It is illegal to post this copyrighted PDF on any website. Relationship Between Stereotypes, Prejudice, and Social Distancing in a Sample of Health Care Providers

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ABSTRACT

Objective: To explore the mediational effects of prejudice on the relationship between negative stereotypes and social distance (discrimination) in a sample of Veterans Administration health care providers.

Methods: Data for this study were collected between August 2011 and April 2012 as part of a larger study examining provider attitudes and clinical expectations toward 2 hypothetical vignette patients: 1 with schizophrenia and 1 without schizophrenia. Survey responses from health care providers were gathered using 3 well-recognized measures: the 9-item Semantic Differential Scale, 9-item Attribution Questionnaire, and Social Distance Scale. A path model was tested using Mplus version 6 to investigate whether prejudice mediates the relation between provider stereotyping and social distance.

Results: A total of 351 health care providers responded to the survey. The results indicate that there was a significant positive correlation between provider stereotypes and prejudice (β =0.298, *P*<.0001), and prejudice significantly predicted social distance (β =0.190, *P*=.002). The indirect effect of stereotypes on social distance, tested using bootstrapped standard errors, was also statistically significant (β =0.167, *P*=.007).

Conclusions: Findings from this study confirm the important role of affective reactions (prejudice) in generating discriminatory behavior (social distancing) among health care providers. The findings will also help future researchers identify potential targets for interventions to decrease stigma among health care providers.

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C tigma is a composite of negative stereotypes and prejudice that results in discriminatory behavior.¹ Stereotypes are negative beliefs about members of a group. Such cognitive knowledge structures often generate impressions and expectations about individuals who belong to a particular group. Prejudicial attitudes, in contrast, are affective reactions toward members of a group; they are implicated in the endorsement of negative stereotypes, which can further lead to discrimination.^{1,2} This relationship between stigmatizing stereotypes and prejudicial attitudes and their influence on discriminatory behavior has been well established in studies^{1,2} focused on the general public. While negative attitudes and beliefs endorsed by the general public toward individuals with serious mental illness (SMI) are known to affect their self-esteem, increase social distancing, and decrease help seeking,³ health care providers' negative attitudes and stereotypes may affect quality of care delivered to these individuals.⁴ Ironically, several studies⁵⁻¹⁰ have found attitudes and beliefs held by health care providers to be either comparable to or worse than those of the general public. Health care providers in those studies⁵⁻¹⁰ endorsed involuntary treatment of individuals with SMI, restriction of their civil rights, and negative beliefs about whether individuals with SMI should be informed of their diagnosis or given treatment choices.

Consequences of stigmatizing behaviors toward individuals with SMI are enormous and affect not only the individual who is being stigmatized but also the overall health care delivery system. Stigma toward individuals with SMI is identified as a barrier to both health care seeking and treatment engagement.¹¹ Stigma is also implicated in the clinical decision-making process of health care providers.¹² Stigmatizing attitudes may result in social distancing from individuals with SMI.¹³ Findings from several experiments conducted by Jussim and colleagues² suggest that controlling for prejudice eliminates bias and thus could be used to decrease the effects of stigma to some extent. These experiments also suggest that some individuals who are aware of their negative stereotypes about members of a particular group may or may not agree with such stereotypes and hence are able to control their discriminatory behavior. While these experiments were conducted in a sample of college students,² it is not fully understood if such conclusions are generalizable to health care providers.

Limited information is available in the literature on the interplay between stereotypes, prejudice, and discrimination among health care providers. Health care providers are a distinct group that has a superior understanding of the biological basis of health conditions including SMI. Given their understanding of the biological nature of SMI, one would expect health care providers to hold fewer stereotypical beliefs compared to the general public. However, it is interesting to note that studies⁸ have reported prevalence rates of stigmatizing attitudes among health care providers comparable

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without schizophrenia.^{14,16} Details of the original study¹⁶ <u>It is illegal to post this copy</u>

- Significant disparities in quality of health care delivered to individuals with serious mental illness (SMI) have been reported, possibly due to health care providers' negative attitudes and low expectations for treatment in these individuals.
- The study findings highlight the mediational role of prejudice on the relationship between negative stereotypes and discrimination toward individuals with SMI.
- Health care providers should be aware of their negative stereotypes and automatic affective responses when offering treatment to individuals with SMI.

