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Falling through the cracks: gaps in depression treatment among older Mexican-origin and white men

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Abstract

OBJECTIVES—1) To compare depression frequency and self-reported depression treatment in Mexican-origin and white men; 2) to examine ethnic differences in self-reported prior depression diagnosis and treatment; 3) to determine whether Mexican-origin men (both English and Spanish language preferring) are less likely than white men to report receiving depression treatment after controlling for potential confounders.

Methods—This is a cross-sectional, observational study of Mexican-origin and white men (60-years and over) presenting for primary care visits at six outpatient clinics in California's Central Valley. Clinical depression was assessed with the SCID module for past-year major depression and questions for chronic depression. Past-year, self-reported prior depression diagnosis and treatment (i.e. medication, psychotherapy, mental health referral) were assessed through a structured questionnaire.

Results—The frequency of past year clinical depression was similar for both ethnic groups yet Mexican-origin men were significantly less likely than whites to report receiving a prior diagnosis of depression or prior depression treatment. Compared with whites, the odds of untreated depression in Mexican-origin men was 4.35 (95% CI 1.35–14.08) for those interviewed in English and 10.40 (95% CI 2.11–51.25) for those interviewed in Spanish. For both ethnic groups, the majority (i.e. approximately two-thirds) of men receiving depression treatment also met criteria for past year clinical depression.

CONCLUSIONS—Mexican-origin older men in primary care suffer from significant gaps in depression care (i.e. diagnosis and treatment) compared with whites. Delivering effective depression treatment (i.e. so that depression remits) remains elusive for both ethnic groups.

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CONFLICT OF INTEREST

The authors report no conflicts of interest that could inappropriately influence, or be perceived to influence, this work.

Keywords

depression; access and quality of care; elderly; men; minorities; primary care

INTRODUCTION

Depression is among the most common and disabling condition afflicting older adults (Charney et al., 2003, Unutzer, 2007). While effective treatments exist for late life depression and treatment rates are increasing, many older adults in primary care settings still do not receive adequate treatment (Crystal et al., 2003). Older men and minorities are particularly unlikely to receive depression treatment (Unutzer et al., 2001, Hinton et al., 2006), a finding that may help to explain elevated rates of older male suicide (CDC, 2011). Despite the public health significance of improving depression treatment for older men, we know little about the factors that contribute to under-treatment in this group, particularly the role of ethnicity. In prior studies of ethnic disparities in depression care, for example, male-female differences in depression treatment have been noted but the magnitude ethnic disparities in gender subgroups has received little attention (Alegria et al., 2008, Gonzalez et al., 2010). We also know little about cross-ethnic differences in the receipt of specific types of depression treatment (e.g. diagnosis, medications, psychotherapy, mental health referral in older minority men and white non-Hispanic (hereafter white) in primary care. This data could provide useful information about the source of disparities (e.g. under-diagnosis versus under-treatment).

Epidemiological and clinical studies have found that men are less likely to seek or receive mental health services including depression treatment (Unutzer et al., 2001, Hinton and Arean, 2008, Gonzalez et al., 2010). This may be due to both patient and provider factors. Sex differences in gender role socialization, for example, may lead men to be less likely to express or seek help for depression as well as other health and mental health problems (Courtenay, 2000, Moller-Leimkuhler, 2002, Addis and Mahalik, 2003, Brownhill et al., 2005). Aging may further complicate this process, as providers or older men may mistakenly attribute depression-related symptoms to co-morbid medical conditions, functional decline or to the aging process itself (Sarkisian et al., 2003). Studies of primary care providers have found that older men are viewed as a challenging group to engage in depression treatment, perhaps because of depression's "double stigma," where the depression label is associated with both "craziness" and "unmanliness" (Hinton et al., 2006, Apesoa-Varano et al., 2010).

Older Mexican-origin men may be at even higher risk for depression under-treatment compared with older white men. Experiences of discrimination, for example, may amplify distress and reduce trust and willingness to seek formal treatment. On the other hand, providers may hold stereotypes based on a combination of gender and ethnicity (i.e. stereotypical views of machismo in Mexican men) that may lead to under-detection and/or under-treatment of depressed older Mexican origin men. Compared with white men, older Mexican-origin men may be more averse to antidepressant treatment due to stigma or other factors (Givens et al., 2007, Vega et al., 2010). In summary, both male gender and ethnicity may amplify disparities in depression treatment, underscoring the need for cross-ethnic comparisons of gender subgroups. This study begins to address this gap in our knowledge.

