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Depressive Symptoms Among Urban Hispanic Older Adults in Miami: Prevalence and Sociodemographic Correlates

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Abstract

This study documents a 35% prevalence of clinically relevant depressive symptoms in a population-based sample of mostly Cuban older adults residing in a low-income, urban Miami neighborhood. This rate is comparable to, or higher than, prevalence rates reported by most other population-based samples of U.S. older adults. Logistic regression analyses indicate that perceived financial strain was the only sociodemographic factor associated with greater odds of clinically relevant symptoms when other sociodemographic factors were statistically controlled. Gender, age, and marital status were not related to elevated depressive symptoms. A case study illustrates the impact of financial strain on older adults' mental health. Findings highlight the need for mental health screening and case management services among these older adults, particularly those who experience financial strain.

Keywords

depressive symptoms; older adult; Hispanic; financial strain

INTRODUCTION

Epidemiologic studies indicate that Hispanic older adults in the U.S. show high rates of depressive symptoms (Falcón & Tucker, 2000; González, Haan, & Hinton, 2001). Despite the growth in both number and diversity of the older Hispanic population (U.S. Census Bureau, 1996), what is known about depressive symptoms in this group is based predominantly on studies of Mexican Americans in the Southwestern U.S. (Black, Markides, & Miller, 1998;

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González et al., 2001; Moscicki, Locke, Rae, & Boyd, 1989) and Puerto Ricans in the Northeastern U.S. (Falcón & Tucker, 2000; Potter, Rogler, & Moscicki, 1995). Studies of Hispanic older adults from other countries of origin, or residing in different geographic regions of the U.S. are less common (Falcón & Tucker, 2000; Narrow, Rae, Moscicki, Locke, & Reiger, 1990). Moreover, existing research on the prevalence of depressive symptoms among U.S. Hispanics often relies on data collected in the 1980s or early 1990s (Moscicki et al., 1989; Narrow et al., 1990; Potter et al., 1995), suggesting the need to study current cohorts of older adults.

Depressive Symptoms Among Hispanic Older Adults

A number of well-established measures exist to assess depressive symptomatology among older adults (e.g., Brink et al.'s [1982] Geriatric Depression Scale or GDS; Radloff's [1977] Center for Epidemiologic Studies Depression Scale, or CES-D). The widespread use of the CES-D (Radloff, 1977) to assess depressive symptoms provides a unique opportunity to compare the prevalence of depressive symptoms across different subgroups of older adults. Although factor analyses have identified varying factor structures across older adults from different cultural groups (c.f. Mui, Burnette, & Chen, 2001), the full-scale CES-D has well supported psychometric properties across diverse populations of Hispanic and non-Hispanic older adults, including good validity and high reliability (Black et al., 1998; Cho et al., 1993; González et al., 2001). A total score of 16 or higher on the CES-D has been found to classify correctly high percentages of older adults as either depressed or nondepressed (Himmelfarb & Murrell, 1983) and is commonly used to identify individuals with elevated or clinically relevant levels of depressive symptoms (see Cho et al., 1993; Radloff & Teri, 1986). While the CES-D does not assess depressive disorders per Diagnostic & Statistical Manual of Mental Disorders IV (DSM-IV) criteria (American Psychiatric Association, 1994), it has been used effectively to screen for potential cases of depression in community samples (Mui, Burnette, & Chen, 2001). Assessment of clinically relevant symptoms that may or may not reach DSM-IV criteria is important because even sub-threshold depression has been found to predict illness, disability, and mortality among older adults (Bisschop, Kriegsman, Deeg, Beekman, & Van Tilburg, 2004; Chopra et al., 2005; Schulz et al., 2000).

