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Do Depressed Older Adults Who Attribute Depression to "Old Age" Believe It Is Important to Seek Care?

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OBJECTIVE: **To determine whether depressed older adults who attribute becoming depressed to "old age" rather than illness are more likely to believe it is not important to seek treatment for depression.**

DESIGN: **Cross-sectional mailed survey.**

SETTING: **Academically affiliated primary care physicians' network.**

PARTICIPANTS: **Surveys were mailed to 588 patients age ≥65 years who were randomly identified from patient lists of 20 physicians. Surveys were returned by 429 patients (73%). Patients were eligible for this study if they scored ≥2 points on the 5-item Geriatric Depression Scale (n = 94) and were not missing key variables (final n = 90).**

MEASUREMENTS AND MAIN RESULTS: **Of the 90 depressed patients, 48 (53%) believed that feeling depressed was very important to discuss with a doctor. In unadjusted analysis, older adults who did not believe it is very important to discuss feeling depressed with a doctor were more likely to attribute becoming depressed to aging (41% vs 17%; P = .012). In a logistic regression model adjusting for sociodemographic characteristics, number of impairments in basic and instrumental activities of daily living, medical comorbidity, and physical (PCS-12) and mental (MCS-12) component summary scores from the Medical Outcomes Study Short-Form-12, depressed older adults who attributed depression to aging had a 4.3 times greater odds than those who attributed depression to illness to not believe it is very important to discuss depression with a doctor (odds ratio [OR], 4.3; 95% confidence interval [CI], 1.3 to 14.5).**

CONCLUSIONS: **Among older persons with depression, attributing feeling depressed to old age may be an important barrier to care seeking.**

KEY WORDS: **aged; attitude to health; barriers to treatment; depression; health belief.**
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Despite strong evidence that depression among older adults responds to treatment,[1–4] over 30% of community-residing adults with major depression do not seek care.[5] The cost of undertreatment is great—both to the inadequately treated older individual, and to society as a whole: beyond its profound immediate impact on quality of life, depression in older adults is a risk factor for functional disability[6,7] and may predict premature mortality.[8–10] Older adults who are depressed use substantially more health resources than their nondepressed counterparts, even after adjusting for comorbid medical illness.[11–13] As the number of adults aged greater than 65 years swells to over 20% of our U.S. population over the next 30 years, it is urgent that we improve translation of what we know works in randomized clinical trials to community-based clinical settings.[14]

Why would an older adult with depression not seek care for this problem? Unfortunately, in contrast to the way in which older adults regard other highly prevalent medical conditions such as arthritis and hypertension, many in the current cohort of older adults still attach substantial stigma to having depression.[15] A 1997 expert consensus panel convened by the National Depressive and Manic–Depressive Association postulated that regardless of whether or not stigma plays a role, depressed people do not recognize the condition as an illness.[16] Believing symptoms of depression are the "expected response to a life situation" acts as a strong barrier to care seeking for many persons with depression.[17]

Among older adults, attributing health problems to "old age" rather than illness is a common phenomenon;[18–20] whether beliefs about aging influence older adults' health care seeking for depression has not been examined. Attributing health problems to old age was shown 20 years ago to increase the risk for early mortality[21] but a causal mechanism has not been elucidated; recently, there has been a resurgence of interest in the possible role of beliefs about aging in influencing health outcomes.[22–24]

Based on this literature and our own clinical experience with older adults, we hypothesized that attributing depression to "old age" causes older adults to decide not to seek health care when they become depressed. The purpose of this investigation therefore is to use survey data collected on community-residing older adults to determine whether depressed older adults who attribute becoming depressed to old age rather than to illness are more likely to believe it is not very important to seek treatment for depression. Identifying such a relationship could point to new strategies to decrease the undertreatment of depression among older adults.

