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Perceived Need for Mental Health Care Among Community-Dwelling Older Adults

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Only half of older adults with a mental disorder use mental health services, and little is known about the causes of perceived need for mental health care (MHC). We used logistic regression to examine relationships among depression, anxiety, chronic physical illness, alcohol abuse and/or dependence, sociodemographics, and perceived need among a national sample of community-dwelling individuals 65 years of age and older (the Collaborative Psychiatric Epidemiology Surveys data set). Less than half of respondents with depression or anxiety perceived a need for care. Perceived need was greater for respondents with more symptoms of depression regardless of whether they met diagnostic criteria for a mental illness. History of chronic physical conditions, history of depression or anxiety, and more severe mental illness were associated with greater perceived need for MHC. Future studies of perceived need should account for individual perceptions of mental illness and treatment and the influence of social networks.

Key Words: Anxiety—Attitudes—Beliefs—Depression—Mental health.

ONLY half of older adults in the United States with a probable diagnosis of depression, anxiety, or psychotic disorder use mental health services (Klap, Unroe, & Unützer, 2003). Perceiving need for mental health care (MHC) is an important step in deciding whether to seek treatment (Mechanic, 1978; Mojtabai, Olfson, & Mechanic, 2002), but little is known about how older adults determine their need for MHC. Existing studies either exclude elderly people (Katz, Kessler, Frank, Leaf, & Lin, 1997; Mojtabai et al.), do not account for subsyndromal conditions (Klap et al.; Meadows et al., 2002), or use care utilization as a proxy for perceived need (Mojtabai et al.; Rabinowitz, Gross, & Feldman, 1999). Not everyone who receives MHC may perceive a need for care; others may demand that a person utilize mental health services (Edlund, Unützer, & Curran, 2006). In this study, we examine the relationship of perceived need for MHC (regardless of utilization rates) with past-year mental illness, history of mental and physical illness, subsyndromal conditions, and history of alcohol abuse and/or dependence.

Our study is based on principles from the common sense model of illness representation (CSM; Diefenbach & Leventhal, 1996). The CSM states that individuals make treatment decisions based on illness beliefs regarding symptom identity, acuity and/or chronicity, severity, causes, and controllability. These beliefs are influenced by prior experience with a condition and information from social network members. From this model, we believe history and severity of mental illness, chronic physical illness history, alcohol abuse, attitudes toward MHC, and social support will influence perceived need for MHC in older adults.

Mental illness history may increase likelihood of perceived need for MHC in two ways. First, individuals with a history of depression or anxiety who currently meet diagnostic criteria for one of the two conditions might draw on previous experience with the condition and infer that they should use care (Howard Leventhal, personal communication, October 15, 2008). Secondly, individuals with a history of depression or anxiety who do not currently meet diagnostic criteria for either disorder might feel continued treatment is necessary for maintaining current health status. History of depression and history of anxiety are related to MHC utilization in the general population (Burns, Wagner, Gaynes, Wells, & Schulberg, 2000; Ronalds et al., 2002); the relationship between history of mental illness and perceived need in older adults is unclear.

Additionally, subsyndromal depression and anxiety and greater numbers of depression or anxiety symptoms might be associated with perceived need for care. Subsyndromal levels of depression and anxiety are associated with physical disability and poor physical health, in some cases to the same degree as major depressive disorder (MDD) or generalized anxiety disorder (GAD; Beekman, Deeg, Braam, Smit, & Tilburg, 1997; De Beurs et al., 1999; Johnson, Weissman, & Klerman, 1992). Furthermore, it is likely more difficult to ignore or explain away symptoms as they proliferate; having more co-occurring adverse symptoms may encourage individuals to view symptom clusters as medical conditions warranting treatment. Greater numbers of depression and GAD symptoms are associated with higher odds of perceived need for depression treatment in younger adults with probable depression (Van Voorhees et al., 2006).

In addition to mental illness history, physical illness history may be related to perceived need for MHC. Occurrence of comorbid chronic physical conditions, but not self-rated health status, among people experiencing mental illness

symptoms is associated with greater perceived need for MHC (Mojtabai et al., 2002; Rabinowitz et al., 1999). Experience with chronic conditions likely reflects experience receiving medical treatment, whereas self-rated health is only indirectly associated with treatment experience. Prior experience (good or bad) with mental health treatment is related to greater odds of perceived need for care in younger adults (Van Voorhees et al., 2006). Furthermore, lower utilization of mental health services occurs in those without a regular source of medical care (Leaf et al., 1985). A history of receiving treatment for any condition may lead individuals to medicalize symptoms and believe that mental health services are beneficial.

