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Correlates of Perceived Need for and Use of Mental Health Services by Older Adults in the Collaborative Psychiatric Epidemiology Surveys

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Abstract

Objectives—Older adults are especially unlikely to seek mental health services, but little is known about whether their perceptions of need for help contribute to this problem. The objectives of this study were to compare perceived need across the lifespan and to examine sociodemographic and mental health correlates of whether or not older adults sought professional help, perceived the need for help without seeking it, and sought help from specialty mental health professionals.

Methods—The authors examined help-seeking and perceived need with the Collaborative Psychiatric Epidemiology Surveys, focusing on 3,017 adults 55 years of age and older. Logistic regressions predicted help-seeking and perceived need from sociodemographic factors, past-year psychiatric disorders, and past-year suicidal behaviors. Individuals who perceived the need for help without receiving it also reported barriers to help-seeking.

Results—Levels of perceived need were highest among 25-44 year-olds and lowest among adults 65 years of age and older. Among older adults with psychiatric disorders, 47.1% did not perceive a need for professional help. Diagnoses and suicidal behaviors were strong predictors of whether or not individuals perceived need, whereas among those who perceived the need for help only older age was positively associated with help-seeking. Few factors clearly distinguished those who did and did not seek help from specialty mental health professionals with the exception of having three or more psychiatric diagnoses. Finally, the most common barrier to help-seeking was a desire to handle problems on one's own.

Conclusions—A lack of perceived need for mental health services and self-sufficiency beliefs are significant barriers to older adults' use of mental health services.

Keywords

mental health service utilization; perceived need; help-seeking

Introduction

The vast majority of individuals with diagnosable mental health problems do not seek professional help, and help-seeking is especially unlikely among older adults (1-4). The

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striking underutilization of mental health services by older adults is particularly troubling for three reasons. First, the North American population is both growing and aging, so that 20 to 25% of individuals are expected to be 65 years of age or older by the year 2030 (5,6). Second, there is good reason to suspect a greater increase in rates of mental health problems among older adults, in comparison to younger individuals, within this same timeframe (7). Third, psychological and pharmacological treatments are highly effective in treating mental health problems in older individuals (8,9). The projected growth in the number of older adults who will not access effective treatments when they need them has led prominent scholars to declare an emerging crisis in older adults' mental health care (7), and to call for additional research aimed at understanding and ameliorating age inequities in service use. The goals of this study are to meet this call by investigating age differences in perceived need for mental health services and exploring correlates of older adults' perceived need for and use of professional help.

Older adults do not seek mental health services for a variety of reasons, only some of which are known. According to Andersen's (10) behavioral model of health services use there are contextual and individual determinants of help-seeking. Contextual factors are known to impede older adults' access to mental health services. For example, older adults are less likely to receive advice to seek help from social support members (11) and more likely to encounter mental health policies that impede access to care (12). Nonetheless, if older adults do seek help they face a lack of professionals with geriatric mental health training (13) and, perhaps as a result, primary care physicians and mental health professionals with ageist attitudes, beliefs, and practices (14,15). With respect to individual-level factors, Andersen's model suggests that help-seeking is determined by predisposing variables such as age and gender, enabling resources such as social support, and objective and subjective indicators of need for help. Research examining the influence of predisposing and enabling characteristics on older adults' help-seeking suggests that lower levels of service use are associated with older age (16), ethnic minority status (17), and poor mental health literacy (18). In contrast, stigma does not appear to be a significant barrier to older adults' use of services (19,20). With respect to need, research clearly shows that objective indicators of psychopathology, including diagnosis and suicidal ideation, are the strongest predictors of mental health service use among older adults (1,2,16)

Although need is clearly a strong driver of mental health service use, objective indicators such as diagnosis offer a restricted view of this important construct. Equating diagnosis with need fails to capture individuals with significant symptoms who do not meet diagnostic criteria, many of whom seek mental health services (21). As a result, there is growing appreciation for the importance of expanding definitions of need to include perceptions of it (22). For example, perceived need has been shown to be a better predictor of physician visits for health concerns than self-reported health status (23) and in the overall adult population perceived need for mental health services is positively associated with distress and psychopathology, female gender, younger age, and poor quality of life (24-26). Research with older adults indicates that they have lower levels of perceived need than younger individuals (2), that perceived need is positively associated with past-year and lifetime GAD and MDD diagnoses, more symptoms of depression, and a history of chronic physical conditions (27), and that limited perceived need may be an important barrier to their use of mental health services (1). This study builds upon these findings using a large nationally representative sample of older adults. Our first objective was to replicate earlier research demonstrating that older adults have lower levels of perceived need than younger adults (2). Our second objective was to examine sociodemographic and mental health correlates of need among older adults in two ways; as it has typically been defined in terms of whether or not older adults seek help for mental health services, and using a broader definition of need that includes older adults who sought help as well as those who perceived the need for help

but did not receive it. Our third objective was to explore correlates of whether or not older individuals sought help once they perceived the need for it. Our final objectives were to explore sociodemographic and mental health factors associated with decisions to seek help from mental health specialists versus general health care providers, and to examine self-reported barriers to help-seeking among those who perceived a need for help without seeking it.

