confidentiality. Philips SPEECHEXEC PRO DICTATE software was used to aid in the process of verbatim transcription of the interviews. After each interview, the participants completed the self-administered clinical assessments: WHODAS 2.0, PSS, GAD-7, and PHQ-9. The study was approved by the VAPHS Institutional Review Board.

Data analyses

Descriptive statistics were used to characterize the level of disability, stress, anxiety, and depression among older and middle-aged veterans with multimorbidity. Braun and Clarke's (2006) strategies for qualitative research were used to guide the qualitative data analysis. Inductive thematic analysis was conducted on the first five interviews in order to generate

initial themes and subthemes. As more interviews were analyzed, the initial themes were revised until thematic saturation was reached, at which point all previous interviews were recorded to match the revised thematic framework.

Results

Table 1 presents the demographic and clinical characteristics for the sample. This older veteran (average age = 63.46 ± 6.33) sample was largely male (78.6%), White (64.3%), non-married (60.7%), high-school educated (education mean: 13.71 ± 2.35), cognitively intact (MMSE mean: 28.14 ± 1.80), and retired (60.7%). On average, these veterans were mildly depressed (PHQ-9 total mean: 9.54 ± 7.49) and anxious (GAD total mean: 8.91 ± 5.97), and had elevated stress (PSS total mean: 16.64 ± 8.10) and disability (WHODAS 2.0 total mean: 29.54 ± 18.62). Even though recruitment was based on medical morbidity, exactly half of our participants also had elevated symptoms of depression (PHQ-9 scores ≥ 10).

Thematic analysis

Across all of the interviews, six prominent themes were identified: (i) personal challenges related to living with multimorbidity; (ii) concerns related to physical and emotional conditions; (iii) self-care related to physical and emotional health management; (iv) barriers to physical and emotional health care; (v) preferences for mental health treatment; and (vi) recommendations for improving VA services and reducing stigma.

Personal challenges related to living with multimorbidity

The participants indicated that their emotional health was much more difficult to manage when they were experiencing physical health difficulties. One participant said, “I get more of the depression because of the pain you know…” The participants also noted that their emotional health made managing their physical health more difficult. For example, one participant stated, “you know I chose to try to isolate myself, stress eat…that’s probably why I’m on high blood pressure medication.” A few participants noted that the process of managing their physical health conditions, such as engaging in healthy lifestyle practices or going to medical appointments, negatively affected their mood or stress level. Many participants noted that their physical and emotional health problems reduced their daily functioning. Approximately 70% of the sample reported significant pain, which appeared to be a main contributor to reduced ability to function. For example, the participants reported that their physical and emotional health conditions caused them to limit or reduce the pace of their activity level. One participant stated, “I get short of breath. I mean I’m not able to do the physical activities that I once was. There are a lot of things that I can’t do…..anything that’s really strenuous or even mildly strenuous I have difficulty.” Other participants reported that their physical and emotional health conditions caused difficulties with maintaining employment or forced them into early retirement. Specific to emotional health, a few participants reported that they have difficulties socializing with others.

Concerns related to physical and emotional health conditions

The participants’ biggest concern with having multiple chronic health conditions was the belief that their health would continue to worsen. One participant said, “…some of my

concerns are I'm hoping that things don't accelerate and things get worse and I'm concerned about you know, I'm concerned my wife's not gonna be able to take care of me." Similarly, the participants were concerned that they would never return to their baseline physical functioning or were concerned about managing their current physical health conditions.

The participants' biggest concern with their stress or emotional health was that it would cause them to be unpleasant or disrespectful to others. One participant said, "I mean the stress and the mood will sometimes …umm… get in the way for me to communicate in a, you know, a humane manner." Others feared that their mood would worsen or would lead to other physical health complications, such as cause them to have a stroke. Furthermore, a few participants were concerned with how their family or others (e.g., friends and employers) perceived their mental health status. When asked about the biggest concern for managing stress or emotional health, one participant said, "that my children have picked up on this and, um, think that I have a serious problem…" Medication side effects, availability of medications, and maintenance of medication regimens were mentioned for both concerns of physical and emotional health conditions.

Self-care related to physical and emotional health management

Medication was consistently reported as a way to manage both physical and emotional health conditions. The most frequently reported way for the participants to manage their physical health was through healthy lifestyle practices such as exercise, healthy eating, abstaining from drugs/alcohol, and proper sleep practices. The participants also mentioned faith, medical doctors, symptom monitoring, and peer socialization as ways to manage their physical health. The participants most frequently reported psychological stress management techniques such as relaxation, behavioral activation, and positive self-talk as ways to manage their emotional health. Some participants mentioned the importance of pets to help with stress reduction. Additionally, the participants reported that actively seeing a psychologist or psychiatrist is important with managing their emotional health. To a lesser degree, the participants also mentioned faith, healthy lifestyle practices, and symptom monitoring as a way to manage their emotional health. While a few participants preferred to manage their physical and emotional health on their own, the majority of the participants noted relying on their support system. Typically, these support systems consisted of spouses, family, and health care providers. Other support mechanisms for managing physical and emotional health included church, self-help books, support groups, and pets.

