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Older primary care patient views regarding antidepressants: A mixed methods approach

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Abstract

Background—Generally, the efforts to predict antidepressant use from patient demographic factors have not been fruitful.

Aim—Our objective was to generate hypotheses regarding antidepressant use among older primary care patients.

Methods—We utilized a mixed methods design that is both hypothesis-testing and hypothesis-generating. Adults aged 65 years and over were recruited from primary care practices and interviewed in their homes. We examined the personal characteristics of older adults according to antidepressant use (hypothesis-testing). Participants taking antidepressants and participants not taking antidepressants were asked open-ended questions about their views on treatment for depression. Themes related to use of antidepressants were examined (hypothesis-generating).

Results—Older adults taking antidepressants were more likely to be white and have more depression symptoms compared to older adults not taking antidepressants ($p < 0.001$ and $p = 0.004$, respectively). Positive and negative themes emerged when participants discussed antidepressant use. We linked quantitative data from the participants with the themes they endorsed to form an emerging theory about older adults' perceptions about antidepressant use.

Conclusion—Few personal characteristics were associated with aatidepressant use. An improved understanding of how older adults view antidepressant use, derived from multiple methods, may inform clinical practice.

Keywords

Depression; aged; primary health care; antidepressants; adherence

Introduction

Generally, the efforts to predict antidepressant use from patient demographic factors have not been fruitful. Only a few personal characteristics have been found to predict current antidepressant prescriptions including gender, ethnicity, education, cognition, and health status (Blazer, Hybels, Fillenbaum, & Pieper, 2005; Blazer, Hybels, Simonsick, & Hanlon, 2000;

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Sirey et al, 1999). A more complete knowledge of predictors of antidepressant use would help practitioners target their efforts to improve outcomes of depression among older adults.

We anticipated that similar to previous investigations few patient-level characteristics would be associated with antidepressant use. Therefore, in addition to testing our hypotheses regarding the personal characteristics associated with antidepressant use, we also sought to generate hypotheses regarding antidepressant use. We asked participants to talk about depression treatment in open-ended interviews, focusing our paper on their talk around medications, and used structured interview data about sociodemographic factors, functional and psychological status, and use of depression medications to describe characteristics of older persons who fall under specific themes.

Our investigation differs from previous investigations on attitudes regarding medications by including elements derived from both quantitative measures and qualitative descriptions (Tashakkori & Teddlie, 1998), incorporating both hypothesis-testing and hypothesis-generating in a single study. The primary objectives of our study were to (i) examine patient characteristics associated with antidepressant use among older adults; (ii) assess older patients' views of depression medication; and (iii) link the survey data from the participants with the themes they endorsed to form an emerging theory about older adults' perceptions about antidepressant use. We hypothesized that few personal characteristics would be associated with antidepressant use. However, we hypothesized that the perspective of older adults may help to explain why older persons often do not accept depression treatment. An improved understanding of how older adults view antidepressant use, derived from multiple methods, may inform clinical practice and intervention development.

Method

The Spectrum Study

The Spectrum Study is a mixed methods study consisting of two linked sets of investigation into the presentation and course of depression among older primary care patients. The design of the Spectrum Survey was a cross-sectional survey of patients aged 65 and older recruited from non-academic primary care practices in the Baltimore, Maryland area ($n = 355$, described in detail elsewhere (Bogner et al., 2004; Gallo et al, 2005)).

Semi-structured interviews

Patients were selected for semi-structured interviews from the sample of older adults who participated in the Spectrum Survey and agreed to be contacted and interviewed again ($n = 102$, described in detail elsewhere (Barg et al., 2006)). All study protocols were approved by the Institutional Review Board of the University of Pennsylvania. The interviews were designed to give participants an opportunity to express their views about depression and depression treatment (Kleinman, 1980; Sayre, 2000).