METHODS

Subjects

As described elsewhere,[24,25] we collected data from community-residing older adults cared for by UCLA-affiliated primary care physicians. First, we sent letters to all 78 full-time clinicians in the UCLA Divisions of General Internal Medicine and Geriatrics, asking them to participate in a study to measure expectations regarding aging. Of the 43 physicians who volunteered to participate, we selected 20 from 7 different clinical settings in the greater Los Angeles region. Physicians were nonrandomly selected based upon the sociodemographic characteristics of the patients served by their community practice in order to maximize the diversity of the sample. For each selected physician, we identified a random sample of 40 of his or her patients aged 65 years or greater by physically pulling every 20th chart from the physician's alphabetized files, starting at a computer-generated random letter of the alphabet. We then presented participating physicians with lists of their 40 potentially eligible patients and asked them to exclude those who were: 1) not their patient; 2) deceased; 3) living in an institution; 4) non-English speaking; and/or 5) too medically ill or cognitively impaired to be able to complete a 30-minute self-administered survey. Exclusion rates varied from 3% to 60%. The most common exclusion criterion was dementia, and the 3 participating geriatricians had the highest exclusion rates. Remaining eligible patient participants (n = 588 out of 800) were sent a signed letter from their physician inviting them to participate in the study by completing the survey enclosed with the letter. Approval for this project was granted by the UCLA Institutional Review Board, and all participating patients provided signed documentation of informed consent, which was mailed back to the investigators along with the completed survey.

Data Collection

To determine whether older adults attribute becoming depressed to aging, we asked participants to state if an older person becomes depressed, whether it is most likely due to aging, aging and illness, or illness. As described previously,[24] participants were also asked to complete a series of 13 items we developed to measure beliefs regarding care seeking for age-associated conditions. These items were preceded by the probe, "If an older friend came to you asking for your advice about the following issue, what would you tell him or her?" Participants were then asked to state whether they would tell their friend that it is very, somewhat, or not at all important to discuss (the described issue) with doctor. For the purposes of this project we used the single item that asked respondents to comment regarding "when older people feel depressed." Potential demographic, medical, and psychosocial correlates of attributing depression to aging and health-seeking beliefs regarding depression were measured using: 1) 7 sociodemographic items; 2) the Medical Outcomes Study Short-Form-12, which can be used to compute a Physical Component Summary (PCS-12) and a Mental Component Summary (MCS-12) score using standardized weights based upon a mean of 50 and a standard deviation (SD) of 10 in the general U.S. population, with higher scores indicating better health status;[26] 3) 13 questions assessing ability to independently carry out Basic and Instrumental Activities of Daily Living (ADLs);[27,28] 4) the Charlson Comorbidity Index modified for self-administration;[29] 5) the 5-item Geriatric Depression Scale;[30] and 6) intrinsic religiosity using 2 questions modified from a previously tested instrument.[31]

Analysis

Because our goal was to examine whether attributing being depressed to aging is associated with health care–seeking beliefs among people who are actually depressed, we limited this study to participants who were likely to be depressed. Subjects therefore were eligible for this study only if they completed the survey and scored 2 or more on the 5-Item Geriatric Depression Scale; this cutpoint has been shown to have a sensitivity of 0.97 and a specificity of 0.85 for diagnosing depression when compared to the gold standard of clinical evaluation.[30]

We were most interested in examining the care-seeking beliefs of older adults who attributed becoming depressed purely to aging; therefore, we dichotomized responses to the attribution of depression to aging item into attributing to aging (only) versus the other 2 possible responses: attributing to aging and illness or attributing to illness (only). We dichotomized responses to the health care–seeking belief item into believing discussing feeling depressed with a doctor is very important versus somewhat or not at all, based upon the evidence from the medical literature that depressive symptoms are a sensitive indicator of clinical depression.[32]

We examined bivariate correlates of not believing that discussing feeling depressed with a physician is very important using 2-sided t tests for continuous variables and χ^2 tests for categorical variables. To determine whether attributing depression to aging is independently associated with not believing that feeling depressed is something very important to discuss with a doctor, we constructed a logistic regression model using the health care–seeking belief item as the dependent variable and the attribution of becoming depressed to aging item as the primary independent variable. We adjusted for age, gender, nonwhite ethnicity, low income, number of activities of daily living unable to do without assistance, number of comorbidities, and MCS-12 and PCS-12 scores. Because of possible correlation between patients of the same physician, clustering at the level of the physician was adjusted for using the Huber-White method.[33] To determine whether our results were dependent upon our decision to dichotomize the independent variable, as a sensitivity analysis, we constructed additional multivariate models using separate dummy

Table 1. Bivariate Comparisons of Depressed Older Adults (*N* = 90) Who Responded that When Older People Feel Depressed, This is: "Somewhat" or "Not at All Important" to Discuss with a Doctor Versus "Very Important" to Discuss with a Doctor