Little is known about the association of alcohol abuse and/or dependence with perceived need for MHC in older adults. There is mixed evidence as to whether alcohol abuse itself increases the likelihood of perceived need for MHC (Edlund et al., 2006; Mojtabai et al., 2002; Sareen, Cox, Afifi, Clara, & Yu, 2005). The relationship may depend on abuse and/or dependence severity and whether comorbid mental illnesses are present. In people with mental illnesses, subclinical alcohol dependence symptoms are related to lower odds of MHC use, but three or more symptoms of alcohol dependence are related to greater odds of care use (Wu, Kouzis, & Leaf, 1999). This suggests that people with some depressive symptoms who do not meet criteria for alcohol dependence may use alcohol to self-medicate. If alcohol ameliorates the symptoms of anxiety or depression, individuals might not perceive a need for mental health treatment. Once they are dependent on alcohol, however, self-medication may be ineffective and lead to perceived need for treatment.

In addition to illness characteristics, social support may affect perceived need for MHC. Ill people often turn to social network members to compare symptoms and experiences and to discover where others have sought treatment (Leventhal, Musumeci, & Leventhal, 2008). Additionally, those with supportive networks might feel their needs are met within the network and may have decreased perceived need for formal treatment. Little is known about the relationship between social network quality and perceived need for care in older adults, although better quality social support is related to less utilization of physical health care and MHC in younger populations (Broadhead, Gehlbach, deGruy, & Kaplan, 1989; Horwitz, 1977).

Attitudes toward MHC are another important determinant of perceived need. Fear of stigma, negative views of others with mental illness, lack of confidence in mental health services, and fear of medication side effects are reasons people do not seek MHC (Cooper-Patrick et al., 1997; Robb, Haley, Becker, Polivka, & Chwa, 2003; Segal, Coolidge, Mincic, & O'Riley, 2005). Positive attitudes toward MHC are correlated with greater likelihood of perceived need for care in younger adults (Mojtabai et al., 2002).

Finally, sociodemographic characteristics are also associated with perceived need. Some evidence suggests that rates of perceived need are highest among middle-aged adults (Edlund et al., 2006; Meadows et al., 2002) and women (Edlund et al.; Mojtabai et al., 2002). Racial differences in perceived need are not always found (Edlund et al.; Meadows et al.; Mojtabai et al.), but some have found lower rates of perceived need in Asians than in Whites (Sareen et al., 2005).

To examine relationships among perceived need and mental and physical health, we used cross-sectional data from the Collaborative Psychiatric Epidemiology Surveys (CPES), which surveyed community-dwelling adults throughout the contiguous United States about their mental health symptoms and health service utilization. We expected to see greater odds of perceived need for MHC among older adults with more severe past-year or history of mental illness, a history of greater numbers of chronic physical conditions, and a history of alcohol abuse or dependence. Information on attitudes toward care and consistent measures of social support were not available for all members of our sample and were excluded from analyses.

Methods

The CPES merges data collected between 2001 and 2003 from three large studies of mental health: the National Comorbidity Survey Replication (NCS-R), the National Survey of American Life (NSAL), and the National Latino and Asian American Study (NLAAS). Samples were obtained via four stages: Metropolitan Statistical Areas (MSAs) and counties, segments within each primary stage, households within segments, and random selection of one respondent per household (Heeringa et al., 2004). (In 20% of the NCS-R households, two adults were interviewed.) The data include sampling weights to account for different probabilities of selection among survey components and oversampling of racial and ethnic minorities. Further details of the survey methods are described elsewhere (Heeringa et al.; Kessler et al., 2004).

The merged data include 20,013 adult respondents, 2,626 of whom are 65 years of age or older. We excluded NCS-R respondents who responded to a shortened version of the survey, and only 25% of NLAAS respondents were asked about perceived need in order to reduce respondent burden for a final sample size of 1,339 (NCS-R: $n = 687$, NLAAS: $n = 93$, NSAL: $n = 559$). We retained the small set of NLAAS respondents to increase the racial diversity of the sample.

Sample demographics match national demographics from the 2000 United States Census. According to the census, 83.6% of the U.S. population is White non-Latino, 8.1% is African American, and 44.5% is male (United States Census, 2000). Our sample included 86.7% White non-Latino, 8.6% African American, and 42.9% male respondents.