Methods

Sample

The Collaborative Psychiatric Epidemiologic Surveys (CPES) (28) are comprised of three surveys conducted between 2001 and 2003: the National Comorbidity Survey Replication (NCS-R, n=9282), the National Survey of American Life (NSAL, n=6082) and the National Latino and Asian American Study (NLAAS, n=4649). The three surveys are representative of the US adult population and they employed very similar methodologies, including utilizing trained lay-interviewers to conduct interviews primarily in-person. The average response rate of the CPES is 72.7%. Details of each survey can be found elsewhere (28,29).

The overall CPES sample includes 20,013 respondents. Help-seeking and perceived need questions were examined in subsets of each of the surveys, including Part II respondents in the NCS-R (n=5692), a random 75% of respondents in the NLAAS (n=3499), and Black respondents of African and Caribbean descent in the NSAL (n=5008). Therefore, a total of 14,199 CPES respondents completed assessments of help-seeking and perceived need.

Most of our analyses are restricted to CPES respondents over age 54 (n=4,888). The sample for the current study includes 3,137 individuals age 55 and over who were in the subsets of each survey that completed assessments of help-seeking and perceived need. This includes Part II respondents in the NCS-R (n=1372), a random 75% of respondents in the NLAAS (n=657), and Black respondents of African and Caribbean descent in the NSAL (n=1108). As was the case in other recent studies (19,30), we focused on adults 55 and older in order to compare young-old, middle-old, and old-old groups; to increase our sample size; and because the traditional cut-off of 65 is becoming less relevant as individuals increasingly retire prior to that age or work well past it.

Measures

Dependent Variables—The current study defined help-seeking based on contact with the following health care providers for mental health concerns in the past year: psychiatrists, psychologists, social workers, medical doctors, nurses, counselors, other health professionals, spiritual advisors, and healers. We categorized psychiatrists, psychologists and social workers as mental health professionals, in line with previous research (26).

Respondents' perceived need for mental health care in the past year was assessed with the following question: "Was there ever a time during the past 12 months when you felt that you might need to see a professional because of problems with your emotions or nerves or your use of alcohol or drugs?" Individuals who endorsed past-year help-seeking were assumed to have perceived a need for help. We used these perceived need and help-seeking questions to create four dependent measures. First, we differentiated individuals with help-seeking from any source in the past-year from individuals who had not sought help in the past year. Second, we differentiated individuals who had either perceived a need for care or sought help in the past-year from a reference group who neither sought help nor perceived a need for help in the past-year. Third, we differentiated individuals who perceived a need for and sought help from a reference group who perceived a need for help without seeking it.

Finally, we differentiated individuals who sought help from mental health professionals in the past-year from a reference group who sought help from other health providers.

Independent Variables—We examined the following sociodemographic correlates of help-seeking and perceived need: age (55-64, 65-74, 75+), gender, race/ethnicity (non-Hispanic White, Asian, Hispanic, Black, other), education (0-11 years, 12 years, 13-15 years, 16+ years), marital status (married/cohabiting, separated/widowed/divorced, never married), and annual household income (<\$12,000, \$12,000-\$26,999, \$27,000-\$54,999, \$55,000+).

Trained lay interviewers used the World Mental Health Composite Diagnostic Interview (WMH-CIDI) (31) to diagnose the following psychiatric disorders according to DSM-IV-TR (32) criteria: major depression, dysthymia, generalized anxiety disorder, panic disorder, agoraphobia, social phobia, post-traumatic stress disorder, alcohol abuse and dependence, and drug abuse and dependence. From these diagnoses we generated independent variables reflecting any anxiety disorder, any mood disorder, any substance disorder, any disorder, and number of psychiatric disorders (0, 1, 2, 3+) in the past year.

Suicidal behaviors were assessed with three questions in each survey: “Have you ever seriously thought about committing suicide?”, “Have you ever made a plan for committing suicide?”, and “Have you ever attempted suicide?” Respondents who endorsed each question were then asked if that behavior had occurred at any time in the past 12 months. As a result of their low levels of endorsement among older adults in the CPES, we combined suicidal ideation, plans and attempts to reflect any suicidal behavior in the past-year.

Barriers to Help-Seeking—Respondents who did not seek help but perceived a need for help for at least one month in the past year were asked whether or not they experienced a list of barriers to seeking help.

Analytic Strategy

We used the Taylor Series Linearization method (33) in SUDAAN (34) for variance estimation purposes to account for the complex sampling design of the surveys. Statistical weights and stratification information are provided for analysis of the CPES as a whole and we applied these in all analyses to ensure the data were representative of the general population.