Characteristic	Somewhat/Not at All Important, *N* = 42*	Very Important (*N* = 48)†	Odds Ratio (95% CI)	*P* Value‡
Categorical variables:	% (*n*)	% (*n*)		
Attribute becoming depressed to aging§	40.5 (17)	16.7 (8)	3.4 (1.3 to 9.0)	.012
Female	54.8 (23)	41.7 (20)	NS	.215
Nonwhite ethnicity	23.8 (10)	35.6 (16)	NS	.232
Annual income < $20,000	34.2 (14)	33.3 (14)	NS	.938
Dependent in ≥ 1 ADL	47.6 (20)	56.3 (27)	NS	.413
Continuous variables:	Mean ± SD	Mean ± SD		
Age	78.4 ± 7.69	75.8 ± 7.88	n/a	.117
PCS-12 score¶	36.0 ± 12.2	33.7 ± 11.8	n/a	.375
MCS-12 score¶	41.2 ± 10.6	44.3 ± 11.8	n/a	.187
Number of comorbidities	2.64 ± 1.68	3.10 ± 2.10	n/a	.257
Religiosity score**	4.07 ± 1.90	3.75 ± 2.06	n/a	.446

* *Those who responded that when older people feel depressed, this is something "somewhat" or "not at all important" to discuss with a doctor.*
† *Those who responded that when older people feel depressed, this is something very important to discuss with a doctor.*
‡ *Comparisons made using* χ^2 *tests for categorical variables and 2-sided* t *tests for continuous variables.*
§ *Those who responded that if an older person becomes depressed, it is most likely due to aging.*
¶ *Physical Component Summary (PCS-12) score and a Mental Component Summary (MCS-12) score are computed from the Medical Outcomes Study SF-12 using standardized weights based upon a mean of 50 and a standard deviation of 10 in the general U.S. population, with higher scores indicating better health status.*[26]
** *Scores range from 1 to 7, with higher scores indicating greater intrinsic religiosity.*
ADL, activity of daily living; CI, confidence interval; SD, standard deviation.

variables for each possible response to the attribution to depression item. For all analyses, findings were considered to be statistically significant using the conventional criteria of $P \leq .05$. We used SAS 8.0 (SAS Institute, Inc., Cary, NC) and Stata (Stata Corporation, College Station, TX) statistical software.

RESULTS

Surveys were completed and returned by 429 (73%) of the original 588 eligible participants. Of the 429 older adults who completed surveys, 94 (22%) were classified as likely to be depressed as determined by a score of 2 or more on the 5-item GDS.[30] Of these, 4 were missing key independent and/or dependent variables, and were therefore removed from all analyses, leaving a final sample of 90 older adults.

Mean age (SD) of the 90 participants was 77.0 (7.9). Just under half (48%) of these participants were female; 70% were non-Latino white; 10% were African-American; 14% were Latino. Twenty-four percent of the participants in the final sample reported having annual incomes less than $20,000. Mean number of comorbidities (SD) was 2.9 (1.9); 52% reported being dependent in 1 or more activities of daily living.

When asked about how important it is to seek health care for feeling depressed, 53% (*n* = 48) respondents stated that feeling depressed is something "very important to discuss with the doctor;" 44% (*n* = 40) responded that this is something "somewhat important to discuss with the doctor;" and 2% (*n* = 2) responded that this is something "not at all important to discuss with the doctor." Table 1 shows a comparison between characteristics of depressed older adults who did not believe it is very important to discuss feeling depressed with a doctor with the characteristics of those who believed that it is. Older adults who did not believe it is very important to discuss feeling depressed with a doctor were more likely to attribute becoming depressed to aging (41% vs 17%; $P = .012$). None of the other characteristics examined were significantly associated with not believing it is very important to discuss feeling depressed with a doctor.