Variables

The dependent variable was perceived need for MHC in the past 12 months, and the explanatory variables were diagnoses

and symptoms of mental illness, number of chronic physical illnesses, history of alcohol abuse and/or dependence symptoms, and sociodemographic characteristics.

Perceived need for MHC.—Respondents who received MHC in the past 12 months (from a psychiatrist, psychologist, social worker, counselor, physical health care provider, religious or spiritual provider, or alternative medicine practitioner) were asked if they sought care voluntarily. Respondents who did not receive MHC in the past year were asked if they felt a need to seek professional care for emotional or substance abuse issues. Consistent with another study of perceived need among NCS respondents (Katz et al., 1997), we categorized respondents as perceiving a need for care if they indicated care seeking was voluntary or if they felt they needed to see a mental health professional. Of those who perceived need for care, there is likely a difference between those who used care and did not use care, but the analysis of this difference is beyond the scope of this article.

Prevalence and severity of depression and anxiety.—Probable diagnoses were ascertained with algorithms from the World Mental Health (WMH) Survey Initiative's adaptation of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI 3.0; Kessler & Üstün, 2004). These algorithms determined whether respondents met the Diagnostic & Statistical Manual of Mental Disorders (DSM-IV) criteria (without hierarchy) for MDD, dysthymia, GAD, and/or another anxiety disorder (post-traumatic stress disorder, agoraphobia with or without panic disorder, panic attack, panic disorder, and social phobia; American Psychological Association [APA], 1994). (Information on other anxiety disorders such as obsessive–compulsive disorder or specific phobia was not available for most respondents in our data set.) We characterized respondents' mental illness experience with two variables: "past year," which refers to those who met diagnostic criteria for a disorder in the past 12 months (regardless of other, earlier experience with mental illness) and "history," which refers to those who satisfied lifetime diagnostic criteria for a disorder but who did not meet that criterion in the past year. History among those who had met past-year diagnostic criteria was not available. All diagnoses and time periods refer to algorithms within the CIDI; none are self-reported. The WMH CIDI 3.0 was designed for epidemiological studies and has good concordance with the Structured Clinical Interview for DSM-IV (SCID) for diagnosing any anxiety disorder (area under receiver-operating characteristic curve [AUC] = 0.88) and any mood disorder (AUC = 0.83) in the past 12 months (Haro et al., 2006).

In addition to diagnostic criteria, we counted the number of symptoms of depression and GAD in the WMH CIDI. Depression symptoms included depressed mood, anhedonia, weight gain or loss, difficulties sleeping, psychomotor agitation or slowing, fatigue, feelings of worthlessness, difficulty concentrating, and suicidal ideation. Respondents were asked about depression symptoms if they reported ever having at least one 2-week period of depression or a year or more with several shorter periods of depression; they were asked about symptoms that occurred during the worst episode of depression they experienced in their lifetimes. All others were coded as having zero symptoms. GAD symptoms included occupation with nervousness or worries, restlessness, fatigue, irritability, difficulty concentrating, muscle fatigue, and difficulty sleeping. Symptoms referred to those that occurred during the worst episode of anxiety they experienced in their lifetimes; respondents without a worst episode were coded as having zero symptoms. Full lists of symptoms specific to past-year episodes were unavailable. Because the meaning of the number of symptoms of non-GAD anxiety disorders could vary widely depending on the disorder, we did not include a symptom count variable for these disorders.

We constructed new algorithms for diagnoses of subsyndromal GAD and minor depression over respondents' lifetimes. We modeled subsyndromal GAD diagnoses after a previous study of the condition (Carter, Wittchen, Pfister, & Kessler, 2001) and the minor depression diagnoses reflect DSM-IV criteria for further study (APA, 1994). The symptoms reported for these conditions were reported during respondents' worst-ever episode of depression or anxiety.

People tend to report fewer symptoms of past episodes of depression with time and are less likely to report symptoms when they are not experiencing psychological distress (Aneshensel, Estrada, Hansell, & Clark, 1987). Perception of severity and number of symptoms that respondents recall experiencing are likely important factors influencing perceived need, regardless of whether recall is perfectly accurate.