We calculated the prevalence of perceived need without help-seeking, perceived need with help-seeking, and help-seeking from mental health professionals among individuals with psychiatric disorders using cross-tabulations. We examined these prevalence estimates across the adult lifespan with seven age categories using cross-tabulations and chi-square tests. We then focused on adults 55 and older and examined sociodemographic characteristics, past-year psychiatric disorders, and past-year suicidal behaviors in cross-tabulations and logistic regression models with each dependent variable described above. We entered each sociodemographic factor, past-year psychiatric disorder variable, and past-year suicidal behavior variable in a bivariate unadjusted logistic regression model with each dependent variable. We also examined sociodemographic factors in logistic regression models adjusted for past-year psychiatric disorders and suicidal behaviors. Finally, we calculated the prevalence of barriers to help-seeking using cross-tabulations. As a result of the large number of comparison tested, we adopted a conservative $p < .01$ value to indicate significant associations.

Results

In terms of the weighted demographic makeup of our sample, 41.1% were 55 to 64 years of age, 32.4% were 65 to 74, and 26.5% were 75 and older. The majority of individuals were female (56.8%) and non-Hispanic White (80.8%). In addition, 9.7% were Black, 5.3% were Hispanic, 2.6% were Asian, and 1.5% reported an “other” race/ethnicity. With respect to education, 26.3% had less than 12 years, 33.2% had 12 years, 21.3% had 13 to 15 years, and 19.2% had 16 or more. The majority of individuals were married or common-law (60.7%) whereas 2.8% were never married and 36.6 were separated, divorced, or widowed. Finally, 14.9% of individuals had an annual household income of less than \$12,000, 24.9% made \$12,000 to \$26,999, 27.8% made \$27,000 to \$54,999, and 32.4% made \$55,000 or more.

Table 1 demonstrates that 420 (9.5%) older adults 55 and older had at least one anxiety, mood, or substance use disorder in the past year. Overall, 41% of these individuals received mental health services (15.7% saw specialty mental health professionals and 25% saw other health professionals) and an additional 12% perceived the need for help without receiving it so that 53% of them perceived a need for help. In addition, 7% of older adults without mood, anxiety, or substance disorders perceived a need for professional help, regardless of whether they received it or not. Importantly, the type of disorder and psychiatric comorbidity affected: (a) the percentage of individuals who perceived a need for help but did not seek it, (b) the percentage who perceived need and sought it, and (c) the percentage who sought help from mental health professionals. With respect to type of disorder, individuals with anxiety disorders had the lowest prevalence of all three outcomes. Conversely, individuals with substance use disorders, although relatively uncommon, had the highest prevalence of perceived need and specialty mental health service use. Not surprisingly, as the level of disorder comorbidity increased, so did the likelihood of perceiving the need for help ($\chi^2 = 4.83$, $df = 3$, $p = .003$), seeking professional help ($\chi^2 = 28.56$, $df = 3$, $p < .001$), and visiting specialty mental health providers ($\chi^2 = 12.78$, $df = 3$, $p < .001$).

Among individuals with psychiatric disorders, Table 2 indicates a hill-shaped curve with respect to the influence of age on perceived need for professional help, with the highest rates among 25 to 44 year-olds and the lowest rates among those over the age of 65.

Correlates of Perceived Need Among Older Adults

We began by exploring correlates of whether or not older adults used mental health services, which is a narrow definition of perceived need. With respect to demographic differences between these groups, shown in Table 3, a greater likelihood of seeking professional help was associated with younger age, female gender, with being previously married, and with having an annual household income of less than \$12,000. However, after adjusting for psychopathology, the only association that remained significant was household income. In contrast, the type of disorder, number of disorders, and presence of suicidal behaviors had much stronger effects on help-seeking, with odds ratios ranging from 8.5 to 25.3.

Our next analysis, shown in Table 4, examined correlates of an expanded definition of perceived need, in terms of whether or not individuals either sought help or needed help but did not receive it. Once again, being younger, female, previously married, and having an annual household income of less than \$12,000 had a positive effect on perceived need, and all demographic effects except for income disappeared after adjusting for psychopathology. Past-year disorders and suicidal behavior had an even stronger effect on whether or not individuals perceived a need for help using this broad definition, with odds ratios ranging from 8.0 to 47.9.

Correlates of Help-Seeking Among Older Adults With Perceived Need

We also examined correlates of whether or not older adults sought help once they perceived the need for it. We used logistic regression to compare 323 older adults with perceived need who sought professional help to 74 with perceived need who did not seek help. The only demographic or mental health variable that significantly differentiated these groups was age. Older adults were more likely to seek help once they perceived the need for it; the odds ratio of seeking help was 8.24 (adjusted for psychopathology; 95% CI 2.79-24.29; $p < .001$) for adults 75 and older in comparison to 55-64 year-olds (Wald $t(180) = 7.40$, $p < 0.001$).

Our final analysis examined correlates of whether mental health services were sought from mental health professionals versus other care providers. As shown in Table 5, younger age was the only demographic factor positively associated with specialty mental health service use in our unadjusted model, and that finding was no longer significant after adjusting for psychopathology. With respect to psychiatric effects, suicidal behavior was not a significant predictor of where older adults sought help, nor was the presence of a mood, anxiety, or substance disorder. Psychiatric comorbidity increased the odds of specialty mental health care, but only for those with three or more disorders.