Using the CES-D, some studies have suggested that levels of depressive symptoms among U.S. Hispanics may vary by country of origin. For instance, the Hispanic Health and Nutrition Examination Study (HHANES) conducted in the 1980s found that Cuban American adults in Miami appeared to have lower rates of clinically relevant depressive symptoms than either Mexican Americans in the southwest or Puerto Ricans in the New York City metropolitan area (Moscicki et al., 1989; Narrow et al., 1990; Potter et al., 1995). This population-based study documented a similar pattern of symptoms specifically among older adults (ages 65 to 74 years), with approximately 11% of Cuban American, 13% of Mexican American, and almost 28% of Puerto Rican older adults showing clinically relevant symptoms. More recent, representative studies of Mexican American older adults conducted in the 1990s have documented rates of clinically relevant CES-D symptoms in approximately 25% of their samples (Black et al., 1998; González et al., 2001). Another study of Hispanic older adults in Massachusetts conducted in the 1990s found that Puerto Ricans (44%) had greater depressive symptomatology than either Dominicans (32%), other Hispanics (30%), or non-Hispanic Whites (22%) (Falcón & Tucker, 2000). The reasons behind the higher rate among Puerto Ricans remain unclear, although some have hypothesized that this may be due to high levels of social isolation or financial strain (Falcón & Tucker, 2000; Krause & Goldenhar, 1992). Nonetheless, rates of poverty and financial need are also high among other Hispanic subgroups who have lower rates of clinically relevant depressive symptoms (U.S. Census Bureau, 2004).

Socioeconomic Factors and Depressive Symptoms

Indeed, socioeconomic variables—such as poverty, low income, limited education, and financial strain—have been associated with depressive symptoms among older adults of different ethnic groups (Black et al., 1998; Kahn & Fazio, 2005; Mendes de Leon, Rapp, & Kasl, 1994; Narrow et al., 1990; Rudkin & Markides, 2001). Economic difficulties can expose individuals to persistent stressors, including inadequate or unsafe housing, crime, and the inability to afford certain basic necessities (e.g., food, medicine, utilities), which can enhance vulnerability to depressive symptoms (Krause, Jay, & Liang, 1991). In older adults, these stressors are often chronic because of fixed incomes and limited resources with which to manage the stressors, such as access to adequate physical and mental health services. Financial strain may also impact older adults' depressive symptoms through its influence on decreased self-esteem and perceptions of control (Krause et al., 1991).

The effects of financial strain and low income are not limited to mental health. Financial strain has also been associated with subjective health and perceived ability for self-care among older adults, including Hispanics (Angel, Frisco, Angel & Chiriboga, 2003; Kahn & Fazio, 2005), as well as a greater incidence of functional impairments and health symptoms (Kahn & Fazio, 2005). Individuals of low socioeconomic status may also be at greater risk for poor mental and physical health because of limited access to adequate health care or more limited health literacy (Sudore et al., 2006). Many of these health outcomes can affect older adults' mental health by interfering with their ability to cope or care for themselves.

U.S. Hispanics may be at special risk for experiencing depressive symptoms because they tend to have lower median incomes and higher rates of poverty than do non-Hispanic Whites (U.S. Census Bureau, 2004). Older adults are particularly vulnerable because they are less likely to increase their income over time and less likely to escape poverty than are younger adults (U.S. Census Bureau, 1996). While certain Hispanic subgroups as a whole, such as Cuban Americans, tend to have substantially higher socioeconomic levels than do other Hispanics, socioeconomic status (SES) differences among subgroups of Hispanic older adults are less evident than among younger subgroups. For example, the poverty rate among Cuban older adults in 2000 was 19.9%, compared with 19% among Mexican, 24.4% among Puerto Rican, and 28.6% among Dominican older adults (U.S. Census Bureau, 2004).

Other Sociodemographic Factors Associated with Depressive Symptoms

When examining clinically relevant depressive symptoms, additional variables associated with depressive symptoms should be considered, including female gender (Swenson, Baxter, Shetterly, Scarbro, & Hamman, 2000) and disrupted marriage or being unmarried (Stallones, Marx, & Garrity, 1990). Older age has sometimes been associated with higher depressive symptoms; for example, Davey, Halverson, Zonderman, & Costa (2004) documented a one-point increase in mean CES-D scores per decade of life among older adults. However, the relationship between age and depression has been found to disappear or reverse when controlling for key depression risk factors, such as gender, socioeconomic status, and disability (c.f. Blazer, 2003).