Measurement strategy

Patient assessment—We used standard questions to obtain information from the participants on age, gender, self-reported ethnicity, and education. The interviewer wrote down the medications and dosages directly from bottles of their prescription medications. The Center for Epidemiologic Studies Depression Scale (CES-D) scale was developed by the Center for Epidemiologic Studies at the National Institute of Mental Health for use in studies of depression, and the Medical Outcomes Study Short Form (SF-36) has been employed in studies of outcomes of patient care (e.g., Gallo et al., 2005).

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Analytic strategy—Our analytic strategy reflects an integration of hypothesis testing and hypothesis generating. The analytic plan proceeded in three phases. In the first phase, we compared the personal characteristics of the 355 older primary care patients in the Spectrum Study who were taking antidepressants versus those who were not (using χ^2 or *t*-tests for comparisons of proportions or means, respectively).

In the second phase, we examined the 102 transcripts of the older primary care patients who participated in the semi-structured interviews. We used the constant comparative method moving iteratively between codes and text to derive themes relating to views regarding medications for depression (Boeije, 2002). Originally developed for use in the grounded theory methodology of Glaser and Strauss (Glaser & Strauss, 1967), this strategy involves taking one piece of data (e.g., one theme) and comparing it with all others that may be similar or different in order to develop conceptualizations of the possible relations among various pieces of data.

In the third phase of analysis, the participants in the semi-structured interviews endorsing the themes regarding depression medication were described with survey measures. During this phase, hypotheses were generated about older primary care patients who endorsed certain themes regarding antidepressants. Linkages among themes were identified to form an emerging theory about older adults' perceptions regarding antidepressant use. Data analysis was carried out with the use of SPSS (SPSS Corporations, College Station, Texas) and QSR N6.0 (QSR International, Durham, UK).

Results

The Spectrum Study sample and use of antidepressants

Sociodemographic characteristics, use of medical care, number of medications, functional and cognitive status, and depressive symptoms were compared among' the participants according to antidepressant use. One hundred and three participants (41%) were taking an antidepressant. Participants taking antidepressants were significantly more likely to be white ($p < 0.001$) compared to participants not taking antidepressants. Use of antidepressants was also significantly more likely among participants with more depressive symptoms ($p = 0.004$). No other measured variables were found to differ significantly between the participants according to antidepressant use.

Themes regarding depression medication

Six major themes emerged from the transcripts, and here we discuss them in detail. These include: (i) "Took the right way", (ii) "Uplift your spirit", (iii) "Medication is just a partial fix", (iv) "It's not a concrete science", (v) "Once you get old", and (vi) "They can become addictive". Twenty-seven participants endorsed only one of the six major themes and 33 participants endorsed more than one of the major themes. Table I examines the sociodemographic characteristics, psychological status, functional status, and antidepressant use of persons endorsing each of the six major themes.

Took the right way—Participants emphasized the importance of adherence to the antidepressant regimen exactly as prescribed by the physician.

> Oh yeah I think it can (help) so long as it's done the right way and took the right way. A lot of people … either take half of it or won't finish it or something.

Uplift your spirit—Participants discussed the benefits of treating depression with antidepressants. Many of these participants talked about the positive mood changes that occur after taking an antidepressant.

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> It will uplift your spirit and give you energy. You got to have that energy. If you don't have energy, you're nowhere.

Medication is just a partial fix—There was a shared sense among many participants, even those who spoke strongly about the effectiveness of medication, that depression may be a complicated problem beyond the curative scope of medications.

> To me, medication is just a partial fix. I say OK, go with the medication but the medication is only to help to break that habit of being depressed.

It's not a concrete science—Many participants did not think that their doctors had all of the answers, and that finding the right drug was a trial and error process.

> People can be overmedicated… or under-medicated… in a lot of cases it's a trial and error thing … doctors are never sure of how much or what and they start off, 'try this and try that' until they find something that works. It's not a concrete science by any means.

Once you get old—Some elderly patients expressed feelings of vulnerability. They commented on the difficulties older persons face including poverty.