Barriers to Seeking Help Among Older Adults with Perceived Need

Table 6 provides the frequencies with which older adults who perceived the need for help without receiving it reported barriers to help-seeking. The most frequent attitudinal barrier, reported by 69% of respondents, was a desire to handle problems on their own. The most commonly reported structural barriers had to do with financial concerns and knowledge about appropriate providers, which were endorsed by approximately 45% of respondents. Concerns related to stigma, dissatisfaction with previous treatment or the availability of services, and problems with access were endorsed by fewer than 25% of respondents.

Discussion

This study examined perceived need for mental health services using a large, representative sample of Americans age 55 and older. Fortunately, most of the individuals in this study who perceived the need for help sought it; that is, 53% of older adults with past-year mood, anxiety, or substance-related disorders perceived the need for professional help and 41% sought it. On the other hand, these data also demonstrate that approximately half of the older individuals with a clear objective indicator of need for professional help (i.e., a psychiatric diagnosis) did not perceive it. Perception of need is therefore a very significant barrier to older adults' use of mental health services. Furthermore, like Klap and colleagues, (2) we found that among individuals with psychiatric disorders, older adults were much less likely to perceive the need for mental health services than middle aged or younger individuals.

Why did so many older adults with clinically significant mental health problems report that they did not feel the need to see a professional? The CPES provides some insight into this question by providing a list of potential barriers to respondents with perceived need who did not seek professional help in the past year. By far the most common reason for not seeking help following perceptions of need was that respondents wished to handle the problem themselves. A sizable percentage of individuals appeared able to do so given that 37% reported that their problem did not require help or went away on its own, and 27% reported that their problem did not bother them very much. In addition to this attitudinal barrier, a significant number of participants endorsed financial concerns and knowledge of where to go and who to see as structural barriers to seeking help. These results are consistent with findings from the Canadian Community Health Survey, which also found that knowledge and self-reliance beliefs were particularly strong barriers to professional help among older

adults (35). At the same time, it is important to note that these barriers are not unique to older adults, as these same attitudinal and structural barriers were the most commonly endorsed by younger adults in other epidemiologic surveys (36). Additional research is required to examine age differences in barriers to perceiving the need for help and to receiving help once the need is perceived, perhaps using a combination of qualitative and quantitative methods (37), rather than assuming what the potential barriers are in advance.

In terms of correlates of perceived need, diagnosis and suicidal behavior were the strongest predictors. This was true when we defined need according to whether or not older adults sought help, and was especially true when we defined it more broadly to include both help-seeking and the need for help without seeking it. It is interesting to note that in terms of diagnosis, help-seeking is typically most likely for mood disorders, less likely for anxiety disorders, and even less likely for substance disorders (2,38,39). In this study, however, substance disorders were especially likely to result in perceived need for professional help, regardless of whether it was sought or not. So although substance disorders were quite rare among older adults in this study, when they existed they were very likely to be perceived as requiring professional help. In comparison to the very strong influence of objective need indicators on perceptions of need, sociodemographic factors had a more modest influence. Using both narrow and broad definitions, perceived need for mental health services was more likely among the young-old, women, those who were previously married, and those with annual household incomes less than \$12,000. With respect to income, it may be that help-seeking and perceived need are highest among especially poor individuals because they are most likely to be eligible for Medicaid and to suffer from poverty-related mental health concerns. The fact that income remained a significant predictor of need after adjusting for psychopathology suggests that individuals with very low incomes experience a host of personal, interpersonal, financial, and environmental stressors even in the absence of threshold psychopathology (40). The odds ratios for sociodemographic variables were, however, much smaller than for the mental health need variables, which mirrors previous research (1,16).

As was the case in Mojtabai and colleagues' (26) study, for individuals who perceived the need for professional help, psychopathology had very little impact on whether or not they sought help. In our study, the only factor that increased the likelihood of help-seeking among individuals who perceived the need for help was older age. Very few adults 75 and older who perceived the need for help did not seek it. This finding suggests that perceptions of need for help and help-seeking are closely linked among the oldest old and that we need to understand why this relationship is more likely to break down among younger individuals.

Sixteen percent of older adults who sought mental health services did so from mental health professionals. This finding is consistent with previous research suggesting that older adults in particular have a preference for meeting their mental health needs within the general medical sector of the health care system (3,4,41). The only sociodemographic characteristic that positively affected specialty mental health service use was younger age. In terms of the influence of psychopathology on whether or not older adults sought help from mental health professionals, we were somewhat surprised that neither psychiatric diagnosis nor suicidal behavior increased the likelihood of specialty mental health service use, and that only having significant comorbidity (3+ disorders) increased the odds of seeing a mental health professional. On the one hand, even though it was a rare occurrence, it is reassuring that older adults with highly comorbid and therefore complicated clinical presentations were more likely to receive specialty mental health treatment. On the other hand, it is quite likely that some proportion of the 84% of older adults who sought mental health services from other health professionals could have benefited from mental health expertise, especially

considering that psychological or psychiatric treatment may be less effective when provided by non-psychiatrist physicians (42,43).