This study has three aims. First, we compare the frequency of past year major depression and self-reported depression treatment in Mexican-origin and white men in primary care. To examine depression remission in men receiving treatment, we compare three subgroups: depressed untreated, depressed treated, and treatment only. Second, we examine cross-ethnic differences in self-reported prior depression diagnosis and the types of depression treatment

(i.e. medication, mental health referral, or psychotherapy). Third, we examine whether Mexican-origin men, including both English and Spanish language preferring subgroups, are less likely report receiving depression treatment after controlling for potential confounders. In summary, this paper adds to our knowledge about ethnic differences in patterns of depression diagnosis and treatment among older men.

METHODS

Study sites and participants

Six primary care clinics in California's Central Valley participated in this study: four were in a large academic medical center and its affiliated network of clinics and two were located in a safety net, county hospital. The study protocol was approved by the Institutional Review Boards at both participating institutions and the study was conducted from 2008–2011. A two-stage screening process was used to assess major depression and depression care among older men meeting the following criteria: 1) 60-years and older, 2) Mexican-origin or U.S.-born whites, 3) non-psychotic, 4) non-demented, and 5) non-institutionalized.

Data collection

The screening process for major depression and self-reported depression treatment is outlined in Figure 1. Men were identified from clinic schedules and approached (i.e., consecutive sample) in the waiting areas prior to their visit with their primary care provider. If they were eligible and willing to participate, screening was done in the clinic either before or just after their visit. First, men were administered a short demographic questionnaire, then a modified version of the Patient Health Questionnaire-revised (PHQ-2), and a question on past-year depression care use (i.e., "In the past 12 months, have you had any treatment such as medications or counseling for stress, depression, or problems with sleep, appetite, or energy?"). The PHQ-2 is based on the two core symptoms of depression (i.e. depressed mood and anhedonia) from the original, full PHQ-9 and has been used successfully with older men in the IMPACT (Unutzer et al., 2001) and other studies (Kroenke et al., 2003, Corson et al., 2004, Lowe and Gibson, 2005). To increase the PHQ-2 sensitivity for this study, the PHQ-2 time frame for symptom presence was extended from the past two weeks to the past-year.

Men who screened positively for depressive symptoms and/or self-reported depression treatment in the past year were then asked to participate in the second screening phase. In an effort to examine a subset of men possibly missed by our initial depression screening process, a random subsample (i.e. every fifth interview or approximately 20%) was advanced to the second more extensive depression screening regardless of their score on the PHQ-2 (see Figure 1).

The depression diagnostic phase included: 1) the SCID major depression module (past-month and past-year) and additional questions for chronic depression, 2) a self-report of receipt of a depression diagnosis or depression treatment in the past year, and 3) screening questions for psychosis and cognitive impairment, and 4) additional sociodemographic characteristics (e.g., health status). Chronic depression was assessed based on endorsement of three or more SCID items and at least one of two probes for chronic depressive symptoms (i.e. "In the past two years, have you been feeling sad or depressed most days even if you felt okay sometimes?" or "Have you felt down, depressed, or disinterested in things you normally enjoy on more than half of the days during the past two years?").

The self-reported depression treatment questionnaire included questions about the receipt of following in the past year: 1) diagnosis of depression from a doctor or other healthcare professional, 2) antidepressant medications, 3) counseling or psychotherapy and 4) referral

to a mental health professional. The depression treatment questionnaire was validated and used in the IMPACT trial (Unutzer et al., 2001). Cognitive impairment was assessed using the Six-item Screener with a score of 3 or less indicated significant cognitive impairment (Callahan et al., 2002).

Interviews were conducted in English or Spanish, depending on the preference of the participant. The SCID was administered by clinicians on the research team with extensive experience in using the SCID in both English (JU, SAG) and Spanish (SAG). Research assistants were non-clinicians who were trained to administer all non-SCID instruments. The training of non-clinicians paralleled that in prior studies of ethnically diverse older adults (Unutzer et al., 2002). All Spanish-language interviews were conducted by native speakers.

Data analysis

All statistical analyses were done using STATA 8.0 (College Station, Texas). Univariate analyses were conducted using chi-square and rank sum tests. Multivariate logistic regression models were used to compare ethnic groups' past-year depression care and to examine correlates of use.