Certain neighborhood variables have also been linked to depressive symptoms. For instance, living in a poor neighborhood has been related to more depressive symptoms among older adults (Kubzansky et al., 2005). Conversely, living in a neighborhood with greater numbers of older adults has been associated with fewer depressive symptoms (Kubzansky et al., 2005). While the mechanisms by which these neighborhood variables might be related to depressive symptoms are not fully understood, their significant association with depressive symptoms speaks to the need to consider them in research.

The Present Study

Given the health and quality of life costs associated with depressive symptoms (Blazer, 2003), as well as the remarkable projected growth of the U.S. Hispanic population (U.S. Census Bureau, 2004), it is important to identify the prevalence and correlates of elevated depressive symptoms among different subgroups of Hispanic older adults in the U.S. With the increased diversity of the aging population in the U.S., these data have become critical for researchers, public health officials, and mental health practitioners (Faison & Mintzer, 2005). The aims of this study are: 1) to document the prevalence of clinically relevant depressive symptoms as measured by the CES-D in a population-based sample of primarily Cuban older adults living in a low-income, urban Miami neighborhood; 2) to describe the sociodemographic correlates of clinically relevant depressive symptoms in this sample; and 3) to illustrate these quantitative findings through a case study that describes one of several study participants who evidenced elevated depressive symptoms.

METHODS

Research Design

The present analyses were conducted as part of a larger research project, the Hispanic Elders Behavioral Health Study, which investigates the relationship between neighborhood environmental factors and residents' physical and mental health outcomes. All 16,000 households in a single urban Miami neighborhood were enumerated to identify all Hispanics aged 70 years or older. Census reports indicate that 93% of this neighborhood's residents are Hispanic and that 35% live below the poverty line (U.S. Census Bureau, 2000). The neighborhood also has a higher percentage of older adults than does Miami-Dade County as a whole (U.S. Census Bureau, 2000). One Hispanic older adult was randomly selected from each of the 302 blocks on which one or more older adults lived. If s/he refused to participate, a second randomly selected older adult from that block was approached for consent, and so on, until one in each of the blocks with older adults consented. In households with more than one eligible participant, Kish tables (Kish, 1949) were used to select the person to be included in the study. Kish tables provide a method for objectively selecting one member of a household when the household has more than one member of the target population. This method helps ensure that each eligible person in the household has the same probability of being sampled. Consented participants were screened for eligibility, and those meeting the criteria completed a second consent form to participate in the full study. If a participant failed to meet the entry criteria, the next ordered older adult was approached, and so on. Of all 3,322 older adults enumerated, and 521 were approached for participation. Of these 521, 30 had died since enumeration, 80 had moved away from the study area or could not be located, 7 could not be contacted after multiple home visits, 95 refused participation, 10 had incorrect home addresses, 24 did not meet full eligibility criteria (the primary cause was low scores on the Mini-Mental State Examination), (MMSE) and 2 moved to a different block from which a participant had already been sampled between enumeration and baseline. Thus, a total of 273 participants consented to participate in the study. The study was approved by the University of Miami's Institutional Review Board.

Participants

To participate, individuals had to meet the following criteria: 1) be 70 years of age or older, 2) have immigrated from a Spanish-speaking country, 3) be a resident of this specific Miami neighborhood, 4) be living in housing in which s/he can walk outside (excluded nursing homes, specialized locked housing units), 5) be of sufficient physical health to go outside; and 6) score 17 or above on the MMSE (Folstein, Folstein, & McHugh, 1975), a test of global cognitive functioning. The standard MMSE cut-point was lowered from 24 to 17 to address concerns raised by previous studies that the MMSE may be biased for those with lower educational

levels, as well as those with different language use or immigrant status (Black et al., 1999; Ostrosky-Solis, Lopez-Arango, & Ardila, 2000). Previous studies have used cut-point corrections to address this bias, and to prevent overestimating rates of cognitive impairment in these groups (Black et al., 1999; Crisostomo, Butler & Webster, 2002).

The 273 participants had a mean age of 78.5 years ($SD = 6.3$). Fifty-nine percent were female. Approximately 86% were Cuban-born or relocated to Cuba as children, and 10% were born in a Central or South American country, primarily Nicaragua. Participants had lived in the U.S. for an average of 29 years, with 77% residing in the U.S. at least 20 years. The sample was of low SES, with 71% reporting annual household income less than \$10,000, and most reporting working class jobs prior to retirement (e.g., factory worker, housekeeper). The sample averaged 7.3 years of education ($SD = 4.3$). Thirty-four percent were married, 35% widowed, 20% separated or divorced, and 11% never married.

