Brief Report

Perceived Stigma as a Predictor of Treatment Discontinuation in Young and Older Outpatients With Depression

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Objective: The authors' goal was to examine the extent to which perceived stigma affected treatment discontinuation in young and older adults with major depression.

Method: A two-stage sampling design identified 92 new admissions of outpatients with major depression. Perceived stigma was assessed at admission. Discontinuation of treatment was recorded at 3-month follow-up.

Results: Although younger patients reported perceiving more stigma than older patients, stigma predicted treatment discontinuation only among the older patients.

Conclusions: Patients' perceptions of stigma at the start of treatment influence their subsequent treatment behavior. Stigma is an appropriate target for intervention aimed at improving treatment adherence and outcomes.

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Inadequate treatment of major depression remains a substantial public health concern. Given the availability of efficacious treatments for depression, efforts to increase effectiveness have targeted provider behavior. Arguably, however, effective treatment is a result of a successful collaboration between the provider and the individual seeking care. Patient barriers to successful treatment are potential targets for interventions but are less well understood. To that end, we investigated the effect of patients' perceptions of stigma on their treatment adherence.

Perceived stigma is the belief that most people will devalue and discriminate against individuals who use mental health services and/or have a mental illness (1). The Surgeon General's report on mental health (2) highlighted stigma as a powerful obstacle to seeking care. For older adults, the effect of stigma on use of mental health services is particularly strong (3); seeking care in the mental health sector entails both countering the discriminatory idea that depressive symptoms are a normal part of aging and confronting the stigma of mental health treatment.

This study tests the hypothesis that stigma affects early treatment discontinuation. We hypothesized that older adults would report perceiving greater stigma than younger adults. We expected that patients perceiving higher levels of stigma would be more likely to discontinue treatment prematurely and that the effect of stigma would be greater in older adults.

Method

The study employed a two-stage sampling procedure to identify individuals with major depressive disorder seeking treatment from a psychiatric outpatient clinic in a multiservice academic setting. Newly admitted patients were approached, and written informed consent to screen for depression with the Center for Epidemiologic Studies Depression Scale (4) was obtained. Patients who screened positive were assessed with the Structured Clinical Interview for DSM-IV Axis I Disorders to establish the diagnosis of major depressive disorder. Exclusion criteria included cognitive impairment (Mini-Mental State [5] score less than 24), alcohol abuse within the past month, or another axis I disorder. The study group consisted of 92 outpatients with a diagnosis of major depressive disorder.

Other measures included the 17-item Hamilton Depression Rating Scale, the Global Assessment of Functioning (DSM-IV, p. 32), medical comorbidity assessed with the Chronic Disease Score (6), and the 47-item Inventory of Interpersonal Problems (7) to screen for interpersonal problems associated with personality pathology.

Perceived stigma was measured by using a version of the Stigma Coping Scale (1), which assesses beliefs about devaluation of and discrimination toward individuals with mental illness and degree of withdrawal. Respondents' levels of perceived stigma are determined by their perceptions of how most other people view individuals with mental illness.

Our treatment outcome measure was a dichotomous variable classifying patients as either "continued in treatment" or "discontinued treatment" (and did not seek treatment elsewhere) during the 3-month follow-up period. The measure was based on subjects' self-report and a review of the clinical chart.

Age differences (patients 18–64 years old compared with those 65 years old or older) in sociodemographic and clinical characteristics were compared by using Student's t test and chi-square tests with continuity correction. Patients who discontinued treatment were compared with those who remained in treatment for the follow-up period. Differences in bivariate analyses at a level of $p \leq 0.05$ were entered into a logistic regression to identify predictors of continued treatment. Adding an interaction term to the main effects logistic model tested the hypothesized age difference in the effect of stigma on treatment.