to the general population. These studies⁸ also reported that diagnostic labels such as schizophrenia continue to evoke negative affective reactions among health care providers. Sullivan and colleagues¹⁴ compared responses of clinicians to a vignette patient with schizophrenia with responses to a patient without schizophrenia. Clinicians expected the vignette patient with schizophrenia to be less adherent to treatment, less able to read and understand educational materials, and less capable of managing health and personal affairs. Clinicians who responded in this study were also less likely to refer the vignette patient with schizophrenia to a weight-reduction program compared to the vignette patient without schizophrenia.¹⁴ Likewise, Corrigan and colleagues¹² examined the relationship between stigmatizing attitudes and physicians' health care decisions and found that physicians who endorsed stigmatizing characteristics were more likely to believe the patient would not adhere to treatment. Such physicians were also less likely to refer the patient to a specialist or refill prescriptions.¹² Implications of such negative expectations are paramount and would directly affect the overall quality of care received by patients with SMI. While these findings establish the effect of stigmatizing stereotypes and prejudice on the clinical decision-making process of health care providers, it is unclear to what extent prejudice plays a role in mediating the effects of stigmatizing stereotypes on health care providers' tendency to engage in behaviors such as social distancing from persons with SMI.

On the basis of findings in the general public, we hypothesized that the relationship between negative stereotypes and social distance (discrimination) will be mediated by prejudice and that the combined effects of stigmatizing stereotypes and prejudice would result in a greater desire for social distance. For these analyses, we utilized a previously used dataset to examine the relationship between stigmatizing attitudes and health care decisions among providers.^{12,15,16}

METHODS

Data Collection

Data for this study were collected as part of a larger study examining provider attitudes and clinical expectations toward 2 hypothetical vignette patients: 1 with schizophrenia and 1

are described elsewhere. Briefly, data were gathered between August 2011 and April 2012 using a survey of 351 health care providers (67 mental health nurses, 91 primary care nurses, 55 physicians, 62 psychiatrists, and 76 psychologists) from 5 Veterans Affairs (VA) health care settings in the southeast and south central areas of the United States. The study was approved by the VA Central Institutional Review Board.

Measures

Negative stereotypes held by health care providers surveyed in this study were assessed using a 9-item Semantic Differential Scale derived from the Characteristics Scale.¹⁷ Each provider rated the qualities (such as valuable and worthless, safe and dangerous, strong and weak, predictable and unpredictable) of the hypothetical patient from the vignette using a 7-point Likert scale. The responses on the 9 items were summed, with the total score representing the severity of provider stereotyping. Higher scores on the scale denote more negative attitudes toward the patient. The a reliability coefficient (Cronbach α) for this scale was 0.83.

Prejudicial attitudes held by health care providers surveyed in this study were assessed using the 9-item Attribution Questionnaire (AQ-9).¹⁸ The AQ-9 assesses a subject's emotional responses such as anger, pity, and fear on a 9-point Likert scale (1 = not at all, 9 = very much). Exploratory factor analysis confirmed an adequate fit for 6 items. The 6 item responses were summed for the analysis, with higher scores denoting more negative attributions about the patient. The α reliability coefficient (Cronbach α) for this scale was 0.76.

Discriminatory behavioral intentions of health care providers surveyed for this study were assessed using items included in the Social Distance Scale, which comprises 5 items from the National Opinion Research Center General Social Survey.¹⁹ Providers were asked to rate each item on a 4-point Likert scale. Item scores were summed, with higher scores denoting a greater desire for social distance from the hypothetical vignette patient. The a reliability coefficient (Cronbach α) for this scale was 0.86.

Data Analysis

To investigate whether prejudice mediates the relation between provider stereotyping and social distance, a path model was tested using Mplus version 6.20 We controlled for several key demographics in the path model, including provider, sex, age, race (white vs non-white), personal and professional provider contact with mental illness, provider specialty, and number of years in clinical practice.