Measures

All participants were interviewed by native Spanish-speaking assessors who read questions and response choices aloud in Spanish. A hard copy of the response scales also allowed participants to read the possible response choices. This section describes only the measures used in the present analyses.

DESCRIPTIVE INFORMATION—Sociodemographic data included: gender, date and place of birth, marital status, years of formal education, employment type (current and/or preretirement), annual income, and number of years living in the U.S. For income, participants were asked to respond by selecting one of ten income categories. Because this variable was substantially restricted in range (i.e., 64% reported annual salaries between \$5,000 and \$10,000), the variable was dichotomized into less than \$10,000 versus \$10,000 or more annually. Participants also responded to a question about how difficult it was for them to pay for basic needs using a 7-point scale ranging from 1 (“Easy”) to 7 (“Very difficult”). All of these variables were collected during the baseline assessment. The last variable assessed was the total number of individuals living on the participant’s block who were 70 years old or older, had immigrated from a Spanish-speaking nation, and were physically well enough to go outside (herein referred to as “independently functioning Hispanic older adults”). Data for this last variable were obtained immediately before the baseline assessment as part of the study’s enumeration phase.

DEPRESSIVE SYMPTOMS—Depressive symptoms were assessed using a Spanish translation of the 20-item CES-D (Radloff, 1977) from the national Resources for Enhancing Alzheimer’s Caregiver Health (REACH) multi-site study (Wisniewski et al., 2003). Item responses are scored from 0 (“rarely or none of the time”) to 3 (“most or all of the time”) indicating the frequency with which each symptom was experienced in the preceding week. The CES-D has demonstrated good test-retest reliability and has been widely used with diverse groups of older adults, including those who are Hispanic and Spanish-speaking (Black et al., 1998; González et al., 2001; Radloff & Teri, 1986). The Cronbach’s alpha for the CES-D in the present sample was 0.86, comparable to the internal consistency reported for other diverse groups of older adults (Berkman et al., 1986; Falcón & Tucker, 2000; Radloff, 1977). A continuous CES-D total score was computed by summing the response scores for each item. Positive affect items were reverse-scored, such that higher values indicated higher depressive symptoms. A *dichotomous CES-D total score* was computed using the cut-off of 16 or greater (Black et al., 1998; Radloff, 1977; Radloff & Teri, 1986), to identify elevated or clinically relevant depressive symptoms.

Procedure

Participants first provided informed consent to be screened for eligibility using the MMSE (Folstein et al., 1975). Individuals meeting the eligibility criteria, completed a second informed consent form to participate in the full study. Participants completed the 3-hour baseline assessment interview in their homes between January 2002 and April 2004, which comprised a series of demographic, environmental, social, physical, cognitive, and mental health measures, some of which are beyond the scope of the current study. The interviews included short breaks, and participants were compensated \$25 for their time. Those demonstrating elevated CES-D scores were promptly visited by one of the study's mental health professionals to further assess their depressive symptoms, and to identify their need for referral to mental health or other community services.

Data Analyses

First, descriptive statistics were used to characterize the prevalence of depressive symptoms in this sample. Also calculated were the sample's mean CES-D score and rate of clinically relevant symptoms weighted by the number of independently functioning Hispanic older adults living on each block. Given that this study's sampling method involved randomly selecting one older adult per neighborhood block, and considering that high concentrations of older adults have been associated with better mental health among previous studies of older adults (Kubzansky et al., 2005), this calculation was conducted to determine whether the prevalence of clinically relevant depressive symptoms was over- or under-estimated in the target population. Next, to identify the variables associated with elevated depressive symptoms, separate, simple logistic regression analyses were conducted with each sociodemographic variable as the independent variable and the dichotomous CES-D score (i.e., CES-D total score < 16 versus ≥ 16) as the dependent variable. The sociodemographic variables examined were: gender, age, education, income, marital status, length of time in the U.S., number of independently functioning Hispanic older adults living on the participant's block, and financial strain (perceived difficulty paying for basic necessities). Finally, the independent variables were entered simultaneously into a logistic regression model using the same dichotomous CES-D score as the dependent variable.