Barriers to physical and emotional health care

The participants identified emotional health problems, physical health symptoms, limited time, lack of self-discipline, and unconducive housing situations as current barriers to managing their own physical health conditions. With respect to managing their emotional health, the following barriers were identified: daily life stressors, medication management problems, unemployment, and difficulties scheduling mental health appointments. Money and transportation were mentioned as personal barriers to managing both physical and emotional health.

The participants were asked to provide potential barriers for other veterans engaging in mental health treatments. Many participants noted that stigma was a major barrier in other veterans seeking mental health treatment. One participant said, “you mention a psychiatrist or something to them and then they freak because all that matters to them is their being labeled as nuts or crazy.” This resistance to opening up about mental health problems or stigma associated with treatment appears to be exacerbated by military cultural and cohort effects. One participant commented, “when you have been in the military, telling somebody, well we are going to set you up with a mental health provider, that has a very negative connotation, to a military person.” A few participants spoke specifically about older adults being particularly reluctant to engage in mental health treatment.

Another barrier for veterans engaging in mental health treatment was lack of trust, both in the VA health care system and in doctors. This lack of trust appeared to stem from negative past experiences. A few participants reported specific concerns about veterans not trusting young doctors. As one participant commented, “I think a lot of veterans question the ability of the young doctor to understand what they have been through …umm… let alone be helpful with that.” Several participants identified lack of mental health knowledge and lack of knowledge in mental health treatment options as barriers. One participant said, “…I think a lot of times they don’t know what’s out there to help them… a lot of times they’re not told what’s available.” Lastly, lack of resources (e.g., money and transportation) and access/availability of services were commonly reported barriers to engaging in mental health treatment.

Preferences for mental health treatment

The majority of the participants (88.5%) agreed that treatment for mood, stress, or emotional health would be beneficial to integrate into disease management for older veterans with multiple chronic health conditions. One participant said, “I don’t know anyone that is having health issues, physical health issues, that wouldn’t benefit from some mood monitoring.” The participants were provided a list of potential treatment options (i.e., healthy lifestyle behaviors, cognitive behavioral therapy, problem solving therapy, and medication), were explained techniques of each treatment option, and asked to provide their treatment preferences. The most frequently reported treatment preference response was that the participants felt that a combination of all four explained treatment options would be the most beneficial. When the participants provided a specific treatment preference, healthy lifestyle practices was the most frequently endorsed, followed by psychotherapy (cognitive behavioral therapy or problem-solving therapy), and then medication. Interestingly, a majority of the participants noted that they would prefer to work with a provider to develop a treatment plan as opposed to the provider developing a treatment plan on their own.

Recommendations for improving VA services and reducing stigma

At a system level, the participants felt that access to providers was often limited and could be improved with a walk-in clinic for physical health issues, longer appointment times, reduced wait time, extended clinic hours, and more frequent encounters with providers. The participants also mentioned the need for clinics to assess for provider preferences (e.g., female veteran requesting a female doctor). Another common theme that emerged was the

importance of a strong doctor–patient relationship. The participants identified several factors they want in a provider: positive interpersonal skills (e.g., respectful, caring, and active listener), effective communication skills (e.g., speaks in layman's terms), collaborative approach (e.g., integrates the patient in the treatment decision-making process), and active disease management (e.g., timely follow-up with patient). To reduce stigma of mental health treatments, the participants suggested better mental health education, increased awareness of treatment options/services, and use of peer advocates or peer support programs.

Discussion

This study provides a unique view into veterans' perspectives of living with co-occurring physical and emotional health symptoms which were clearly linked to common functional challenges. Pain was one of the biggest factors limiting functional ability. Moreover, the physical and emotional symptoms of veterans often interacted with each other, causing greater difficulty with health care management and functionality. The participants had many concerns about their physical and emotional health conditions, such as continued disease progression and the addition of other emotional and physical health complications. These personal concerns likely motivated the participants to engage in self-care strategies such as medication, healthy lifestyle practices, and psychological stress management techniques.

