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Knowledge of Depression Among Korean American Older Adults

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Abstract

The present study explored knowledge about depression and the factors that predict that knowledge in a sample of Korean American older adults ($N = 675$). Compared with other published results, knowledge of depression in the present sample was generally low. The participants provided on average only 42.6% correct answers on the 12-item Depression in Late Life Quiz, and for 9 items, more than 50% of the participants provided incorrect answers. In a multivariate linear regression, acculturation ($\beta = .12, p < .01$) and depressive symptoms ($\beta = -.09, p < .05$) were significant predictors of knowledge. Individuals with lower levels of acculturation had less knowledge of depression. An interesting finding was that those with higher levels of depressive symptoms exhibited poorer knowledge of depression. The study findings emphasized the need for educational interventions to be provided in order to improve the mental health literacy of Korean American older adults.

Keywords

knowledge of depression; acculturation; depressive symptoms; Korean American older adults

Unlike the inconsistent findings on prevalence rates for depressive symptoms and depressive disorders (e.g., Chiriboga, Black, Aranda, & Markides, 2002; Sorkin, Pham, & Ngo-Metzger, 2009; also see Ford et al., 2007; Kessler, Chiu, Demler, & Walters, 2005; Li, Friedman, Conwell, & Fiscella, 2007), there is a general consensus about the lower rates of mental health service use among older racial and ethnic minorities compared to their non-Hispanic White counterparts (e.g., U.S. Department of Health and Human Services, 2001). Although numerous studies have identified structural (e.g., insurance, access issues) and cultural (e.g., acculturation in general, English proficiency, cultural and health beliefs) barriers and challenges to service utilization among minority older adults, little attention has been paid to the role of individuals' knowledge and beliefs about mental health and mental illness (Jorm et al., 1997). Personal knowledge of depression may have a strong influence on the recognition and management of symptoms, help-seeking patterns, and the use of services (Jorm, 2000; Nielsen-Bohlman, Panzer, & Kindig, 2004; Werner, 2005).

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Despite an overall increase in knowledge about mental health over the past few decades (Phelan, Link, Stueve, & Pescosolido, 2000), members of the general public, particularly racial and ethnic minorities, still often have misconceptions about depression or associate a stigma with it (Goldney, Fisher, & Wilson, 2001; Lauber, Nordt, Falcato, & Rössler, 2003). Given that individuals with greater knowledge about mental disorders are more likely to seek appropriate and early treatment (Jorm, 2000; Link, Struening, Rahav, Phelan, & Nuttbrock, 1997), assessment of knowledge of depression deserves attention. A better understanding of the factors associated with this knowledge may help experts develop educational interventions to increase awareness of mental health issues, improve mental health literacy, and promote proper utilization of services.

The present study focused on one underserved and understudied minority group: Korean American older adults. Korean Americans have been identified as a high-risk group in mental health research (Hughes, 2002; Hurh & Kim, 1990; Kuo, 1984). Their reported levels of depressive symptoms are consistently higher than those observed in Whites and other racial and ethnic groups (e.g., Hurh & Kim, 1990; Jang & Chiriboga, 2010; Kuo, 1984; Min, Moon, & Lubben, 2005; Noh & Avison, 1996), but their utilization rate of mental health services is extremely low (e.g., Kim, 1995; Shin, 2002). One reason for this may be a lack of awareness of the signs and symptoms of depression. The aim of the present study was to explore levels and predictors of knowledge of depression among Korean American older adults. The explanatory variables considered in the assessment were basic sociodemographic characteristics, acculturation level, and depressive symptoms.

Method

Participants and Procedures

The participants were recruited using a cross-sectional survey of community-dwelling Korean American older adults (60 years and older) conducted from March to August 2008 in Tampa and Orlando, Florida. Using multiple sample recruitment strategies, researchers collected data from 675 Korean Americans older adults through visits and mail surveys. The survey questionnaires, which were in Korean, were developed through a translation/back-translation process that also included pilot testing with 20 Korean American older adults who were representative of the anticipated sample. Most of the instruments used in the study had been used in previous research and had good psychometric properties. Detailed information on the sampling procedures and validation of the multimethod recruitment strategy is available elsewhere (e.g., Jang, Chiriboga, Allen, Kwak, & Haley, 2010). None of the participants had missing information on more than 10% of the variables surveyed, and all were included in the analyses.

Measures

Knowledge of depression—The Depression in Late Life Quiz (Pratt, Wilson, Benthin, & Schmall, 1992) was used to assess individuals' knowledge of depression. This scale consists of 12 items that ask about depression. Examples include "It is normal for older people to feel depressed a good part of the time"; "Memory problems may be a sign of depression"; and "Depression among the elderly can be effectively treated with medication."

Although the original response format is “True,” “False,” and “I don’t know,” the present study used a simple true/false response because a majority of the Korean American elders endorsed the “I don’t know” response for many of the items during pilot testing. At .54, the internal consistency was relatively low, but this reflects the broad content area as well as variations in the difficulty of the items. The total number of correct answers was used in the analysis, with scores potentially ranging from 0 to 12.