RESULTS

Prevalence of Clinically-Relevant Depressive Symptoms

The sample had a mean total CES-D score of 12.99 ($SD = 10.64$), a median of 11, and a range between 0 and 42. Using the standard cut-off score of 16 or higher, 35.2% of participants ($n = 96$) met criteria for elevated or clinically relevant levels of depressive symptoms. When participants' CES-D scores were weighted by the number of independently functioning Hispanic older adults living on their respective blocks, the results were comparable. Specifically, the weighted mean of clinically relevant symptoms was 13.39 compared with the unweighted mean of 12.99. The weighted prevalence of clinically relevant symptoms was 36.5%, compared with the unweighted prevalence of 35.2%.

Sociodemographic Factors Associated with Clinically-Relevant Depressive Symptoms

Results of the simple logistic regression analyses show that the odds of having clinically relevant depressive symptoms were 2.36 times greater for women than for men ($p < .002$). Individuals who were married were less likely to report elevated depressive symptoms than those with disrupted marriages (i.e., separated, divorced or widowed) ($OR = 0.54$, $p < .031$); in other words, the odds of clinically relevant depressive symptoms was 1.85 times greater among those with disrupted marriages than among those with intact marriages. Participants who had never married were at no greater or lesser risk for experiencing elevated depressive

symptoms than those with disrupted marriages. Greater perceived financial strain corresponded to greater odds of clinically relevant symptoms ($OR = 1.27, p < .001$). Indeed, the odds of clinically relevant depressive symptoms were 2.03 times greater for individuals with incomes less than \$10,000 per year compared with those with incomes of \$10,000 or greater ($p < .019$). The number of independently functioning Hispanic older adults living on the block was unrelated to clinically relevant depressive symptoms. No other variables were significantly related to depressive symptoms in the simple logistic regression analyses.

Although certain independent variables were correlated (e.g., income and financial strain), multicollinearity indices including tolerance and variance inflation factor, suggested that multicollinearity should not be a concern in the final model. As shown in Table 1, the only variable associated with clinically relevant depressive symptoms in the final model was financial strain. For each unit increase in perceived financial strain on this 7-point scale, the odds of elevated depressive symptoms increased 28% ($OR = 1.28; p < .001$). In the full model, when the effects of other independent variables were statistically controlled, gender, age, education, income, time in the U.S., marital status and the number of independently functioning Hispanic older adults living on the block were all unrelated to clinically relevant CES-D rates. A post-hoc independent samples *t*-test indicated that women had higher mean financial strain scores than men, 4.4 and 3.8 respectively ($t = -2.12, p < .035$). The full model's Nagelkerke R^2 was .15.

DISCUSSION

Results show that 35% of this sample, comprised mostly of Cuban older adults, reported clinically relevant levels of depressive symptoms. This prevalence is comparable to, or higher than most of, the prevalence rates reported for other U.S. Hispanic older adults, with the exception of Falcón & Tucker's (2000) sample of Puerto Ricans living in Massachusetts, who had a 44% prevalence of clinically relevant depressive symptoms. As described, the present study's sampling method consisted of randomly selecting one older adult from each neighborhood block for the purpose of adequately answering the broader study's research questions about the influence of the neighborhood environment on older adults' health. While this method ensured that individuals living in different sections of the neighborhood were represented, an important question for the present analyses was whether those living on blocks with fewer older adults may have been over-represented, whereas those living on blocks with many older adults may have been under-represented, and how this may have affected the prevalence findings. Indeed, at least one study has found that living in a neighborhood with a higher concentration of older adults has been associated with fewer depressive symptoms (Kubzansky et al., 2005). However, the analyses indicate that the prevalence rates of clinically relevant symptoms, whether weighted by the number of independently functioning Hispanic older adults on a block or not, were highly comparable. While this does not provide an unequivocal estimate of prevalence, the weighted prevalence rate adds a measure of confidence to the generalizability of the findings to the Hispanic older adults in this neighborhood. Similarly, the number of independently functioning Hispanic older adults living on the block was found to be unrelated to clinically relevant depressive symptoms. These results suggest that the study's sampling strategy most likely did not result in a substantial over- or under-estimation of the prevalence of clinically relevant depressive symptoms in this population.