RESULTS

Depression screening results and sample characteristics

The results of the screening process are shown in Figure 1. A total of 509 men were approached in the four participating primary care clinics and 364 agreed to the interview (28% refusal rate). Twenty-nine of the 364 began the screening process, but were ineligible or dropped out, leaving a total sample of 335 who were both eligible and completed the screening process. Of these 335, 55% were white, 52% were age 65 and above, 27% were interviewed in Spanish, 29% were born in Mexico, and 49% reported fair/poor health (versus good/excellent). About half (53%) of those screened were from a large public hospital and 47% from a large primary care network affiliated with an academic medical center.

Ethnic differences in past-year clinical depression and depression treatment

In the overall sample, 26% (n=88) met criteria for past-year clinical depression (DSM-IV major depression and/or chronic depression) and 18% (n=59) reported past-year depression treatment (i.e. either pharmacotherapy or counseling/medications). As shown in Figure 2, the frequency of clinical depression were similar in Mexican-origin and whites (i.e. 28% versus 25%, $X^2=0.59$, $p=.444$, $df=1$) but the frequency of self-reported depression treatment was significantly lower in Mexican-origin men compared with whites (i.e. 9% versus 25%, $X^2=15.73$, $p<.001$, $df=1$).

To further examine the association of ethnicity with depression treatment among the 108 men with depression or depression treatment in the prior year, Figure 3 shows a cross-ethnic comparison of the proportion of men in each of three depression treatment subgroups (i.e. depressed untreated, depressed treated, treatment only). Among the Mexican-origin group 72% (n=34) were in the depressed/untreated group, 19% (n=9) in the depressed/treated group, and 9% (n=4) in the treatment only group. Corresponding numbers for the whites were 25% (n=15) depressed/untreated, 49% (n=30) depressed/treated, and 26% (n=16) depression treatment only (cross-ethnic comparison test statistic, $X^2 = 24.47$, $p<.001$, $df=2$).

Self-reported depression diagnosis and treatment types in Mexican-origin and white men

Next, we examined the types of depression treatment reported by Mexican-origin and white men meeting criteria for clinical depression in the prior year (n=88) as shown in Table 1.

Compared with whites, Mexican-origin men were significantly less likely to report having received either a depression diagnosis or a prescription medication for depression, depressive symptoms, or emotional troubles/stress (all $p < 0.01$ or lower). There were no cross-ethnic differences in receipt of counseling/psychotherapy or referral to a counselor/mental health provider. However, it should be noted that the number of older men reporting counseling/psychotherapy was relatively low in all groups. All men who reported receiving psychotherapy also reported being prescribed medication for depression.

Correlates of depression treatment

To compare factors associated with self-reported depression treatment in white and Mexican origin older men with a past-year history of clinical depression, we examined the bivariate relationship of receipt of depression treatment with older men's sociodemographic and health status (see Table 2). Depression treatment was defined as self-reported past year receipt of medication or counseling for depression, stress, or depressive symptoms. As can be seen in Table 2, men who were Mexican-origin, were interviewed in Spanish, born in Mexico, and who had less formal education were significantly ($p < .01$ to $p < .001$) less likely to report depression treatment.

Logistic regression analyses

In order to examine the effects of language on likelihood of depression treatment among the Mexican-origin men, we conducted a logistic regression comparing the odds of depression between whites and two language subgroups of Mexican-origin men: those who preferred to be interviewed in English and those who preferred to be interviewed in Spanish. We also controlled for level of formal education as this variable was associated with depression treatment in the bivariate analysis. Mexican-origin men who were English and Spanish language preferring had significantly higher odds of depression under-treatment compared with Whites (Table 3) after adjusting for level of formal education.

DISCUSSION

This study has several important findings. First, older Mexican-origin men experience similar levels of past year clinical depression yet report much lower rates of depression diagnosis and treatment compared with older white men. Differences in self-reported depression treatment extend to both English and Spanish language preferring subgroups of Mexican-origin men. Second, the majority of the Mexican-origin and white older men who reported receiving depression treatment also met criteria for past year clinical depression, indicating that few achieved full remission. Together these findings highlight our need to improve diagnosis and treatment in primary care, particularly for those of Mexican-origin. Corresponding improvements in the quality of the depression care are also needed so that older men achieve full remission from depression.