RESULTS

A total of 351 health care providers responded to the randomly distributed surveys. A total of 192 health care providers returned surveys that included a vignette with a diagnosis of schizophrenia, and 159 providers returned surveys that included a vignette with no diagnostic label



of schizophrenia. Health care providers who responded to these surveys fell into 5 main categories: primary care physicians (15.7%), psychiatrists (17.6%), psychologists (21.7%), primary care nurses (25.9%), and mental health nurses (19.1%). Most providers were female (65%), white (63%), and aged \geq 40 years (68.7%). The mean number of years in clinical practice for each study participant was approximately 17 years. Only 22% reported having no contact with friends or family members with mental illness. The pairwise correlations among the provider stereotype, prejudice, and social distance measures were moderate. Figure 1 shows the results of the mediational analysis using path analysis, while adjusting for the demographic measures. The results indicate that there was a significant positive correlation between provider stereotypes and prejudice $(\beta = 0.298, P < .0001)$, and prejudice significantly predicted social distance ($\beta = 0.190$, P = .002). As would be expected from these results, the indirect effect of stereotypes on social distance, tested using bootstrapped standard errors, was also statistically significant ($\beta = 0.167$, P = .007) (Figure 1).

DISCUSSION

The findings from this study support the hypothesized mediational model that prejudice mediates the relationship between provider stereotypes and discriminatory behavior (social distance). While the relationship between stereotypes and social distance is statistically significant, the strength of their association through prejudice is stronger (see Figure 1). The significance of this report is 2-fold.

First, our study upholds the important role of affective reactions (prejudice) in generating discriminatory behavior (social distancing) among health care providers. This finding in a sample of health care providers is similar to the findings reported by Jussim and colleagues² in a sample of university students. These researchers² tested 3 different models: an affective model that assumed prejudice mediates bias, a cognition model that assumed stereotypical beliefs mediated bias, and a third model that assumed both affective reactions and cognitive knowledge structures are necessary to mediate bias. In all 3 tests, they found that controlling for prejudice eliminated bias. Two of their studies also suggested that controlling for stereotypes eliminated bias.² Findings from our study indicate that negative stereotypes could result in stronger discriminatory behaviors when mediated by

prejudicial attitudes. Although negative stereotypes alone could result in discriminatory behavior, such effect is weaker when compared with the mediational role played by prejudice.

Second, this study aids in understanding potential targets for interventions to decrease stigma among health care providers. A review of literature on intervention strategies for reducing stigma in the general public showed that education and contact-based interventions were promising.²¹ Using a didactic approach, "education" contrasts the myths of SMI with facts to dispel stereotypes rooted in misconceptions (cognitive distortions). Using an experiential approach, "contact" (with individuals with SMI) challenges stereotypes and attempts to alter negative automatic affective responses. However, effect sizes for these interventions are quite modest in published studies.²¹ These studies²¹ were predominantly tested using study subjects drawn from college students. It is unclear if similar strategies would be effective to target stigmatizing stereotypes and discriminatory behaviors endorsed by health care providers.

We recently pilot tested both education and contactbased interventions in a sample of primary care providers at a VA facility using a randomized comparative effectiveness trial (manuscript in process). While there was some evidence from the quantitative data to suggest that educationbased intervention was beneficial, the qualitative analysis suggested that contact-based intervention was perceived to be impactful. Findings from contemporary research²² in the general public suggest that using education or contact alone may not be sufficient to bring desired changes in attitudes and discriminatory behavior toward persons with mental illness. Individuals with established negative attitudes about mental illness are less likely to be influenced by education alone than individuals with generally neutral or positive attitudes.²² Studies²³ also suggest that educationbased strategies would be more useful if they incorporated cognitive and emotional components such as a cinematic experience rather than traditional classroom material. Such findings^{22,23} strengthen a hypothesis that using a combined education and contact-based intervention might be an effective strategy to target stigma in health care providers.

It is recommended that health care providers, particularly primary care providers, be more aware of the role of stigmatizing stereotypes in undermining their

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It is illegal to post this copyr decision-making process. The mediational model tested in this study, and findings from contemporary literature^{1,2} on stigmatizing attitudes held by the general public, suggest that discriminatory behavior is quite severe when individuals hold and endorse stigmatizing stereotypes and that prejudice influences this effect. While stereotypes are cognitive knowledge structures that could be targeted effectively by educational strategies, prejudicial affective reactions could be moderated by increasing contact with high-functioning individuals with lived experience of SMI. We recommend that future researchers develop and test such combined

intervention strategies for health care providers. Findings from our study will help researchers identify potential targets for these interventions. For instance, interventions could be successful if they target negative expectations and prejudice held by health care providers toward individuals with SMI. Incorporation of educational components that highlight awareness regarding automated affective reactions and their effects on clinicians' health care decisions would also be helpful. Lastly, findings from this study are based on a relatively small sample of VA health care providers, which could limit generalizability.

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