The findings from this study must be interpreted in light of several limitations. First, the CPES examined perceived need with a single question, which is necessarily less reliable, valid, and comprehensive than psychometrically sound instruments such as the Perceived Need for Care Questionnaire (44) that assesses need for information, medication, psychotherapy, social intervention, and skills training. Second, we would have liked to examine the influence of insurance on perceived need for mental health services. However, one of the three CPES surveys (the NSAL) did not assess Medicare separately and instead included it with other forms of government insurance such as Medicaid and military health insurance. We felt that a general government insurance category was inappropriate and potentially misleading for an older adult sample and therefore excluded insurance from our analyses. Third, caution is needed in generalizing our findings to institutionalized older adults because they were not sampled in the CPES. Fourth, caution is also required when interpreting analyses with small subgroups, such as older adults with substance disorders. Finally, the CPES does not allow for an examination of factors such as help-seeking attitudes that have previously been shown to influence perceptions of need for help (26).

Despite these limitations, this study provides compelling evidence that many older adults with serious mental health problems do not seek professional help because they fail to perceive the need for it. Perceived need in this study was more likely among younger, previously married, female, and poor demographic groups. It was also more likely among older adults with psychiatric diagnoses and suicidal behavior. One possible implication of these findings is that by understanding why certain groups of older adults often fail to perceive the need for help, we can greatly enhance their use of effective mental health services. Another possible implication, however, is that some proportion of older adults with mental health concerns do not perceive the need for help because they do not require it, perhaps because their symptoms are mild or transient (45), because of resilience or effective coping (46), or because of a high threshold for when professional help is necessary. Regardless, these data highlight the need for additional research exploring the nature and consequences of perceived need for professional mental health services among older adults.

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Table 1
Perceived need and help-seeking among older adults with and without various psychiatric disorders

Diagnosis	N	%	Perceived Need Without Help-seeking, %	Perceived Need With Help-seeking, %	Sought Help from Mental Health Professionals, %
Type of Disorder					
Any Anxiety Disorder	306	7.1	13.1	40.9	16.1
Any Mood Disorder	181	4.2	21.1	47.0	21.7
Any Substance Disorder	17	0.3	26.8	50.9	47.5
Any Disorder	420	9.5	12.2	40.7	15.7
Number of Disorders					
No Disorders	2652	90.5	1.3	5.9	1.8
One Disorder	285	6.3	4.9	34.5	9.2
Two Disorders	79	1.9	24.8	47.5	16.1
Three or More Disorders	56	1.3	44.5	61.1	46.8

Note: Percentages are weighted.

Table 2

Prevalence of perceived need for professional help among individuals with psychiatric disorders across the adult lifespan

Variable	N (%) ^a								χ^2	df	p
	Total	18-24	25-34	35-44	45-54	55-64	65-74	75+			
No perceived need	1304	292 (74.3)	307 (61.9)	273 (67.9)	221 (74.7)	122 (85.9)	60 (89.3)	29 (99.7)			
Perceived need without help-seeking	485	95 (25.7)	159 (38.1)	114 (32.1)	82 (25.3)	24 (14.1)	10 (10.8)	1 (0.4)	5.91	6	<0.001
No perceived need	1296	290 (49.6)	306 (40.3)	270 (33.9)	220 (42.4)	121 (46.7)	60 (65.2)	29 (56.6)			
Perceived need with help-seeking	1517	231 (50.4)	372 (59.7)	396 (66.1)	322 (57.6)	131 (53.3)	42 (34.9)	23 (43.4)	5.55	6	<0.001
No help-seeking	1790	387 (77.5)	466 (79.7)	387 (66.7)	303 (74.3)	146 (72.7)	71 (90.4)	30 (91.0)			
Sought help from mental health professionals	504	66 (22.5)	99 (20.3)	156 (33.3)	113 (25.7)	56 (27.3)	10 (9.6)	4 (9.0)	3.94	6	0.001

^aReported Ns are for the sample, whereas percentages are weighted to be representative of the US population.

Table 3
Demographic and psychiatric correlates of whether or not older adults used mental health services