The rate of depression treatment among Mexican-origin older men was surprisingly low considering ours is a primary care-based sample and is more in line with what has been found in community-based studies of Latinos. Prior community-based and mixed-sex epidemiological (Gonzalez et al., 2010) and clinic studies (Lagomasino et al., 2005) have found rates of depression care among whites to be 1.5 to 2 fold higher compared with Mexican-origins. In contrast, our study found a nearly three-fold gap between rates of primary-care based depression treatment in Mexican-origin and white older men. Our findings suggest that ethnic disparities in depression care may be amplified among men and additional studies are needed to replicate this finding in larger samples.

In our study, self-reported depression treatment was not significantly different for English and Spanish language preferring subgroups of Mexican-origin men. This finding differs from prior studies. Previous studies of elderly Latinos have found that Latinos with Spanish language preference, but not those who preferred to speak English, were at higher risk for depression under-treatment compared with whites (Gonzalez et al., 2001, Gonzales et al., 2009). One possible reason for this discrepancy is we studied only older men whereas prior studies were mixed-sex. Future studies examine the possibility that gender modifies the relationship between depression treatment and language in Mexican origin or other Latino populations.

Older Mexican-origin men were significantly less likely to report that a doctor had told them that they were depressed. This suggests that under-diagnosis or difficulties in the communication of diagnosis may also play an important role in under-treatment of depression in this primary care based sample. While a detailed discussion of the sources of under-diagnosis is beyond the scope of this paper, they may include physician factors (e.g. stereotypes, not asking about depression, failing to recognize men's depression). For example, most physicians are trained to pay attention to the epidemiologic base-rates of disorders, which highlight depression among women, but not men. This may have the untoward effect of depression under-detection in men. Patient factors (e.g. stigma) may hinder men from expressing distress in ways that are not easily recognized by physicians. Additionally, lack of familiarity with the health system or experiences of discrimination, or lack of healthcare insurance may compound depression under-diagnosis and under – treatment for Mexican-origin men. If older Latinos are more averse to anti-depressant medication than whites (Cooper et al., 2003), they may be less likely to seek help for depression in primary care settings.

The second major finding is that among those older men of both ethnic groups who reported receiving depression care, the majority remain highly symptomatic. While our study did not include a measure of treatment adequacy as some epidemiological studies have done (Gonzalez et al., 2010), the fact that two-thirds of older men in primary care who reported receiving depression treatment continued to meet criteria for clinical depression suggests that inadequacy of treatment continues to be a major challenge (Young et al., 2001). Our results are consistent with prior treatment trials showing that 70–80% of men receiving “usual care” do not achieve significant reduction in depressive symptoms and highlights the significant problems with quality of care after initial diagnosis and engagement in care (Unutzer et al., 2002, Katon et al., 2010, Mojtabai, 2001). Research in primary care settings has shown that older men benefit as much from depression interventions as women and dissemination of effective collaborative care models to reach older men in primary care is clearly needed (Unutzer et al., 2002).

The study findings should be interpreted in the context of this study's strengths and limitations. In contrast to prior studies, we included older men who had been successfully treated for depression, allowing us to assess the full-spectrum of depression treatment. Another strength is that we assessed depression using face-to-face interviews and a measure of syndromal clinical depression (i.e. SCID) rather than relying on measures of depression symptoms. Several caveats should be considered when evaluating this study. First, while we used the SCID to assess current major depression, previous depression history and treatment were based solely on men's self-report, which has the potential to introduce biases. Higher depression-related stigma among Mexican-origin men, for example, could have led to greater under-reporting of diagnosis or treatment compared with whites (Vega et al., 2010). In addition, our sample was small by epidemiological standards, which may have limited our ability to detect any differences in receipt of psychotherapy. Another potential study limitation to generalizability was that our sample was drawn from a single geographic area.

In addition, our measure of depression treatment did not permit us to examine adequacy of treatment. Because our measure of depression treatment was less stringent, far fewer older men were likely to be receiving treatment that we would consider to be guideline-congruent (Gonzalez et al., 2008). Finally, our sample included only Mexican-origin men so caution should be used in generalizing to other Latinos, as prior work has demonstrated heterogeneity among Latino subgroups in terms of rates of depression and depression treatment (Gonzalez et al., 2010, Jimenez et al., 2010).

