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Mental health stigma and primary health care decisions

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Abstract

People with serious mental illness have higher rates of mortality and morbidity due to physical illness. In part, this occurs because primary care and other health providers sometimes make decisions contrary to typical care standards. This might occur because providers endorse mental illness stigma, which seems inversely related to prior personal experience with mental illness and mental health care. In this study, 166 health care providers (42.2% primary care, 57.8% mental health practice) from the Veteran's Affairs (VA) medical system completed measures of stigma characteristics, expected adherence, and subsequent health decisions (referral to a specialist and refill pain prescription) about a male patient with schizophrenia who was seeking help for low back pain due to arthritis. Research participants reported comfort with previous mental health interventions. Path analyses showed participants who endorsed stigmatizing characteristics of the patient were more likely to believe he would not adhere to treatment and hence, less likely to refer to a specialist or refill his prescription. Endorsement of stigmatizing characteristics was inversely related to comfort with one's previous mental health care. Implications of these findings will inform a program meant to enhance VA provider attitudes about people with mental illness, as well as their health decisions.

Keywords

Serious mental illness; Primary care; Health decisions; Stigma

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Conflict of interest

There are no conflicts of interest for any authors.

1. Introduction

People with serious mental illness experience health challenges yielding alarming morbidity rates (Mai et al., 2011; WHO, 2005) and die, on average, 15–30 years younger than their cohort (Saha et al., 2007). In part, this occurs because of health system failures: e.g., absence of integrated care services (Lutterman, 2010) or insufficient insurance coverage (Druss and Mauer, 2010). However, research also suggests that some provider decisions may worsen health outcomes. Compared to patients not identified with mental illness, research has shown health providers are less likely to refer patients with mental illness for mammography (Koroukian et al., 2012), inpatient hospitalization after diabetic crisis (Sullivan et al., 2006), or cardiac catheterization (Druss et al., 2000). Provider endorsement of stigma might be one influence on these health care decisions for people with mental illness (Jones et al., 2008; Thornicroft et al., 2007). It is possible that perceptions about adherence to treatment mediate the connection between provider stigma and health care decisions. Namely, those with stigmatizing attitudes may believe people with mental illness are less likely to adhere to treatment recommendations. If this is the case, providers may be less likely to offer some types of health care options to people with serious mental illness. In this paper we examine two treatment options that might be offered to a patient presenting with significant pain related to arthritis: refer for specialist consult or refill the patient's prescription for Naproxen. The hypothetical relationship between stigma and health decisions is summarized in the right paths of Fig. 1.

Two other variables are likely influential here. First, familiarity with mental illness is inversely associated with endorsing the stigma of mental illness (Corrigan et al., 2001a, 2001b). One proxy for familiarity is the degree to which a person is comfortable seeking mental health care themselves. We expect to show that health care providers who are comfortable seeking mental health treatment are less stigmatizing. Second, we hypothesize that health care provider discipline might be expected to moderate stigma's effects on treatment response. It seems reasonable to think nurses and physicians with mental health training are less likely to hold stigmatizing views compared to primary care colleagues; hence, being a mental health professional might be associated with endorsing stigmatizing characteristics. However, research suggests mental health providers may endorse stigma equal to or greater than many other professions (Lauber et al., 2006; Schulze, 2007). To learn more about this relationship, we include discipline (mental health versus primary care) as an additional variable in our path model without hypothesis about expected relationship.

2. Methods

2.1. Participants

Nurses, physicians, and psychologists from mental health and primary care clinics were recruited from five VA hospitals in the southeast and southwest areas of the US in 2011 and 2012. The study was approved by the VA Central Institutional Review Board. Providers who were fully informed to the study and consented to participate were given a hardcopy survey and self-addressed, postage paid envelope to return information anonymously. Research participants completed one of two vignettes of a patient (described more fully below) who varied based on presence or absence of a diagnosis of schizophrenia. Results

reported here are responses from research participants solely randomized to the patient “X” with schizophrenia ($N = 166$). The sample was 62.4% female. In terms of ethnicity, participants were 1.9% American Indian/Alaskan Native, 13.6% Asian/Asian American, 1.9% Native Hawaiian/Pacific Islander, 14.8% African/African American, and 67.8% European/European American; 6.9% reported themselves as Hispanic. In terms of professional discipline, 42.2% reported they worked in primary care, and 57.8% in mental health. Participants reported 16.1 years ($S.D. = 11.4$) of on-the-job service with 89.3% currently working full time. Age was reported in decades: 4.2% were less than 30 years old, 29.3% were 31–40 years, 24.0% were 41–50 years, 28.7% were 51–60 years, and 12.6% were over 60 years; 1.2% of the sampled opted to not answer the question on age.