Several variables were statistically associated with elevated levels of depressive symptoms in the simple logistic regression analyses. However, when the effects of other sociodemographic variables were controlled statistically, only participants' perceived financial strain remained significant. Other studies with diverse groups of older adults have reported comparable findings on the relationship between financial strain and depressive symptoms (Angel et al., 2003; Black, et al., 1998; Chou & Chi, 2001; Krause, 1987). The cross-sectional nature of these

analyses does not permit a determination of the direction of this relationship. It may be that more depressed individuals are more likely to perceive difficulties in their financial situation because of more pessimistic or negative outlooks. Indeed, it has been suggested that financial strain may be part of a cluster of psychological factors indicating low morale that negatively influences perceptions of health (Angel et al., 2003). However, longitudinal studies have reported that low SES and financial strain predict greater depressive symptoms, particularly among men (Berkman et al., 1986; Boey, 2005; Mendes de Leon et al., 1994). Certainly, financial strain and economic difficulties can expose older adults to stressors that may intensify depressive symptoms (Krause, Jay, & Liang, 1991). Financial strain and limited income are also related to more limited health literacy and poorer access to adequate physical and mental health services (Kahn & Fazio, 2005; Sudore et al., 2006), which may interfere with individuals' ability to manage their mental health symptoms.

Gender was not significant in the full model, a result that differs from previous findings that show women tend to report higher levels of depressive symptoms than do men (Swenson et al., 2000). However, the present analyses also indicated that the women in this sample reported significantly higher levels of financial strain than did the men, and it is likely that their greater levels of depressive symptoms in the simple logistic regression analyses may have been influenced, at least in part, by their greater financial strain. The full model's relatively modest Nagelkerke R^2 indicates that factors beyond the sociodemographics examined in this study play an important role in explaining older adults' clinically relevant depressive symptoms. While the inclusion of these other variables was beyond the scope of this study, variables such as social support (Krause, 1987) and health indicators (Bisschop et al., 2004), among others, have been associated with older adults' depressive symptoms.

The older adults in this sample are distinctive in a number of respects, which may have contributed to the high prevalence of elevated depressive symptoms. First, although all participants were foreign-born, most had been living in the U.S. for many years, a group average of approximately 29 years. Moreover, they had been living in a predominantly Hispanic and Spanish-speaking neighborhood of a bicultural city. This immigrant group, which has aged in the U.S., has probably been less exposed to the acculturative stressors typically faced by Hispanics in other U.S. regions, including language barriers and cultural differences. Nonetheless, high rates of depressive symptoms were reported. These factors must be considered because they may compromise the generalizability of the findings to other populations. Yet, as the U.S. Hispanic population continues to expand, many other Hispanics will age in bicultural neighborhoods throughout the country. Second, the Cubans in this sample are refugees who face a unique stressor: the inability to live in their homeland again. A study of Turkish immigrant older adults living in the Netherlands found that those who had been unable to return to Turkey reported higher depressive symptoms than those who had been able to return (van der Wurff et al., 2004). Third, a large proportion of participants in this sample reported very low annual incomes, placing them at greater risk for experiencing financial strain. This is a special concern in Miami, which is among the top three poorest metropolitan areas in the U.S. (U.S. Census Bureau, 2005). Fourth, the study's entry criteria excluded individuals with certain characteristics, for instance, those younger than 70 years of age and those with greater risk for cognitive impairment (i.e., Mini-Mental State score below 17). While the latter issue involved a small number of individuals ($n = 22$), the prevalence estimate in the larger population may have been underestimated given that cognitive impairment and depression often co-occur (cf. Blazer, 2003). Despite the few individuals excluded on the basis of Mini-Mental State scores, caution should be taken in generalizing the findings to individuals with other characteristics.