In conclusion, we found very low rates of depression treatment in older Mexican-Origin men, highlighting a gap in mental health services delivery in primary care for this population. Older Latinos who are not able to access treatment for their depression may experience more prolonged depressive episodes and associated suffering (Interian et al., 2011). The high rates of depression under-treatment are taken on addition significance given that older Latinos are among the largest and fastest growing segments of seniors. (Angel and Hogan, 2004). In addition, most older men, including white and Mexican-origin, who have received depression treatment in the past year remain clinically depressed. Thus an equally important challenge is ensuring that depression treatments are effective so that depression fully remits. Older adults incur important “costs” when being diagnosed and treated for depression, such as social (i.e. labeling) and resource-related (e.g. monetary costs of treatment) burdens. To offset these “costs” improved access must be linked to more adequate depression care, which will provide health benefits that outweigh these costs. In interventions based on the collaborative care model, older Latinos show improvements in depression-related outcomes that are comparable to or greater than whites (Bauer et al., 2011, Arean and Ayalon, 2005). Future efforts to reduce disparities in depression care for older men must address both access and quality-related challenges.

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Figure 1.
Men's Health and Aging Study Depression Screening Results from Primary Care Clinics in the California Central Valley.

Figure 2. Frequency of past year clinical depression and depression treatment among Mexican-origin (n=152) and white men (n=183) screened in primary care

*Cross-ethnic comparison do depression treatment, $X^2 = 15.74$, $p < .001$ (df=1)

Figure 3. Comparison of the proportion of Mexican-origin and white men in three depression-treatment subgroups (n=108)*

*Cross-ethnic comparison, $X^2 = 24.47$, $p < .001$ (df=2)

Self-report of receipt of depression diagnosis and treatment among older Mexican-origin and white men with past-year clinical depression (n=88)

Table 1

	Mexican-origin (n=43)	White (n=45)	Both (n=88)	P value	Test statistic (all df=1)
	% (n)	% (n)	% (n)		χ^2
Diagnosis					
Doctor or health care professional told them they might be depressed	37 (16)	67 (30)	52 (46)	p=0.006	$\chi^2=7.65$
Prescription Medications					
Received prescription drug for depression	21 (9)	60 (27)	41 (36)	p<0.001	$\chi^2=13.89$
Received prescription for stress/emotional troubles	16 (7)	49 (22)	33 (29)	p=0.001	$\chi^2=10.58$
Received prescription for depression	16 (7)	53 (24)	35 (31)	p<0.001	$\chi^2=12.23$
Received prescription for pain	74 (32)	76 (34)	75 (66)	p=0.902	$\chi^2=0.02$
Counseling/Psychotherapy					
Received counseling/psychotherapy for stress, emotional troubles or depression	12 (5)	20 (9)	16 (14)	p=0.283	$\chi^2=1.15$
Received counseling/psychotherapy for reported depression symptoms	12 (5)	22 (10)	17 (15)	p=0.186	$\chi^2=1.75$
Doctor referred them to a counselor/therapist/psychiatrist *	12 (5)	20 (9)	16 (14)	p=0.329	$\chi^2=2.22$
Family/friends advised them to seek a counselor/psychiatrist	12 (5)	20 (9)	16 (14)	p=0.283	$\chi^2=1.11$

* n=87, one missing value

Table 2

Bivariate relationship of depression treatment and selected variables among older men with SCID ascertained past-year clinical depression (n=88)

	Antidepressant or psychotherapy (n=39)	No treatment (n=49)	P value	Test statistic (all df = 1)
	% (n)	% (n)		
Mexican-origin	23 (9)	69 (34)	p< 0.001	X ² =18.64
Born in Mexico	15 (6)	39 (19)	p=0.016	X ² =5.84
Interviewed in Spanish	8 (3)	41 (20)	p<0.001	X ² =12.34
Age 60–64	54 (21)	57 (28)	p=0.757	X ² =0.10
Good or better self-rated health	21 (8)	25 (12)	p=0.658	X ² =0.20
Married	49 (19)	55 (27)	p=0.551	X ² =0.36
Less than a high school education	26 (10)	55 (27)	p=0.004	X ² =8.25
Currently employed part/full time	8 (3)	20 (9)	p=0.137	X ² =2.21
Religion is important	64 (25)	74 (36)	p=0.269	X ² =1.22

*
n=87, one missing value

Table 3

Odd of having untreated past-year clinical depression by ethnicity-language group among older men (n=87)*

	OR	95% CI	Z value
White	1.00	--	--
Mexican-origin English preferred	4.35	1.35–14.08	2.46
Mexican-origin Spanish preferred	10.40	2.11–51.25	2.88

* Logistic regression analysis adjusted for education, $X^2 < 0.001$, $df = 3$, $r^2 = .17$