2.2. Procedures

The vignette described patient X, a 34 year old male with schizophrenia and multiple other health problems including hypertension, obesity, disturbed sleep, and chronic low back pain attributed to arthritis. Current medications include Naproxen (500 mg twice a day for pain); the patient reports that he has finished the Naproxen prescription for the month in 25 days and would like to have his prescription filled early. The vignette also includes history, weight, blood pressure, and spoken concerns. More complete description of the vignettes including qualitative work for developing a content valid story is discussed in Sullivan et al. (in press). Briefly, focus groups of people with serious mental illness; mental health nurses, psychologists, and psychiatrists; and primary care nurses and physicians were asked to comment on experiences between providers and patients with serious mental illness regarding management of physical health problems. Interview questions included expected problems with care and barriers to service. This information was used to construct the vignette and survey measures for this study.

2.2.1. Measures—Three items from the National Comorbidity Study (Kessler, 2002) were used to assess comfort of health providers' previous mental health care with four point Likert scales. (1) “If you had a mental health problem, would you go for professional help?” (1 = definitely go, 4 = definitely not go). (2) “How comfortable would you be talking about mental health problems with a professional?” (1 = very comfortable, 4 = not comfortable at all). (3) “How embarrassed would you be if your friends knew you were getting professional help?” (1 = very embarrassed, 4 = not embarrassed at all). Items 1 and 2 were reversed (the higher the rating, the less comfortable the respondent) and a total comfort score was determined by adding all items together. Internal consistency was adequate ($\alpha = 0.65$). Remaining measures represented the provider's view of patient X. Mental illness stigma was assessed using a semantic differential of mental health attitudes, which has a long history for measuring the construct (Olmsted and Durham, 1976; Penn et al., 1994). Research participants were instructed to rate patient X on nine, 6-point continua; e.g., valuable–worthless, dirty–clean, and safe–dangerous. Some items were reversed and summed to yield a total score; the higher, the more stigmatizing ($\alpha = 0.82$). Research items for expected adherence represented beliefs about whether patient X “will adhere to medications,” “keep his regular appointments,” and “refill his medications on time.” Research participants answered the items on a 10-point Likert scale (10 = extremely likely) and internal consistency was good ($\alpha = 0.89$).

Two sets of items assessed health decisions to which respondents answered using the 10 point “likely” scale. Intent to refer to specialist included three consults: weight reduction, pain management, and sleep study ($\alpha = 0.46$). Intent to prescribe was assessed separately for Naproxen and Lortab (a narcotic analgesic). Intent to prescribe also included expectations patient X would use more Lortab than prescribed ($\alpha = 0.32$).

3. Results

Missing data were replaced by imputations representing means of existing data for remaining items in the measure. Mean and standard deviations of the measures included in our model are summarized in Table 1. Table 1 also includes Pearson Product Moment Correlations examining associations between constructs. Provider discipline was significantly associated with comfort with mental health care; providers from mental health clinics showed more comfort. Those who reported greater comfort were less likely to endorse stigmatizing characteristics. Agreement with stigmatizing characteristics led to less belief that the person will adhere to treatment. Greater perceived adherence was positively associated with both health decisions: referrals and prescription refill.

The standardized solutions from the structural equation model testing our path are summarized in Fig. 1; we used LISREL8.80 software to test models. Indicators suggest the model strongly fit data with a nonsignificant chi-squared, $\chi^2(9) = 3.28, p > 0.95$, chi-squared to d.f. ratio far less than 2 (ratio = 0.36), and RMSEA below 0.06 (RMSEA = 0.000). Additional indicators also supported goodness of fit (i.e., indicator is greater than 0.90): normed fit index = 0.93 and comparative fit index = 1.00. Fig. 1 also includes *Betas* representing relationships between adjacent constructs in the path model as well as t-tests indicating significance of these relationships. Hypotheses about relationships between stigma and the two proxies of health decisions were supported. Providers who endorsed stigmatizing characteristics were more likely to believe patients would not adhere to treatment. Comfort with previous mental health service experiences was inversely associated with stigma. Those who believed the patient would adhere to treatment recommendations were more likely to refer patient X to a specialist and more likely to refill prescriptions; in other words, they were more likely to take clinical actions to address the patient's complaints of back pain. Fig. 1 also shows no significant relationship between discipline and expectations about treatment response; mental health providers seemed to endorse elements of the path similar to primary care.