Acculturation—Level of acculturation to mainstream American culture was assessed with a 12-item inventory (Jang, Kim, Chiriboga, & King-Kallimanis, 2007) that drew items from three existing instruments (i.e., Hazuda, Stern, & Haffner, 1988; Suinn, Ahuna, & Khoo, 1992; Ying, 1995). The inventory covered language use, media consumption, food consumption, social relationships, sense of belonging, and familiarity with culture. The psychometric properties of this inventory have been validated in studies with both older (e.g., Jang et al., 2007) and younger (e.g., Jang, Chiriboga, & Okazaki, 2009) Korean Americans. Each response was coded from 0 to 3. Total scores could range from 0 to 36, with a higher score indicating a greater level of acculturation to mainstream American culture. The internal consistency of the scale in the present sample of Korean Americans was high ($\alpha = .92$).

Depressive symptoms—A 15-item short form of the Geriatric Depression Scale (GDS-SF; Sheikh & Yesavage, 1986) was used to index depressive symptoms. With a yes/no response format, the scale consists of 5 positive items (e.g., “Are you satisfied with your life?” and “Do you feel happy?”) and 10 negative items (e.g., “Do you feel that your life is empty?” and “Do you feel helpless?”). The total score was calculated by summing the number of responses suggestive of depression. Scores could range from 0 (*no depressive symptoms*) to 15 (*severe depressive symptoms*). The internal consistency of the GDS-SF in the present sample was satisfactory ($\alpha = .82$).

Sociodemographic characteristics—Also assessed were age (in years), gender (0 = *male*, 1 = *female*), marital status (0 = *married*, 1 = *not married*), and educational attainment (0 = *less than high school*, 1 = *high school or more*).

Results

Characteristics of the Sample and Study Variables

The sample consisted of 675 Korean American older adults aged 60 to 96, with an average age of 70.2 years ($SD = 6.87$ years). More than half (58.8%) were women, and over three quarters were married (76.6%). More than 70% of the participants had received a high school education or higher. The mean acculturation score was 15.8 ($SD = 7.56$) out of 36. Scores for depressive symptoms averaged 3.61 ($SD = 3.27$). Scores on the Depression in Late Life Quiz averaged 5.12 ($SD = 1.71$) out of 12, representing 42.6% correct on the quiz.

Table 1 presents the percentages of incorrect responses on the individual items of the Depression in Late Life Quiz. The percentages of incorrect responses ranged from 17.4% to 82.7%. The highest percentage (82.7%) was for Item 6 (“Family and friends can usually help the depressed older person by telling him or her to ‘count your blessings’ or ‘look at the

bright side”). For 9 of the 12 items, more than 50% of the participants had incorrect answers, indicating a serious lack of knowledge about various aspects of depression. Item 8 (“It is common for older people to talk about potential suicide”) had the lowest percentage of incorrect answers (17.4%), suggesting that the majority of Korean American older adults were aware that talking about suicide is not common among older adults. However, nearly 50% of the participants thought that most older persons who did talk about committing suicide were not serious.

Multivariate Analyses

Prior to conducting multivariate analyses, we assessed bivariate correlations in order to understand the underlying associations among the study variables. The highest correlation coefficient was between education and acculturation ($r = .38, p < .001$), but the level did not provide evidence of collinearity.

Table 2 summarizes the results of a hierarchical linear regression analysis with knowledge of depression as the dependent variable. None of the four demographic variables reached statistical significance. However, acculturation ($\beta = .12, p < .01$) and depressive symptoms ($\beta = -.09, p < .05$) were significant. Individuals with lower levels of acculturation had less knowledge of depression. It is interesting that those with higher levels of depressive symptoms exhibited poorer knowledge of depression. The final model accounted for a relatively small (2%) but statistically significant proportion of the variance ($F = 2.52, p < .05$).

Discussion

Given the importance of mental health literacy, the present study assessed knowledge of depression and its related factors in a sample of community-dwelling Korean American older adults. It is striking that this sample averaged only 42.6% correct on the quiz. This figure is substantially lower than those reported in several studies conducted with relatively small samples of largely non-Hispanic Whites. For example, in a study by Pratt and colleagues (1992), the average rates of correct answers were 61% for a group of undergraduate students, 57% for a group of older adults enrolled in educational programs, and 69% for a group of service providers. In a more recent study of 52 primary care physicians, the average rate of correct answers was 80% (Zylstra & Steitz, 2000). In the present study, not only was the average rate of correct responses low, but more than 50% of the participants answered the majority of items (9 out of 12) incorrectly.

Examination of individual items answered incorrectly by many participants indicates lack of awareness of symptoms of depression, belief that available treatments for depression do not work, and belief that depression is “normal” for older adults. Other research has found that older adults who believe the myth that depression is “normal” are less likely to seek treatment for depression (Sarkisian, Lee-Henderson, & Mangione, 2003). These findings suggest that many Korean American older adults will not recognize depressive symptoms or suicide risk, and even if they do, will not seek appropriate treatment.