	No Past-Year Help-Seeking (n=2678)		Past-Year Help-Seeking (n=323)					
	n (%)	n (%)	OR (95% CI)	AOR ^a (95% CI)	<i>t</i> ^b	<i>p</i>		
Demographic Characteristics								
Age								
55-64	1290 (88.3)	182 (11.8)	1.00	1.00	--	--		
65-74	867 (92.2)	88 (7.8)	0.64 (0.46-0.88)*	0.87 (0.63-1.20)	-2.75	0.007		
75+	521 (93.1)	53 (6.9)	0.55 (0.36-0.83)*	0.83 (0.54-1.30)	-2.87	0.005		
Gender								
Male	1076 (93.5)	94 (6.5)	1.00	1.00	--	--		
Female	1602 (88.9)	229 (11.2)	1.81 (1.25-2.61)*	1.62 (1.06-2.48)	3.15	0.002		
Race/Ethnicity								
Non-Hispanic White	936 (90.5)	171 (9.5)	1.00	1.00	--	--		
Asian	270 (93.0)	23 (7.1)	0.72 (0.43-1.21)	0.84 (0.48-1.46)	-1.24	0.22		
Hispanic	368 (91.5)	45 (8.5)	0.88 (0.52-1.49)	0.76 (0.44-1.30)	-0.47	0.64		
Black	1073 (92.8)	79 (7.2)	0.74 (0.51-1.07)	0.69 (0.46-1.03)	-1.62	0.11		
Other	31 (92.3)	5 (7.7)	0.79 (0.23-2.76)	0.24 (0.01-4.53)	-0.37	0.71		
Education								
0-11 years	909 (90.1)	99 (9.9)	1.00	1.00	--	--		
12 years	779 (92.7)	92 (7.3)	0.72 (0.43-1.21)	0.78 (0.44-1.39)	-1.26	0.21		
13-15 years	488 (90.7)	67 (9.3)	0.93 (0.60-1.44)	0.85 (0.51-1.41)	-0.33	0.74		
16+ years	502 (88.8)	65 (11.2)	1.15 (0.69-1.93)	1.18 (0.70-2.00)	0.54	0.59		
Marital Status								
Married/cohabiting	1397 (92.8)	145 (7.2)	1.00	1.00	--	--		
Separated/widowed/divorced	1165 (87.8)	158 (12.1)	1.77 (1.21-2.59)*	1.46 (0.99-2.13)	2.98	0.003		
Never married	116 (87.4)	20 (12.6)	1.85 (0.75-4.56)	1.49 (0.57-3.89)	1.35	0.18		
Household Income								
\$11,999 or less	601 (83.8)	101 (16.2)	1.00	1.00	---	---		
\$12,000 - \$26,999	723 (93.5)	68 (6.5)	0.36 (0.22-0.60)***	0.43 (0.25-0.75)**	-3.94	<0.001		

	No Past-Year Help-Seeking (n=2678)		Past-Year Help-Seeking (n=323)			
	n (%)	n (%)	OR (95% CI)	AOR ^a (95% CI)	<i>p</i> ^b	P
\$27,000 - \$54,999	665 (91.0)	82 (9.0)	0.51 (0.34-0.77)***	0.61 (0.40-0.92)*	-3.28	0.001
\$55,000 or more	689 (91.9)	72 (8.1)	0.46 (0.29-0.72)***	0.58 (0.35-0.94)*	-3.40	<0.001
Past-Year Disorders						
Any Anxiety Disorder						
No	2501 (93.3)	204 (6.8)	1.00	---	---	---
Yes	177 (59.1)	119 (40.9)	9.56 (6.77-13.51)**	---	12.89	<0.001
Any Mood Disorder						
No	2582 (92.5)	246 (7.5)	1.00	---	---	---
Yes	96 (53.0)	77 (47.0)	10.94 (7.89-15.17)**	---	14.45	<0.001
Any Substance Disorder						
No	2667 (91.0)	318 (9.0)	1.00	---	---	---
Yes	11 (49.1)	5 (50.9)	10.46 (2.13-51.30)*	---	2.91	0.004
Number of Disorders						
No Disorders	2431 (94.1)	164 (5.9)	1.00	---	---	---
One Disorder	187 (65.5)	91 (34.5)	8.48 (5.66-12.69)**	---	10.44	<0.001
Two Disorders	40 (52.5)	34 (47.5)	14.52 (8.05-26.19)**	---	8.95	<0.001
Three or More Disorders	20 (38.9)	34 (61.1)	25.26 (14.89-42.88)**	---	12.05	<0.001
Past-Year Suicidal Behaviors						
Any Suicide Ideation, Plan or Attempt						
No	2663 (91.3)	304 (8.7)	1.00	---	---	---
Yes	14 (36.5)	19 (63.5)	18.28 (9.46-35.33)**	---	8.70	<0.001

* p≤0.01.

** p≤0.001

^a AORs are for adjusted for any past-year anxiety, mood or substance disorder and any past-year suicidal behavior.

^b Wald *t*-tests (and associated *p*-values) with *df* = 180 for the unadjusted ORs.

Table 4
Demographic and psychiatric correlates of whether or not older adults perceived a need for or used mental health services