Physical health and cognitive functioning.—Respondents were asked if a health professional had ever told them they had heart troubles, ulcers, cancer, hypertension, diabetes, asthma, or chronic lung disease; we summed the number of conditions reported. Numbers of chronic conditions are correlated with length of hospital stay, increased physical limitations, and increased mortality (Elixhauser, Steiner, Harris, & Coffey, 1998; Verbrugge, Lepkowski, & Imanaka, 1989).

Because a global measure of self-assessed health was not available, we substituted a measure of functional limitation. Functional limitations are highly correlated with self-assessed health (Mora, DiBonaventura, Idler, Leventhal, & Leventhal, 2008). Cognitive functioning, self-care ability, and mobility were measured by the World Health Organization Disability Assessment Schedule II (WHO-DAS II; Kessler et al., 2003; WHO, 2001). Scores are a product of frequency (number of days) and severity of problems (none, mild, moderate, severe) respondents reported experiencing in the past 30 days and are normalized to have values ranging from 0 to 100, where

higher numbers indicate worse functioning. We transformed the scores into *z* scores in the multivariate analyses.

Prevalence of alcohol abuse and/or dependence.—Past-year, historical, and lifetime diagnoses of alcohol abuse and dependence were assessed by the WMH CIDI. The WMH CIDI and SCID have good specificity for diagnoses of alcohol abuse (AUC = 0.81), and alcohol dependence (0.72; Kessler et al., 2005). We also counted the number of alcohol abuse and dependence symptoms ever experienced. Dependence symptoms included tolerance, withdrawal, drinking or becoming drunk when unintended, inability to reduce drinking, spending many days recovering from drinking, drinking instead of doing social activities or working, and drinking although knowing it was leading to health problems. Abuse symptoms included failure to fulfill role obligations, use in dangerous settings, and continued use despite social problems.

Sociodemographics.—Sociodemographics included age, sex, race (White non-Latino, African American and Afro-Caribbean, and other), marital status, education, household size, and poverty index. The poverty index is the ratio of household income to the poverty threshold used in the 2001 Census (adjusted for household size).

Analyses

Analyses were performed with SAS-callable SUDAAN. Multivariate logistic regression was used to examine relationships among illness characteristics, sociodemographics, and perceived need for care. Variables were entered simultaneously in all models; only variables that were present in each component of the CPES were included in our analyses. The regression was run separately with the entire sample for two different sets of mental health variables: a diagnosis model with variables for past-year and history of mental illness diagnoses, and a symptom model with counts of symptoms occurring during the worst episode of illness respondents had experienced in their lives. Due to small cell sizes, lifetime diagnoses for minor depression, dysthymia, and alcohol abuse and/or dependence were excluded from analyses. The relatively low prevalence of co-occurring mental illnesses, perceived need, and alcohol abuse precluded us from examining interaction terms in the complete models. An additional model was run on the subsample of respondents who never met diagnostic criteria for depression or anxiety to explore relationships possibly obscured by the strong relationship between diagnosis and perceived need for care. We tested for interactions between depression and/or anxiety and alcohol abuse and/or dependence in models unadjusted for physical health or sociodemographics. Akaike's information criterion with a second-order correction (AICc) for small sample sizes was used to compare models (Burnham & Anderson, 2002; Sugiura, 1978).

Results

The mean age of respondents was 74.6 years, and 9.3% were 85 years of age or older. Few (2.5%) respondents met past-year diagnostic criteria for MDD, but 6.9% of respondents had a history of MDD. Only 2.3% had met criteria for minor depression at some point in their lives. Of those who reported at least one episode of depression over their lifetimes, the mean number of symptoms reported was 0.8 (*SE* = 0.1; range = 0–9). Few (1.6%) met diagnostic criteria for GAD in the past year, but 2.7% had a history of GAD and 5.1% met criteria for subthreshold GAD at some point in their lives. Of those who recalled an episode of anxiety during their lifetime, the mean number of symptoms reported was 0.6 (*SE* = 0.1, range = 0–7). Past-year diagnostic criteria for non-GAD anxiety disorders were met by 5.4% of respondents; historical diagnostic criteria were met by 13.7%. Of the sample, 4.6% reported any symptoms of alcohol abuse and/or dependence over their lifetime. Respondents experienced a mean of 1.3 chronic physical conditions (*SE* = 0.1).