4. Discussion

This paper helps to explain the relationship between mental illness stigma and health care decisions. In particular, health care providers who endorse more stigmatizing attitudes about mental illness were likely to be more pessimistic about the patient's adherence to treatment. Stigma was greater among those providers who were relatively less comfortable with using mental health services themselves. This path was then associated with two separate health decisions: refer the patient to a specialist and refill his prescription for pain medication. Interestingly, professional background did not seem to be related to other variables in the model. Providers from mental health backgrounds showed no difference in expectations

about treatment response than primary care professionals. These findings suggest that both primary care and mental health providers should be targets of the interventions aimed to decrease disparities in clinical care.

Of the many findings here, especially noteworthy is the mediating effect of adherence. Contrary to clinical lore, research suggests adherence of psychiatric patients to medication and other prescriptions is not really different from what is seen generally in medical practice (Corrigan et al., 2012). All patients decide at times not to follow medical advice; hence, provider decisions as a result of perceived poor adherence should be no different across the breadth of patients seen across clinics. Note here that stigma was significantly associated with perceived adherence, suggesting that poor perceived adherence was partly a proxy for endorsing stigma about people with mental illness and leading to problematic health decisions. These findings have implications for crafting an anti-stigma program, which is discussed below.

There were several limitations that hindered interpretation of findings and need to be addressed in future work. Internal consistency for some of the constructs in the path model was lacking. The model is correlational and not causal; future research should collect belief and behavior indicators over separate times. Decisions in the model are behavioral intentions and not actual behaviors. Subsequent studies should include proxies of actual behavior on “real” patients: for example, do provider beliefs about people with mental illness and their response to treatment predict actual treatment decisions. Finally, providers in this study were VA employees and cannot be considered representative of all providers. Additional investigations need to determine whether findings are replicated for providers from other health systems.

These findings may help to inform stigma change programs that might improve the quality of primary health care for people with serious mental illness. In particular, the strategic stigma change model (SSC; Corrigan, 2011) – stigma change is targeted, local, continuous, credible, contact – might be adopted to address provider perspectives. According to SSC, stigma is impacted through contact; interactions with people with lived experience. In the VA health care system, this might be patients with serious mental illness. Contact is targeted: rather than seeking to change perspectives of an entire population, the message is crafted for important subgroups. Here, they might include nurses and physicians from both mental health and primary care. Local means contact is more effective when representing interests from the proximal setting. Hence, the stigma-change program here might be more effective when developed by VA-specific coalitions of providers and patients. Contact is also more effective when credible and continuous. Credible for this audience might mean patient contacts need to have military experience. Continuous suggests one contact is not enough. Multiple interactions between health providers and people with lived experience are necessary. Most recently added to the SSC model, and consistent with the implications of the study here, is a change goal. Rather than broadly seeking to change attitudes, specific behavioral targets need to be considered. Notably, these might include primary care providers referring patients with serious mental illness to specialists when indicated. The authors of this paper are in the midst of developing a randomized controlled trial examining an SSC program for VA health care providers.

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MI is mental illness
PC is primary care

$\chi^2(9) = 3.28, p > .95$ RMSEA = 0.00

Figure 1.

Standardized solutions (β) of structural equation modeling examining three paths between stigma and health decisions: specialist referrals or medication prescriptions. Fit indicators (χ^2 and Root Mean Square Error of Approximation (RMSEA)) are provided.

Table 1

Mean, standard deviations, and intercorrelations among constructs included in the hypothetical path.

	<i>M</i>	<i>S.D.</i>	Comfort with MI care	Stigma characteristics	Adhere to scripts	Refer to specialist	Refill medication scripts
Provider:			−0.22***	0.06	0.05	0.07	−0.02
1 = Primary care	42.2%						
0 = Mental illness	57.8%						
Comfort with care for mental illness	5.4	1.76		0.17*	−0.15	−0.07	−0.03
Stigma characteristics	24.6	5.17			−0.26***	−0.04	−0.04
Expected adherence to medication prescriptions	22.6	5.15				0.20**	0.22**
Specialist referral	18.4	5.80					0.05
Medication prescriptions	15.6	4.25					

*
p<.05

**
p<.01

p<.005