TABLE 1. Logistic Regression Predicting Continued Treatment Among 92 Outpatients With Major Depressive Disorder

Variable	Adjusted Odds Ratio	Confidence Interval	Wald χ^2 (df=1)	p
Stigma	0.92	0.79–1.07	1.08	<0.30
Age ≥65	0.00	0.00–2.04	3.45	<0.07
Interaction: stigma by age ≥65	1.29	1.00–1.66	3.94	<0.05
Depression severity (Hamilton depression scale score)	1.07	0.93–1.24	0.95	<0.33

Results

Sixty-three of the patients were 18–64 years old; 29 were 65 years old or older. Most of the patients in both age groups were female, white, and had some college education. More of the older adults than the younger adults had been married previously (52% [N=15] compared with 24% [N=15]). Significantly more of the older patients had a concurrent medical illness (52% [N=15] compared with 29% [N=18]) (χ^2=4.22, df=1, p=0.04). The older adults also had higher Global Assessment of Functioning Scale scores (mean=50.6, SD=6.6, compared with mean=46.8, SD=9.4) (t=–1.97, df=90, p=0.05). The patients in the two age groups did not differ in severity of depression (Hamilton depression scale mean score=18.2, SD=4.3, for older patients and mean=18.8, SD=3.9, for younger patients).

The majority of the patients in both age groups held disparaging views of people with mental illness. Two patients refused to answer the questions about stigma. Contrary to our hypothesis, younger adults reported higher levels of overall perceived stigma than the older adults (t=2.00, df=89, p=0.05).

The patients in the two age groups did not differ in type of treatment or side effects. Most of 92 patients (N=75 [82%]) remained in treatment during the follow-up period; seven (24%) of the elderly patients and eight (13%) of the younger patients discontinued treatment completely. All 15 of the patients who discontinued treatment did so within the first 6 weeks—nine (60%) immediately following the first evaluation sessions—and none sought care elsewhere. Patients who discontinued treatment did not differ from those who remained in care by age or other sociodemographic variables, clinical characteristics (e.g., previous hospitalizations, duration of current episode, depression severity, Global Assessment of Functioning Scale score, medical conditions, interpersonal problems), or type of antidepressant medication or mental health service used.

The hypothesized age difference in the effect of stigma on treatment discontinuation was tested in a logistic regression model (Table 1) that controlled for baseline severity of depression. In this model, the interaction between age and stigma was significant, and the main effect of age group was marginally significant. In older patients, but not younger patients, greater perceived stigma was associated with a greater likelihood of treatment discontinuation. To illustrate the effect, we calculated the adjusted odds ratio of a mean stigma score 3 points (half the standard deviation) above the mean stigma score for young and old age groups. Older adults had a 1.7 greater likelihood of dropping out with a stigma score 3 points above the mean score, but young adults were 1.3 times less likely to drop out.

Discussion

The principal finding of this study is that perceived stigma toward individuals with mental illness predicts early treatment discontinuation in elderly patients with major depression. No other demographic, clinical, or treatment characteristic predicted dropout in this study group. Although younger patients reported greater perceived stigma than older patients, stigma did not influence treatment discontinuation in younger outpatients. We know of no other study that has demonstrated the impact of stigma on treatment participation.

A limitation of this study is the small number of older adults seeking mental health treatment. Studies of service utilization indicate that older adults are increasingly making outpatient mental health visits (8). However, a 1995 New York State Office of Mental Health utilization survey of outpatient mental health clinics in Westchester County (9) found that only 7% of outpatients were over 65 years old. We screened new outpatient admissions (N=1,258) from public and private mental health clinics and found that 79% of older adults sought care at the academic clinic from which the study subjects were drawn (10). Although our findings are significant, the age effect of stigma needs to be replicated with a larger study group and at other facilities.

Although previous research has documented that perceptions of stigma reduce use of mental health services, these findings demonstrate that the impact of stigma reaches into the treatment process itself. We cannot account for other treatment factors (e.g., patient-doctor alliance and communication), but these data provide empirical support for the claims of clinicians and researchers that stigma contributes to the undertreatment of depression, especially for older adults. This support is consistent with the argument of Link et al. (1) that the effect of stigma is greater when treatment is initiated and the individual must face the reality of receiving mental health treatment (e.g., having a diagnosis, taking medication, meeting with a clinician). This process in part entails weighing the perceived social costs against the anticipated benefits of treatment. The anticipated social costs may be greater for older adults and may influence their treatment adherence more directly. As perceptions of stigma are potentially changeable (11), an implication of these findings is that patient stigma may be a useful target for intervention with the aim of improving treatment adherence and outcomes of depression.

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