Of the entire sample, 7.3% (157) perceived a need for MHC in the past year. Of those who perceived a need for MHC, 82.8% (130) had voluntarily received MHC from a primary care provider or mental health specialist in the past 12 months, and 17.2% (27) perceived a need for care but did not receive care. In bivariate analyses, perceived need for care was less likely as age increased, and it was more likely to be reported by women and unmarried respondents (Table 1). Perceived need was more likely for respondents with MDD, dysthymia, GAD, subthreshold GAD, and other anxiety disorders than for those without diagnoses, but not everyone who met diagnostic criteria perceived a need for care. Half of respondents who met diagnostic criteria for MDD or GAD in the past year perceived a need for care. Conversely, 4.7% of those who did not meet criteria for depression or anxiety in the past year perceived a need for care.

People with perceived need had significantly more depression (*M* = 3.0, *SE* = 0.4) and GAD symptoms (*M* = 2.4, *SE* = 0.3) at some point in their lifetimes than those who did not perceive need (depression: *M* = 0.7, *SE* = 0.1; GAD: *M* = 0.5, *SE* = 0.1). Perceived need also was more likely among respondents reporting any alcohol abuse and/or dependence symptoms than among those without any symptoms.

Tests for interactions between depression and alcohol abuse and/or dependence in models unadjusted for physical health or sociodemographics failed to find significant results. There was, however, a significant interaction between past-year GAD and number of alcohol abuse and/or dependence symptoms. In this model, alcohol symptoms alone were not related to perceived need, but past-year GAD and past-year GAD with alcohol abuse and/or dependence symptoms were associated with greater likelihood of perceived need (odds ratio [OR] = 10.78, 95% confidence interval [CI] = 4.44–26.15; OR = 1.35, 95% CI = 1.01–1.81, respectively).

Respondents with worse WHO-DAS cognitive functioning and mobility scores were more likely to perceive need

Table 1. Mean (standard error) or Frequency (%) for Bivariate Relationships With Perceived Need for Mental Health Care

	Perceived need				Perceived need		
	No (n = 1182)	Yes (n = 157)			No (n = 1182)	Yes (n = 157)	
Variable	n (%) or M (SE)	n (%) or M (SE)		Variable	n (%) or M (SE)	n (%) or M (SE)	
Age	74.7 (0.4)	73.1 (0.7)	*	GAD (year)[a]			**
Sex			**	No	1164 (93.4)	138 (6.6)	
Male	454 (96.0)	38 (4.0)		Yes	18 (51.9)	19 (48.1)	
Female	728 (90.3)	119 (9.7)		GAD (history)			**
Race			**	No	1140 (93.1)	142 (6.9)	
White Non-Latino	515 (93.2)	78 (6.8)		Yes	42 (79.0)	15 (21.0)	
African American and Afro-Caribbean	568 (94.4)	35 (5.6)		Subthreshold GAD (life)			**
Other	99 (81.6)	44 (18.4)		No	1128 (93.6)	132 (6.4)	
Martial status			**	Yes	54 (76.8)	25 (23.2)	
Not married	694 (91.1)	94 (8.9)					
Married	488 (94.0)	63 (6.0)					
Education				Non-GAD anxiety (year)[a]			**
Less than high school	457 (90.8)	62 (9.2)		No	1105 (94.7)	103 (5.3)	
At least high school	725 (93.5)	95 (6.5)		Yes	77 (58.8)	54 (41.2)	
Household size	1.61 (0.04)	1.58 (0.07)		Non-GAD anxiety (history)			**
Poverty index				No	994 (93.8)	118 (6.2)	
≤ 200% of threshold	700 (91.7)	90 (8.3)		Yes	188 (85.8)	39 (14.2)	
>200% of threshold	482 (93.7)	67 (6.3)		Alcohol abuse (life)			
MDD (year)[a]			**	No	1107 (93.1)	147 (6.9)	
No	1150 (93.8)	122 (6.2)		Yes	75 (85.3)	10 (14.7)	
Yes	32 (50.5)	35 (49.5)		Alcohol dependence (life)			
MDD (history)			**	No	1162 (92.9)	153 (7.1)	
No	1080 (93.6)	127 (6.4)		Yes	20 (80.8)	4 (19.2)	
Yes	102 (80.8)	30 (19.2)		No. of depression symptoms[b]	0.7 (0.1)	3.0 (0.4)	*
Minor depression (life)				No. of GAD symptoms[b]	0.5 (0.1)	2.4 (0.3)	*
No	1160 (92.8)	151 (7.2)		Any AA and/or AD symptoms[c]			**
Yes	22 (87.6)	6 (12.4)		No	1107 (93.1)	146 (6.9)	
Dysthymia (life)			**	Yes	75 (85.1)	11 (14.9)	
No	1156 (93.2)	141 (6.8)		WHO-DAS self-care	1.6 (0.4)	4.6 (1.6)	
Yes	26 (67.1)	16 (32.9)		WHO-DAS cognition	0.6 (0.2)	2.4 (0.8)	*
				WHO-DAS mobility	8.4 (0.8)	14.1 (2.5)	*
				No. of chronic conditions[d]	1.3 (0.1)	1.7 (0.1)	*