A resounding 88.5% of the participants felt that treatment for mood, stress, or emotional health would be beneficial to integrate into disease management for older veterans with multiple chronic health conditions. Unfortunately, current clinical practice guidelines tend to focus on the management of a single disease and may not be applicable or effective for patients with multimorbidity (American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity, 2012). Therefore, we recommend an expansion of integrated mental and physical health self-management interventions to address mood disorders and various medical disease states. Previous research indicates that a higher percentage of multimorbid patients compared with single morbidity patients were "definitely" willing to learn self-management skills (Noel *et al.*, 2007). Self-management interventions teach individuals how to self-monitor physical and emotional health symptoms, recognize early signs of relapse, and self-administer care prescribed by providers. Fortunately, there are effective interventions that address co-occurring physical and emotional health conditions for veterans. A recent systematic review of integrated medical and psychiatric self-management interventions identified one intervention, Life Goals Collaborative Care (LGCC), for veterans with co-occurring physical and emotional (i.e., serious mental illness) health conditions (Whiteman *et al.*, 2016). LGCC has shown to improve health-related quality of life (Kilbourne *et al.*, 2008a; Kilbourne *et al.*, 2008b), decrease impaired functioning, reduce depressive symptoms (Kilbourne *et al.*, 2012), and reduce blood pressure (Goodrich *et al.*, 2012; Kilbourne *et al.*, 2013). As LGCC is expanding to include individuals with major depressive disorder (Kilbourne *et al.*, 2014), we recommend building on this clinically effective intervention and examining the effectiveness of this intervention, with middle-aged and older veterans who present with less severe mood disorders and multimorbidity.

While the VA has undertaken several initiatives to increasing accessibility to and delivery of integrated physical and behavioral health services (Zeiss and Karlin, 2008), additional efforts are needed to align self-management programs with veterans' perspective. Many veterans with multimorbidity experience a broad range of barriers to engaging in self-care. Fortunately, our participants provided insight and many helpful suggestions to improve VA physical and emotional health services. One suggestion the participants had for reducing stigma of mental health treatments was to use peer advocates or peer support programs. The VA health care system has peer specialists which are veterans with a mental health and/or co-occurring condition that have been trained and certified to help others with these conditions. Peer specialists have been found to reduce social isolation and improve veterans' adherence to and participation in treatment (Chinman *et al.*, 2006). Additionally, Whiteman and colleagues (2016) recommends peer delivered self-management interventions that may offset costs of traditional mental health providers and facilitate engagement with patients.

Limitations

Our sample included middle-aged and older veterans that were recruited from primary care or behavioral health clinics, which limits the generalizability of the findings. For instance, the findings may differ for nonveterans, a younger cohort, a larger proportion of female veterans, or veterans not currently enrolled in the VA health care system. Therefore, the findings may not be transferable to other counties or populations outside the VA. Additionally, participant recruitment was based on medical morbidity and not the presence of depressive symptoms. It is reasonable to expect that individuals with depression or elevated depressive symptoms would report experiences and treatment preferences distinct from veterans without depression. Unfortunately, our sample size is too small to explore this question, and future research should consider evaluating this further. The qualitative nature of the study also warrants some potential limitations, such as interviewer/observer expectancy effect. Similarly, in using an inductive approach the coder had to make judgment calls about what is/is not important. Even though efforts were made by the PI to make the qualitative interview clear and concise, it is possible that the participants did not fully understand research questions or were uncomfortable with the interview environment/process.

Conclusion

The middle-aged and older veterans rarely mentioned disease-specific challenges but rather discussed the complexity and cumulative effect of coping with numerous physical and emotional health symptoms. While many veterans with multimorbidity engaged in self-care practices and acknowledged the importance of mental health treatment, barriers at the patient, provider, and system level often prevented access to and successful engagement in health care. Veterans' perspective of living with multiple chronic conditions should be used to develop patient-centered approaches and integrated mental and physical health self-management. Such programs could in turn improve quality of care and outcomes for middle-aged and older veterans with multimorbidity.

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Key points

- The complexity and cumulative effect of having numerous physical and emotional health symptoms were linked to common functional and health care management challenges.
- Participants were favorable of integrating mental health care into chronic disease management.
- Participants identified many effective self-care strategies; yet, barriers at the patient, provider, and system level often prevented access to and successful engagement in health care.
- Incorporating veterans' perspective into the development and delivery of integrated mental and physical health treatment approaches may improve patient outcomes.

Table 1

Demographic and clinical characteristics of older veterans with multimorbidity ($N = 28$)

Variable	*n*	%
Age (mean ± *SD*)	63.46 ± 6.33	
Male	22	78.6
White	18	64.3
Education (mean ± *SD*)	13.71 ± 2.35	
Marital status		
Non-married	17	60.7
Married	11	39.3
Work status		
Paid work	4	14.3
Self-employed	1	3.6
Retired	17	60.7
Unemployed	6	21.4
MMSE total (mean ± *SD*)	28.14 ± 1.80	
PHQ-9 total (mean ± *SD*)	9.54 ± 7.49	
PSS total (mean ± *SD*)	16.64 ± 8.10	
GAD total (mean ± *SD*)	8.91 ± 5.97	
CIRG (mean ± *SD*)		
Total	14.14 ± 3.30	
Severity	1.94 ± .23	
WHODAS 2.0 total (mean ± *SD*)	29.54 ± 18.62	