Case Study

The impact of financial strain on older adults' functioning may be better understood if research studies complemented their findings with information gathered through qualitative research methods (Angel et al., 2003). In this way, "financial strain" would be couched within the broader context of the individual's life circumstances, and its role in influencing depressive symptoms might be better understood. The following case study characterizes a participant of the current research project, and illustrates some of the mechanisms by which financial strain may influence depressive symptoms in older adults. Names and identifying information have been altered to ensure confidentiality.

Caridad is a 75-year-old Cuban-born woman, who has lived in Miami for more than 35 years. She has been divorced for over 20 years, and presently lives with her 55-year-old daughter, who has an unspecified psychiatric disorder and is under the care of a psychiatrist. This daughter is limited in her independent functioning and Caridad is her only caregiver. Prior to retirement, Caridad held a job as a factory worker, and her current income consists entirely of government benefits that she and her daughter receive. Despite this assistance, Caridad reports difficulties paying for basic needs and bills. She describes herself as generally healthy. Her chief health problems, as she sees them, are severe gastric reflux and "problemas de nervios," a colloquial term that refers to psychological or emotional symptoms, typically depressive and/or anxiety symptoms.

At the time of the clinical assessment, Caridad presented with elevated depressive and anxiety symptoms, a total CES-D score of 29. She explained that approximately 3 weeks prior to the assessment, she and her daughter were evicted from their apartment because they had been unable to pay the rent for several months. Their landlord had recently raised the rent because of rising real estate values and real estate taxes in the neighborhood, and her fixed income could not cover this increase. Caridad and her daughter were forced to move to the only place they could afford: a small, one-room efficiency on a busy commercial street. She explained that although their previous living conditions were not ideal, her present living conditions were abysmal. The efficiency was cramped, unclean, high in humidity and mold, and poor in ventilation. Living adjacent to bars and liquor stores made her feel anxious and unsafe, particularly at night. Similarly, her daughter has been anxious about their living circumstances, which has intensified her own psychiatric symptoms. By moving, they were both separated from longtime neighbors, who had previously provided some emotional and instrumental support (e.g., bringing dinner to their home). An added challenge is that their doctors are less accessible because they are further away.

Caridad reported multiple depressive symptoms, including poor appetite, insomnia, distractibility, depressed mood, as well as hopelessness about her situation. She also described various anxiety symptoms such as nervousness, restlessness, and persistent worries about the future. The chronic stress she has been experiencing also appears to have intensified her preexisting gastric reflux, interfered with her appetite, and resulted in a 5-pound weight loss since their move three weeks ago. This is worrisome for an already thin, older woman. When asked, Caridad admitted to having recent thoughts of suicide, but acknowledged that she could not act on her thoughts because of her daughter's dependence on her.

Caridad is unsure of the official diagnosis that her primary care physician has given her; yet, he has prescribed an antidepressant (a selective serotonin reuptake inhibitor), as well as an anxiolytic medication (a benzodiazepine). However, Caridad recently decided not to fill her antidepressant prescription because this allows her to use the saved money for other needs, such as transportation. The doctor has also suggested that Caridad seek mental health counseling. Nonetheless, Caridad has not followed through on this suggestion because she is skeptical that counseling will help. Instead, she believes that her pressing need is to have

adequate housing, and that her depressive symptoms will subside if this need were addressed. She has therefore requested financial or housing assistance.

Conclusions

In several ways, Caridad's case is not atypical of this study's sample of older adults. Many have moved to new locations since the beginning of the study, frequently because of rising rent prices. Among these individuals' most common concerns are the high costs and poor conditions of housing. Compounding this situation, community resources to help address housing concerns are limited. The local waiting list for government housing assistance is long, and it has even been closed for extended periods of time due to high demand and insufficient resources to meet this demand.

Caridad's life circumstances highlight some of the ways in which financial strain can intensify or complicate an older adult's depressive symptoms. Financial strain can result in chronic exposure to stressful experiences, a particular concern for older adults who are on fixed incomes and have limited opportunities to improve their finances through work (Krause, Jay & Liang, 1991). Caridad became unable to pay her rent when housing prices rose, an increasingly common phenomenon, as urban neighborhoods become gentrified.