> What do the poor people do? My mother lived with us all her life so therefore she didn't have to pay rent. She had to use her whole social security check on medicine, you know, it's terrible. It's like once you get old, they go "Eh, who care about them?" you know, but when you need to make big decisions, when you're old is when you can least make those decisions, you know.

They can become addictive—Participants espousing this theme expressed strong concerns about becoming addicted to their depression medication.

> Well they can become addictive, habit forming, I think. And when the person comes off of 'em, I mean, it can't take them all their life so what happens to them? I think it's bad.

Patient characteristics and themes

Table I describes characteristics of patients according to the themes. Participants expressing the "Took the right way" theme were predominantly white with only one person self-identifying as African-American. Among the participants who discussed the "Uplift your spirit" theme only 7 (28%) were taking an antidepressant. Nine of the 19 participants (47%) endorsing the "Medication is just a partial fix" theme self-identified as African-American. Only 4 of the 19 persons (21%) in this group were currently taking depression medication. Forty-two percent of participants expressing the "It's not a concrete science" theme were men, which is a noteworthy considering 74% of the entire sample was women. Four of the 19 participants (21%) endorsing this theme had less than a high school education. Participants who expressed the "Once you get old" theme had high scores on the physical function score of the SF-36, indicating high levels of functioning. Four of the 7 persons (57%) in this group were currently taking depression medication. Seventeen of the 19 participants (89%) endorsing the theme "They can become addictive" were women and 7 participants (37%) were taking an antidepressant.

Discussion

Our study combines the use of highly scripted interviews employing standardized assessments (quantitative tradition) with semi-structured interviews (qualitative tradition) in order to make

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the best of both traditions (mixed methods). The survey data confirm previous investigations that use of antidepressants is predicted by patient ethnicity and depression severity (Blazer et al., 2005; Blazer et al., 2000; Sirey et al., 1999). The open-ended responses from the participants represent patient voices and the quantitative data sharpen our ability to characterize who expresses particular themes. The qualitative descriptions enrich the findings from the survey data by illustrating how patient-level characteristics influence views on antidepressants. Our study confirms and builds upon aspects of other studies investigating patient attitudes toward depression care and acceptability of depression treatment (Cooper et al., 2003; Ozmen et al., 2005). However, our study elicited themes from older patients instead of utilizing survey data measuring fixed choice responses of attitudes toward antidepressants thereby allowing us to relate the insider perspective directly to the reported use of antidepressants which had been only partially explained by patient-level characteristics.

Before further discussing our findings, the limitations of our study deserve comment. First, our results were obtained from patients who receive care at a limited number of primary care sites that might not be representative of most primary care practices. Second, patients' remarks reflected their perceptions of antidepressants and might not reflect their actual adherence to these medications. Third, our study involves participant recall of their own and others' experiences and was therefore subject to all the sources of error associated with retrospective interview data including imperfect recall and response bias (e.g., socially desirable responding). Fourth, as with all qualitative data, the nature and amount of information the participants offered depended upon their interactions with the interviewers, the circumstances surrounding their interview, and their motivations for participating in the study. Lastly, since all interviews took place in the participants' homes, their responses may be different from responses they might give in a doctor's office or other location.