Consistent with findings from previous studies (e.g., Hughes, 2002; Jang & Chiriboga, 2010; Min et al., 2005), the present sample of Korean American older adults showed relatively low levels of acculturation and relatively high levels of depressive symptoms. When applying the cutoff score for the GDS-SF (scores higher than 5; Sheikh & Yesavage, 1986), we found that more than one fourth of the participants fell into the category of having probable depression. This figure is quite high compared with the rate of presence of depression of 9% and 10% observed, respectively, among community-dwelling older Whites and African Americans in Florida who were in the same category (e.g., Jang, Borenstein, Chiriboga, & Mortimer, 2005).

In the multivariate analysis, sociodemographic characteristics were not linked to the knowledge variable. It is of particular interest that there was no significant relationship between education and knowledge of depression. However, acculturation—a variable often closely associated with education—was a significant predictor, even after the influence of education was partialled out. Our findings with respect to the role of acculturation are consistent with previous studies showing that individuals with greater levels of acculturation usually have more access to and understanding of health information (e.g., Berry, 2002; Chiriboga et al., 2002). These results are somewhat different from those found in a previous study that used the same sample (Jang, Kim, & Chiriboga 2010), however, in which both education and acculturation contributed significantly to the prediction of knowledge about Alzheimer's disease. Given that the concept of depression is more fully developed in Westernized societies, perhaps those who are more acculturated might have more exposure to and understanding of the concept of mental health and mental illness regardless of their level of education.

It is quite surprising that individuals with higher levels of depressive symptoms—presumably those with a greater need for mental health services—had less awareness and knowledge of depression. It may be that the negative emotional states underlying depressive symptoms make individuals reluctant or unwilling to expose themselves to information about depression. Indeed, such lack of knowledge or low mental health literacy may be responsible for the reported underutilization of mental health services among these populations.

Several limitations of the present study should be noted. Because the study was based on a cross-sectional design and a nonrepresentative sample, the findings are only suggestive and warrant further investigation. Also, further refinement of the Depression in Late Life Quiz is needed. Given cultural differences in the conceptualization and manifestation of depression, qualitative approaches may provide needed perspectives on how to improve this scale. Finally, although the estimated model in the present study was statistically significant, it accounted for a relatively small proportion of the variance: Experts should take other variables, such as cultural stigma and environmental factors, into consideration when predicting knowledge of depression. In particular, the availability and accessibility of culturally appropriate mental health services (e.g., mental health providers who speak the same language) may play a key role in shaping community members' general level of knowledge about depression.

Despite these limitations, the present study has important practical implications. Our findings suggest that intervention efforts need to focus on those who are less acculturated and more vulnerable to depressive symptoms. Our findings also underscore the importance of disseminating educational programs in the native language of the target population because a majority of those who are less acculturated have limited English proficiency. The items answered incorrectly suggest specific content for educational materials for Korean American older adults. Specifically, educational materials will need to describe symptoms of depression, as well as counter the myths that depression is “normal” for older adults and that available treatments do not work. In prior research, we have found self-identification of mental health issues to be closely related to awareness of mental health issues in other people (Gum et al., 2009), so an educational approach that involves one or more Korean American older adults presenting this type of educational information may be particularly effective to improve mental health literacy. Promoting knowledge of depression may lead to proper utilization of mental health services and eventually to improved mental health.

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Table 1

Descriptive Information on the Depression in Late Life Quiz

Test item (correct answer)	Percentage of incorrect answers
1. It is normal for older people to feel depressed a good part of the time (F).	52.7
2. Memory problems may be a sign of depression (T).	50.1
3. Depression is easy to recognize in an older person who is physically ill (F).	74.0
4. Older people are more likely than younger people to say, "I am depressed" (F).	60.8
5. A complete medical evaluation is needed to rule out physical reasons for depression (T).	42.3
6. Family and friends can usually help the depressed older person by telling him or her to "count your blessings" or "look at the bright side" (F).	82.7
7. There is a higher suicide rate among the elderly than among younger adults (T).	74.9
8. It is common for older people to talk about potential suicide (F).	17.4
9. Most older persons who talk about committing suicide are not serious (F).	47.2
10. Health professionals often have difficulty diagnosing depression in the older person (T).	50.0
11. If depression is severe, there is little the depressed person can do to help him or herself (T).	65.1
12. Depression among the elderly can be effectively treated with medication (T).	70.8

Note. T = true; F = false.

Table 2

Regression Model of Knowledge of Depression

Step	Predictor	β	t
1	Age	.01	0.31
	Female	-.02	-0.47
	Not married	-.07	-1.53
	High school	-.01	-0.12
2	Acculturation	.12	2.71 **
3	Depressive symptoms	-.09	-2.00 *
	R^2	.02	
	F	2.52 *	

* $p < .05$.

** $p < .01$.