Certainly, Caridad's depressive symptoms are further complicated because she is the sole caregiver to a dependent family member with a psychiatric disorder. An older adult in a caregiving role to a loved one with special needs may be at risk for emotional, health and economic challenges (Connell, Janevic & Gallant, 2001; Magilano et al., 2005). This can be a source of chronic stress even for those who have sufficient economic and coping resources. However, when the caregiver is also burdened by financial needs, caregiving can become unmanageable and overwhelming. Because of economic limitations, these individuals may not be able to access the resources that facilitate adequate coping, such as home health assistance or respite care. Caregiving roles among older adults are becoming more common (Connell, Janevic, & Gallant, 2001), and financial strain may hinder their ability to provide care.

Finally, financial strain can interfere with an older adult's ability for self-care, making them vulnerable to physical and mental health problems. While it is fortunate that Caridad's physician recognized her depressive symptoms and treatment needs, her economic situation has compromised her ability to follow through on her doctor's treatment recommendations. Her choice to forego potentially helpful antidepressant medication so that she might pay for other basic needs has deprived her of potential relief from her depressive symptoms. Indeed, clinically relevant depressive symptoms have been found to predict self-neglect among older adults, which in turn has been related to greater mortality and institutionalization (Abrams, Lachs, McAvay, Keohane, & Bruce, 2002).

For mental health professionals, recognizing financial strain among older adults is critical because it has important implications for the successful treatment of depression (Angel et al., 2003; Krause, 1987). A recent study comparing the efficacy of cognitive behavioral group therapy, clinical case management, and a combination of the two for the treatment of depression among low-income older adults found that these individuals benefited more from clinical case management services (alone or combined with cognitive behavioral group therapy) than from cognitive behavioral group therapy alone (Areán et al., 2005). Clinical case management in this study involved evaluating participants' needs, and then connecting them to services that would attend to their needs.

When Caridad was referred for counseling services by her doctor, she declined, finding it difficult to understand how talking could resolve her need for a safe home. Instead, she requested more instrumental assistance that could help her find an adequate affordable home

or obtain financial support so she could afford a more livable home. Without question, Caridad may benefit from counseling services, perhaps especially to help her build a social support system. However, it is likely that by addressing her immediate life needs, complementary case management and social services would allow her to better focus on counseling and perhaps even improve her engagement into therapy.

SUMMARY

This study documents a high prevalence of clinically relevant depressive symptoms among a present-day, population-based sample of mostly Cuban older adults living in Miami. It highlights the need to evaluate depressive symptoms among those who may be especially vulnerable to experiencing such symptoms, including those residing in urban neighborhoods with high rates of socioeconomic disadvantage. In light of the growing number and diversity of Hispanic older adults in the U.S., studies that provide information about the prevalence and correlates of psychological symptoms among different subgroups can help identify particularly vulnerable individuals, such as those who experience financial strain. The greater susceptibility of Hispanic older adults to poverty and disadvantage speaks to the importance of considering financial strain among this diverse group. Moreover, the identification of financial strain among older adults who exhibit depressive symptoms can help mental health professionals provide interventions tailored to meet their specific needs and improve their treatment outcomes.

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TABLE 1

Logistic regression model: Sociodemographic variables associated with clinically-relevant depressive symptoms (i.e., CES-D ≥ 16)

Variable	B	OR	OR CI	p Value
Gender				
Female	.48	1.62	0.90–2.91	.11
Male (RG)	—	—	—	—
Marital status				
Never married	−.87	0.42	0.16–1.11	.08
Married	−.23	0.79	0.42–1.50	.48
Separated, divorced, widowed (RG)	—	—	—	—
Age	.02	1.02	0.97–1.06	.48
Years of education	−.05	0.96	0.89–1.02	.17
Time in U.S (months)	.00	1.00	0.99–1.00	.68
Number of independently functioning	.00	1.00	0.98–1.03	.77
Hispanic older adults living on block				
Annual Income				
<\$10,000	.40	1.49	0.75–2.95	.25
$\geq$ \$10,000 (RG)	—	—	—	—
Financial Strain	.25	1.28	1.12–1.47	.001

Note: Abbreviations: OR = Odds ratio; CI = Confidence interval; RG = Referent group.

Model Statistics: $\chi^2(df=9) = 30.13, p < .001$; $-2\log$ likelihood = 307.41; Nagelkerke $R^2 = .15$.