Because of the design we are able to discuss how the themes and numeric data from the same sample further our understanding of use of antidepressants. Only one participant expressing the "Took the right way" theme was African-American and approximately one-fourth of participants endorsing this theme had less than a high school education. These results are consistent with our survey measures that older adults taking antidepressants were more likely to be white as well as with evidence suggesting that white middle class members are more likely to view depression as a medical problem (Jacob, Bhugra, Lloyd, & Mann, 1998). Among the participants who discussed the "Uplift your spirit" theme only approximately one-fourth were taking an antidepressant, indicating that many patients who are not taking antidepressants may perceive antidepressants as beneficial. Almost half of the participants endorsing the "Medication is just a partial fix" theme self-identified as African-American, and less than one-fourth in this group were using antidepressants. Other investigators have found ethnic differences in the acceptability of depression treatment (Cooper et al., 2003). Patients expressing the "It's not a concrete science" theme had the largest proportion of men and higher levels of education. Consistent with a medical model of depression, proponents of this theme recognize that the act of prescribing an antidepressant is just the starting point for finding the right medication, the right dose, and the level of acceptable side effects. More than half of the participants who discussed the "Once you get old" theme were currently taking an antidepressant and reported high levels of physical functioning. The results are consistent with literature that older adults are more skeptical of diagnosis and treatment of depression (Fisher & Goldney, 2003). Approximately one-third of the patients endorsing the "They can become addictive" theme were taking antidepressants. Other literature discussing older patients' preferences and beliefs about depression treatment cited addiction as a concern with antidepressants which often stemmed from fear of or negative experiences with antidepressants (Givens et al., 2006), All except two of the participants endorsing this theme were women consistent with a previous report that women might have more negative views of antidepressants (Kessing, Hansen, Demyttenaere, & Bech, 2005).

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Consistent with previous investigations, older adults taking antidepressants were more likely to be white and have more depressive symptoms. If our analysis had been limited to patient characteristics (a purely quantitative study), the patient perspective would be missing. The themes represent patient voices and reflect patient ideas of how antidepressants work that likely differ from physician knowledge of these medications. Since a patient's willingness to accept and sustain depression treatment is a deciding factor in the success of any given intervention, it is vital to understand more about the factors that promote or impede adherence behaviors. In the future, we intend to explore the link between views on antidepressants and actual use of services, satisfaction with care, and acceptance as well as adherence to treatment.

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Table I

Characteristics of persons according to themes raised in semi-structured interviews (n = 102). Data from the Spectrum Study (2001–2004).

	"Took the right way" *n*=14	**"Uplift your spirit" *n* = 25**	**"Medication is just a partial fix" *n* =19**	**"It's not a concrete science" *n* =19**	**"Once you get old" *n* = 7**	**"They can become addictive" *n* = 19**	**Total sample *n* =102**
Sociodemographic characteristics							
Age, mean (SD)	77.4 (7.1)	78.4 (7.5)	77.7 (6.9)	75.3 (5.6)	72.9 (7.1)	79.3 (7.0)	78.3 (6.5)
Women, *n* (%)	11.0 (79%)	19.0 (76%)	16.0 (84%)	11.0(58%)	6.0 (86%)	17.0 (89%)	75.0 (74%)
African-American, *n* (%)	1.0 (7%)	9.0 (36%)	9.0 (47%)	6.0 (32%)	1.0(14%)	6.0 (32%)	47.0 (46%)
Education less than high school, *n* (%}	3.0 (21%)	8.0 (32%)	9.0 (47%)	4.0 (21%)	3.0 (43%)	8,0 (42%)	38.0 (37%)
Psychological status							
CES-D score, mean (SD)	5.9 (3.2)	8.2 (6.4)	5.3 (4.8)	8.0 (6.8)	5.9 (6.6)	7.5 (7.2)	14.3 (12.4)
Functional status							
Physical function score, mean (SD)	73.2 (20.2)	57.4 (29.9)	56.8 (23. 5)	66.1 (28.5)	87.0(11.7)	61.6 (31.2)	61.3 (29.6)
Role physical scorej mean (SD)	73.2 (35.9)	56.0 (42.3)	64.5 (37.6)	68.4 (32.1)	75.0 (25.0)	61.8 (34.7)	45.1 (40.1)
Role emotional score, mean (SD)	83.4 (34.0)	89.4 (24.9)	91.2(26.9)	89.4 (25.1)	90.6 (16.1)	91.3 (24.4)	73.7 (41.1)
Antidepressant use							
Antidepressant use, *n* (%)	6.0 (43%)	7.0 (28%)	4.0 (21%)	6.0 (32%)	4.0 (57%)	7.0 (37%)	29.0 (28%)

Percents are column percents. SD, standard deviation. CES-D, Center for Epidemiologic Studies Depression Scale.