Notes: Unweighted *n*s and weighted percentages are reported. MDD = major depressive disorder; GAD = generalized anxiety disorder; AA = alcohol abuse; AD = alcohol dependence; WHO-DAS = World Health Organization Disability Assessment Scale.

[a]Refers to past-year diagnosis. [b]Number of symptoms experienced during worst episode over respondent's lifetime. [c]Refers to symptoms experienced at any point in lifetime. [d]Refers to conditions experienced at any point in lifetime.

*p < .05 with t-test; **p < .05 with Rao-Scott chi-square test.

for care. The odds of reporting perceived need were higher with greater numbers of chronic physical conditions ever experienced.

Multivariate Analyses

In multivariate logistic regression analyses, model fit was slightly better when symptoms over the respondent's lifetimes were included as regressors (AICc = 568.0) rather than past-year diagnoses and history of diagnoses (AICc = 579.1).

Diagnosis model.—When the model included past-year and historical diagnoses of depression and anxiety, both past-year MDD and history of MDD were significantly related to perceived need (Table 2). Past-year GAD was related to perceived need, but history of GAD was not. Lifetime incidence of subthreshold GAD was related to higher odds of perceived need. Respondents with past-year and history of a non-GAD anxiety disorder were more likely to perceive a need for care than those without an anxiety disorder. The number of chronic conditions ever experienced was related to perceived need as well.

Symptom model.—When the model substituted counts of MDD and GAD symptoms experienced during worst lifetime episodes of illness for diagnoses, the odds of perceiving a need for MHC were higher with more depression symptoms and more GAD symptoms (Table 2). As in the diagnosis model, the odds of perceived need for care were higher when respondents had a past-year anxiety disorder other than GAD and when respondents had a lifetime history of more chronic physical conditions. Unlike the diagnosis model, however, history of non-GAD anxiety was not related to perceived need in the symptom model. Perceived need was more likely for those who had ever experienced symptoms of alcohol abuse and/or dependence. Men were half as likely to report perceived need as women.

Table 2. Odds Ratios (ORs) and Confidence Intervals (CIs) for Multivariate Logistic Regressions Examining Perceived Need for MHC

	Diagnosis variables; full sample (N = 1339, AICc = 579.1)		Symptom variables; full sample (N = 1339, AICc = 568.0)		Symptom variables; respondents without depression and/or anxiety[a] (n = 869)	
Variable	OR (95% CI)		OR (95% CI)		OR (95% CI)	
No. of chronic conditions (lifetime)	1.38 (1.09–1.76)	*	1.35 (1.07–1.70)	*	1.58 (1.02–2.46)	*
Age	0.97 (0.93–1.76)		0.98 (0.94–1.02)		0.96 (0.89–1.03)	
No. of household members	0.90 (0.64–1.25)		0.95 (0.68–1.32)		0.75 (0.52–1.09)	
MDD (year)[b]	4.66 (1.75–12.42)	*				
GAD (year)[b]	4.08 (1.10–15.13)	*				
Non-GAD anxiety (year)[b]	7.75 (3.57–16.81)	*	7.20 (3.36–15.42)	*		
Subthreshold GAD (lifetime)	2.87 (1.18–6.95)	*				
MDD (history)	2.25 (1.08–4.71)	*				
GAD (history)	1.06 (0.42–2.69)					
Non-GAD anxiety (history)	2.74 (1.31–5.74)	*	2.00 (0.98–4.06)			
Male	0.56 (0.30–1.02)		0.46 (0.23–0.94)	*	0.20 (0.05–0.89)	*
Race[c]						
African American and Afro-Caribbean	0.63 (0.30–1.34)		0.68 (0.32–1.43)			
Other	1.82 (0.88–3.75)		1.67 (0.84–3.32)			
Non-White (African American, Afro-Caribbean, and other)					1.91 (0.69–5.32)	
Married	1.16 (0.60–2.24)		1.18 (0.57–2.45)		1.48 (0.58–3.79)	
Completed high school	0.72 (0.39–1.33)		0.79 (0.41–1.55)		0.59 (0.23–1.55)	
WHO-DAS self-care[d]	1.01 (0.75–1.36)		0.94 (0.63–1.40)		1.02 (0.54–1.93)	
WHO-DAS cognitive[d]	1.15 (0.86–1.54)		1.13 (0.82–1.55)		1.34 (0.97–1.86)	
WHO-DAS mobility[d]	0.93 (0.60–1.42)		0.97 (0.63–1.51)		0.94 (0.50–1.77)	
≤200% of poverty threshold	1.02 (0.59–1.76)		1.05 (0.59–1.84)		0.67 (0.25–1.82)	
No. of depression symptoms (lifetime)			1.15 (1.07–1.24)	*	1.39 (1.13–1.70)	*
No. of GAD symptoms (lifetime)			1.22 (1.08–1.37)	*	1.29 (0.92–1.81)	
Any alcohol symptoms (lifetime)			2.77 (1.06–7.29)	*	3.73 (0.78–17.80)	