	Neither Sought Help nor Perceived a Need for Help (n=2602)		Sought Professional Help or Perceived a Need for Help (n=397)		p
	n (%)	n (%)	OR (95% CI)	AOR ^a (95% CI)	
Demographic Characteristics					
Age					
55-64	1243 (85.3)	229 (14.7)	1.00	1.00	--
65-74	844 (90.8)	108 (9.2)	0.59 (0.41-0.83)**	0.81 (0.57-1.16)	0.003
75+	515 (92.9)	60 (7.1)	0.44 (0.29-0.67)**	0.65 (0.42-0.99)	<0.001
Gender					
Male	1053 (92.1)	117 (7.9)	1.00	1.00	--
Female	1549 (86.9)	280 (13.1)	1.75 (1.21-2.55)*	1.56 (1.02-2.40)	0.004
Race/Ethnicity					
Non-Hispanic White	897 (88.8)	207 (11.2)	1.00	1.00	--
Asian	269 (92.7)	24 (7.3)	0.62 (0.38-1.04)	0.72 (0.42-1.25)	0.068
Hispanic	357 (90.0)	56 (10.0)	0.88 (0.54-1.44)	0.73 (0.44-1.21)	0.61
Black	1052 (91.1)	101 (9.0)	0.78 (0.55-1.10)	0.72 (0.49-1.06)	0.16
Other	27 (85.1)	9 (14.9)	1.39 (0.55-3.51)	0.63 (0.16-2.52)	0.48
Education					
0-11 years	880 (87.8)	128 (12.2)	1.00	1.00	--
12 years	764 (91.7)	107 (8.4)	0.65 (0.43-1.00)	0.71 (0.45-1.12)	0.048
13-15 years	474 (89.4)	79 (10.6)	0.85 (0.57-1.27)	0.77 (0.48-1.23)	0.42
16+ years	484 (86.1)	83 (13.9)	1.16 (0.69-1.94)	1.18 (0.70-2.01)	0.58
Marital Status					
Married/cohabiting	1365 (91.2)	178 (8.8)	1.00	1.00	--
Separated/widowed/divorced	1123 (85.7)	197 (14.3)	1.74 (1.25-2.41)*	1.43 (1.02-2.00)	0.001
Never married	114 (87.2)	22 (12.8)	1.53 (0.64-3.77)	1.16 (0.43-3.13)	0.34
Household Income					
\$11,999 or less	576 (80.9)	124 (19.1)	1.00	1.00	---

	Neither Sought Help nor Perceived a Need for Help (n=2602)	Sought Professional Help or Perceived a Need for Help (n=397)			
	n (%)	n (%)	OR (95% CI)	AOR ^a (95% CI)	p
\$12,000 - \$26,999	707 (91.9)	85 (8.1)	0.37 (0.24-0.58)***	0.44 (0.27-0.70)***	-4.41 <0.001
\$27,000 - \$54,999	650 (89.8)	97 (10.2)	0.48 (0.33-0.70)***	0.55 (0.37-0.82)**	-3.83 <0.001
\$55,000 or more	669 (90.1)	91 (9.9)	0.47 (0.30-0.73)***	0.59 (0.37-0.94)*	-3.40 <0.001
Past-Year Disorders					
Any Anxiety Disorder					
No	2453 (92.0)	250 (8.0)	1.00	---	-- --
Yes	149 (51.5)	147 (48.5)	10.78 (7.98-14.56)**	---	15.59 <0.001
Any Mood Disorder					
No	2527 (91.2)	298 (8.8)	1.00	---	-- --
Yes	75 (42.3)	99 (57.7)	14.06 (9.34-21.16)**	---	12.75 <0.001
Any Substance Disorder					
No	2594 (89.3)	390 (10.7)	1.00	---	-- --
Yes	8 (31.8)	7 (68.2)	17.85 (5.11-62.39)**	---	4.54 <0.001
Number of Disorders					
No Disorders	2392 (93.0)	201 (7.1)	1.00	---	-- --
One Disorder	171 (62.3)	107 (37.8)	8.00 (5.39-11.87)**	---	10.39 <0.001
Two Disorders	30 (39.2)	44 (60.8)	20.49 (12.26-34.23)**	---	11.61 <0.001
Three or More Disorders	9 (21.6)	45 (78.4)	47.93 (21.16-108.54)**	---	9.34 <0.001
Past-Year Suicidal Behaviors					
Any Suicide Ideation, Plan or Attempt					
No	2594 (89.7)	371 (10.3)	1.00	---	-- --
Yes	7 (15.5)	26 (84.5)	47.61 (18.07-125.47)**	---	7.87 <0.001

* p≤0.01,

** p≤0.001

^a AORs are for adjusted for any past-year anxiety, mood or substance disorder and any past-year suicidal behavior.

^bWald *t*-tests (and associated *p*-values) with *df* = 180 for the unadjusted ORs.

Table 5

Demographic and psychiatric correlates of whether older adults sought help from specialty versus general mental health service providers