As illustrated in Table 2, in a multivariate logistic regression model adjusting for age, gender, nonwhite ethnicity, low income, number of ADL impairments, number

Table 2. Independent Association Between Attributing Depression to Aging and Responding that When Older People Feel Depressed, This is Not Something "Very Important" to Discuss With a Doctor*

Characteristic	OR	95% CI	*P* Value
Attributing depression to aging	4.3	1.3 to 14.5	.017

* *Logistic regression model adjusted for age, gender, nonwhite ethnicity, low income, # activities of daily living unable to do without assistance, # comorbidities, MCS-12, PCS-12, and clustering at the level of the physician. None of these other characteristics were significantly associated with responding that when older people feel depressed, this is not something "very important" to discuss with a doctor (P > .1 for all).*
CI, confidence interval; OR, odds ratio.

of comorbidities, physical and mental health-related quality of life (PCS-12 and MCS-12 scores from the SF-12), and clustering at the level of the physician, depressed older adults who attributed depression to aging had a 4.3 times greater odds than those who attributed depression to illness of not believing it is very important to discuss feeling depressed with a doctor (odds ratio [OR], 4.3; 95% confidence interval [CI], 1.3 to 14.5). The results of the sensitivity analysis showed that models in which the independent variable was not dichotomized estimated a similar effect size of attributing depression to aging.

DISCUSSION

Among depressed older adults in this community-based sample, those who attributed depression to aging had a 4 times greater odds of not believing that it is very important to discuss feeling depressed with a doctor than those who attributed depression to illness. This suggests that among older persons with depression, attributing feeling depressed to old age may be an important patient-level barrier to care seeking.

This study builds upon work done over the past 25 years, showing that attributing health problems to old age may be a contributing factor in older adults' not receiving needed care. In the 1980s, Prohaska and Leventhal found that attributing symptoms to aging was associated with more passive coping strategies[34] and less care seeking.[35] More recently, Goodwin et al. found that older adults who attribute heart disease, arthritis, and difficulty sleeping to normal aging were less likely to have received preventive medical services in the previous year.[22] In our recent work, we found that older adults who have low expectations for aging are more likely to state that it is not important to seek health care for a number of modifiable medical conditions.[24]

What sets this study apart from previous studies, however, is that the older adults in this sample are known to have had a strong probability of actually being depressed, and therefore having a high probability of benefiting from treatment, and conversely, a probability of harm from not receiving care. Given the availability of effective treatments for depression, and the high personal and social cost of undertreatment of depression, we believe that based on these findings, a targeted campaign to educate older adults that depression should not be attributed to old age might improve the quality of care for older adults with depression. In addition, the identification of this strong association between attributing depression to aging and not valuing discussing feeling depressed with a physician lends further support to calls for improved and comprehensive screening of older adults for depression in the primary care setting.

The results of this study must be interpreted with an appreciation of the limitations. This was a sample recruited from a single geographic region, was largely white and more educated, with higher incomes on average than most older Americans. The sample also has a greater percentage of men than is typical in samples of depressed older persons. Potential participants may have been differentially excluded by their physicians based on different levels of awareness of patients' cognitive function as well as different interpretations of how cognitively impaired one would need to be before being unable to complete a survey. Furthermore, though the response rate to the mailed survey was high (73%), nonresponders were likely to be different from those who completed the survey; conclusions from this study should not be generalized to all older adults.

Most of the respondents who stated that discussing depression with the doctor is not very important did at least state that discussing depression with the doctor was "somewhat important." Whether this belief corresponds with lower health care–seeking behavior for depression cannot be determined from this study. Further work should determine whether those who feel health care seeking for depression is not very important actually do not seek care. Future research should also delve deeper into understanding what older adults mean by attributing feeling depressed to aging rather than to illness: do these individuals believe old age is equivalent to having a medical illness and therefore depression is an appropriate response? Is depression attributed to aging as a coping mechanism in an attempt to remove some of its stigma?

It is important to point out that participants were not asked to report whether it was very important to seek health care when one has depression, but rather when one feels depressed. Though feeling depressed is a symptom of major and minor depression, it is not specific to these disorders; most nondepressed people feel depressed sometimes without having a psychiatric condition that would benefit from treatment, and it would be a waste of resources for every older adult to seek health care every time they felt depressed. Accordingly, initiatives to change older adults' attitudes toward depression must take caution to account for normal grief in the face of life events that commonly cause transient distress in late-life; we strongly agree with others who have warned against medicalizing the universal experience of human suffering in the face of loss of loved ones.[36]

In conclusion, depressed older adults who attributed depression to aging had a 4 times greater odds of believing that it is not very important to discuss feeling depressed with a doctor. Such attitudes may contribute to the undertreatment of depression among older adults. Attempts to improve the treatment of depression among older adults should incorporate public health initiatives to educate older adults that depression is not a normal part of aging.

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