Notes: MHC = mental health care; MDD = major depressive disorder; GAD = generalized anxiety disorder; WHO-DAS = World Health Organization Disability Assessment Schedule; AICc = Akaike's information criterion with a second-order correction.

[a]Respondents who never met diagnostic criteria for major depression, GAD, dysthymia, or another anxiety disorder. [b]Past-year diagnosis. [c]Reference category = White Non-Latino. [d]ORs for WHO-DAS scores refer to change in odds per standard deviation.

*$p < .05$.

Perceived need among those without depression and/or anxiety.—Among respondents who had never met diagnostic criteria for depression or anxiety, the number of depression symptoms was still significantly related to perceived need (Table 2). Anxiety symptoms, however, were not related to perceived need. Additionally, men were less likely to perceive a need for care than women, and respondents with a history of more chronic physical conditions were more likely to report perceived need.

Discussion

As predicted, respondents with more severe mental illnesses, a history of depression or anxiety, and/or a history of chronic physical illnesses and alcohol abuse and/or dependence symptoms were more likely to perceive a need for MHC. Past experience with illnesses and treatment, in addition to symptom severity, may influence individuals' perceptions of control over depression and anxiety and thus influence perceptions of need for formal MHC according to the CSM (Diefenbach & Leventhal, 1996).

A history of depression or non-GAD anxiety was associated with higher odds of perceived need. This suggests that older adults whose mental health condition has improved according to diagnostic criteria may still experience distress or feel they could benefit from further treatment. Alternatively, according to the CSM, those who met past-year diagnostic criteria for depression or anxiety and have a history of the disorder may draw on past experience with the condition to evaluate how they might rid themselves of the symptoms most quickly and be more likely to perceive a need for MHC (Howard Leventhal, personal communication, October 15, 2008); their past experience may affect assessment of their present condition. From these data, we could not determine the relationship of history and perceived need for those with past-year depression and/or anxiety nor could we determine whether respondents had received treatment for the specific past episodes they reported.

People meeting diagnostic criteria for MDD or GAD had higher odds of perceived need than those with subsyndromal conditions, but subthreshold GAD and number of depression and anxiety symptoms were still significantly associated with perceived need. These results, along with the fact that perceived need for MHC is associated with psychological distress and suicidality regardless of whether one meets diagnostic criteria for a disorder (Sareen et al., 2005), suggest that diagnostic criteria may not always reflect individual assessments of depression and anxiety. Although diagnostic criteria are correlated with perceived need, these

results indicate that individuals' perceptions of need are also affected by subclinical symptoms. Perceptions of severity or the extent to which symptoms interfere with daily life for those not meeting past-year criteria for MDD or GAD may lead older adults to perceive a need for care. Increased symptom intrusiveness into daily life is associated with greater distress for physical conditions (Delahanty et al., 2007), but little is known about the relationship between mental illness intrusiveness and perceived need for care among older adults.