	Sought Help from Other Professionals (n=188)		Sought Help from Mental Health Professionals (n=135)		OR (95% CI)	AOR ^a (95% CI)	<i>t</i> ^b	p
	n (%)	n (%)	OR (95% CI)	AOR ^a (95% CI)				
Demographic Characteristics								
Age								
55-64	89 (56.3)	93 (43.7)	1.00	1.00			--	--
65-74	58 (69.4)	30 (30.6)	0.57 (0.23-1.41)	0.67 (0.25-1.79)			-1.23	0.22
75+	41 (84.6)	12 (15.4)	0.24 (0.08-0.72)*	0.27 (0.08-0.89)			-2.57	0.011
Gender								
Male	52 (54.1)	42 (45.9)	1.00	1.00			--	--
Female	136 (70.6)	93 (29.4)	0.49 (0.24-1.01)	0.51 (0.24-1.08)			-1.95	0.053
Race/Ethnicity								
Non-Hispanic White	111 (68.2)	60 (31.8)	1.00	1.00			--	--
Asian	9 (52.8)	14 (47.2)	1.92 (0.59-6.23)	2.26 (0.69-7.44)			1.09	0.28
Hispanic	18 (51.1)	27 (48.9)	2.06 (0.83-5.09)	1.80 (0.70-4.66)			1.57	0.12
Black	47 (53.2)	32 (46.8)	1.89 (0.96-3.72)	1.77 (0.84-3.76)			1.85	0.07
Other ^c								
Education								
0-11 years	59 (63.1)	40 (36.9)	1.00	1.00			--	--
12 years	59 (76.4)	33 (23.6)	0.53 (0.25-1.13)	0.54 (0.25-1.18)			-1.65	0.10
13-15 years	34 (61.3)	33 (38.7)	1.08 (0.35-3.31)	1.17 (0.42-3.26)			0.14	0.89
16+ years	36 (60.3)	29 (39.7)	1.12 (0.45-2.79)	1.19 (0.48-2.95)			0.26	0.80
Marital Status								
Married/cohabiting	84 (67.5)	61 (32.5)	1.00	1.00			--	--
Separated/widowed/divorced	95 (65.5)	63 (34.5)	1.09 (0.54-2.22)	1.14 (0.55-2.35)			0.24	0.81
Never married	9 (41.8)	11 (58.3)	2.90 (0.66-12.62)	3.02 (0.71-12.84)			1.43	0.16
Household Income								
\$11,999 or less	55 (54.5)	46 (45.5)	1.00	1.00			--	--
\$12,000 - \$26,999	42 (61.8)	26 (38.2)	0.68 (0.30-1.56)	0.68 (0.30-1.54)			-0.92	0.36

	Sought Help from Other Professionals (n=188)		Sought Help from Mental Health Professionals (n=135)		OR (95% CI)	AOR ^a (95% CI)	<i>b</i>	P
	n (%)	n (%)	n (%)	n (%)				
\$27,000 - \$54,999	45 (54.9)	37 (45.1)	1.31 (0.57-3.00)	1.35 (0.60-3.03)	0.65	0.52		
\$55,000 or more	46 (63.9)	26 (36.1)	0.74 (0.34-1.61)	0.69 (0.29-1.61)	-0.77	0.44		
Past-Year Disorders								
Any Anxiety Disorder								
No	122 (67.9)	82 (32.1)	1.00	---	---	---		
Yes	66 (60.6)	53 (39.4)	1.38 (0.73-2.59)	---	0.99	0.32		
Any Mood Disorder								
No	151 (68.8)	95 (31.2)	1.00	---	---	---		
Yes	37 (53.8)	40 (46.2)	1.89 (0.83-4.33)	---	1.52	0.13		
Any Substance Disorder								
No	187 (66.6)	131 (33.4)	1.00	---	---	---		
Yes ^c								
Number of Disorders								
No Disorders	99 (68.6)	65 (31.4)	1.00	---	---	---		
One Disorder	59 (73.3)	32 (26.8)	0.80 (0.40-1.59)	---	-0.65	0.52		
Two Disorders	18 (66.2)	16 (33.8)	1.12 (0.37-3.35)	---	0.20	0.84		
Three or More Disorders	12 (23.4)	22 (76.6)	7.14 (2.56-19.25)**	---	3.92	<0.001		
Past-Year Suicidal Behaviors								
Any Suicide Ideation, Plan or Attempt								
No	180 (66.7)	124 (33.3)	1.00	---	---	---		
Yes	8 (47.4)	11 (52.6)	2.23 (0.70-7.03)	---	1.37	0.17		

* p≤0.01,

** p≤0.001

Note: AORs are for adjusted for any past-year anxiety, mood or substance disorder and any past-year suicidal behavior.

^a AORs are for adjusted for any past-year anxiety, mood or substance disorder and any past-year suicidal behavior.^b Wald *t*-tests (and associated *p*-values) with *df* = 180 for the unadjusted ORs.

c, Cell sizes < 5 are not reported or analyzed

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Table 6

Barriers to help-seeking among older adults with perceived need who did not seek help in the past year

Barriers to Help-Seeking	Number of respondents who were asked the question	Number (%) of respondents who endorsed each barrier
Attitudinal Barriers		
1. I wanted to handle the problem on my own	36	23 (69.2)
2. I thought the problem would get better by itself	36	15 (41.3)
3. I didn't think treatment would work	36	13 (38.9)
4. <i>The problem went away by itself, and I did not really need help</i>	58	21 (36.7)
5. The problem didn't bother me very much	36	10 (26.6)
6. I was concerned about what others might think if they found out I was in treatment	36	9 (23.9)
7. I received this treatment before and it did not work	36	9 (23.8)
8. I was not satisfied with available services	36	5 (9.7)
9. I was scared about being put into a hospital against my will	36	4 (6.4)
Structural Barriers		
1. I was unsure about where to go or who to see	36	17 (44.8)
2. I was concerned about how much money it would cost	36	19 (44.2)
3. I thought it would take too much time or be inconvenient	36	11 (33.3)
4. <i>Insurance wouldn't cover this type of treatment</i>	58	19 (28.2)
5. I had problems with things like transportation, childcare, or scheduling that would have made it hard to get to treatment	36	8 (22.6)
6. I could not get an appointment	36	2 (1.4)

Note: Respondents who answered affirmatively to the italicized barriers were not asked about the remaining barriers.