Perceived need was significantly more likely when individuals reported a lifetime occurrence of more chronic physical conditions. Respondents who needed chronic care in the past likely have more experience receiving care in formal settings and may be more accepting of medical treatment. This in turn may increase the likelihood of viewing psychological symptoms as a target for care from a primary care provider or mental health specialist. Those with fewer problems may be more likely to rely on themselves or informal resources for emotional support. This is supported by the fact that none of the more general measures of physical health status were significantly related to perceived need in multivariate analyses; it is not the physical health status, but the experience with medical care that is related to perceived need.

The relationship between alcohol abuse and/or dependence and perceived need was not affected by depression, but it was affected by anxiety. When alcohol use was examined as an interaction term with past-year GAD, alcohol abuse and/or dependence was only significantly associated with perceived need for those with past-year GAD. From these results, it seems that alcohol abuse may be a reason for perceived need on its own or perhaps when used as ineffective self-medication for anxiety. Because alcohol abuse symptom reports might have been reduced by social desirability bias, those who reported any symptoms likely had worse experiences with alcohol. It remains to be seen whether older adults who have some, but not many, symptoms of alcohol abuse are less likely to perceive a need for care because they are self-medicating.

Future studies should include more specific measures of the decision-making process leading to perceived need for care. They should include individuals' assessments of symptom "identity, timeline, cause, controllability, and consequences" (as stipulated in the CSM; Diefenbach & Leventhal, 1996, p. 20), along with measures of the impact of social networks and general attitudes toward mental health on individual assessments. If people with more supportive social networks are less likely to perceive a need for care, it will be important to determine the relative benefits of supportive social networks *versus* formal MHC in addressing mental health issues. If social networks are inhibiting members from receiving care that may potentially improve their symptoms, educational interventions about the benefits of formal MHC may be useful.

Many respondents who met past-year diagnostic criteria for MDD or GAD did not perceive a need for care. There are several reasons why this may have occurred: they may have negative attitudes about mental illness and MHC, they might feel their interactions with social networks are suitable substitutes for formal MHC, or their interactions with social networks may lead them to have negative attitudes toward care. Although our data set did not allow us to examine these relationships, it is an important area for future research.

Individuals' perceptions of symptoms and severity are related to whether they perceive need for MHC, and perceived need is an important determinant of whether individuals decide to seek care (Mechanic, 1978). Understanding the type and development of these perceptions is central to developing an effective care plan and strategy for working with older people with depression and anxiety.

Limitations

Our analyses are limited by the cross-sectional nature of the data; we cannot show causal associations. Because we used secondary data, some useful information was unavailable due to differing skip patterns for some questions in the components of the merged data set (e.g., self-rated physical health was not available for all respondents). Past-year chronic conditions and symptom counts, attitudes toward care, and consistent social support measures are not available in all components of the CPES. It would have been ideal to have consistent time frames for measures of past-year physical and mental health. Furthermore, because of the relatively low prevalence of minor depression and dysthymia, this study had limited power to examine some relationships between illness characteristics and perceived need. An ideal model would have also included measures of self-assessed physical and mental health, attitudes toward care, quality of social support, and more health measures specific to the past 12 months. Finally, the results of this study cannot be extended to individuals with cognitive disabilities or dementia who have proxies making health care decisions. The CPES data used in this study, however, are the most comprehensive data related to MHC in older adults.

Conclusion

Few studies have examined perceived need for mental health services in older adults. This study examines the relationships between perceived need for care, patient mental and physical illness, and sociodemographics in the framework of the common sense model.

Histories of MDD and non-GAD anxiety were related to perceived need. Among respondents who did not meet diagnostic criteria for depression or anxiety, the number of depression symptoms ever experienced was related to perceived need. This suggests that providers should be sensitive to symptom reports and individual assessments, even

if they do not meet the diagnostic threshold for depression. Conversely, many who met diagnostic criteria for depression or anxiety disorders in the past year did not perceive a need for MHC. It is important for these patients to understand the importance of care for depression and anxiety, as these conditions are related to poor physical health outcomes and increased mortality risk.

Depression and anxiety symptoms are experienced by a considerable portion of community-dwelling older individuals, but symptoms are not a sufficient condition for perceived need. Future studies should focus on how individual perceptions of mental illness and social network interaction influence whether individuals perceive a need for care and whether they seek treatment. Future studies also should examine the association between perceived need and utilization and whether need and utilization are related to illness characteristics and psychosocial factors in similar ways. Understanding processes that lead older adults to perceive need for treatment and decide whether to seek treatment could improve MHC utilization rates, which could lead to improved physical and mental health status as well as reduced health care costs.

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