



Beliefs about causes of mental illness predict provider referrals to behavioral health

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ABSTRACT

Background: Many patients with behavioral health concerns seek services for their problems from primary care providers (PCPs) rather than specialty mental health services. This study investigated whether referrals by PCPs to integrated behavioral health specialists could be predicted by PCPs' stigmatizing attitudes towards mental illness, blaming of patients for their problems, and beliefs about the causes of mental illness.

Method: Participants were all PCPs ($N = 22$) from three integrated primary care clinics, all part of the same Federally Qualified Health Center. PCPs completed a brief packet of questionnaires. Referral rates (percentage of unique patients seen in the prior 3 months who were referred to integrated behavioral health specialists) were extracted from electronic medical records.

Results: PCPs showed moderate blame and low stigma towards patients with mental illness. PCPs reported believing mental illnesses were most strongly caused by environmental and biological factors, compared to psychological factors. Approximately 16% of patients seen by PCPs were referred to behavioral health specialists. Blame and stigma were not related to referral rates, but greater endorsement of biological causes was related to lower referral rates.

Conclusions: Educating PCPs about the psychosocial determinants of behavioral health problems might increase willingness to refer patients to integrated care specialists.

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Introduction

Many patients seek help for behavioral health (BH) concerns from primary care providers (PCPs) rather than specialty care [1]. The PCP's decision to refer a patient to specialty mental health care is influenced by many factors, including the belief that psychotherapy is effective, lower self-confidence in treating mental illness, and lower mental illness stigma [2–4].

Integrated primary care settings that embed BH specialists into the health care team are increasingly common [5]. PCPs may be more willing to refer patients to BH specialists who are integrated into the primary care clinic than to outside specialty clinics [6]. Here, we investigate whether referrals by PCPs to integrated BH specialists could be predicted by stigma, blame, and beliefs about the causes of mental illness.

Beliefs about the causes of mental illness can be biological (e.g., genetics), psychological (e.g., will-power), or environmental (e.g., stress) [7]. Causal attributions may be associated with mental illness stigma, with biological causes being less stigmatizing than psychological causes [7,8]. Causal attributions may also be associated with referral to BH specialists. For instance, a PCP might not feel they have adequate training in psychosocial interventions for depression, but might feel more confident in treating depression with pharmacological interventions [3].

While stigma and patient blame relate to PCPs' referral rates to mental health care, the relations between causal beliefs regarding mental illness and referral rates to BH care have not been explored. Furthermore, to the authors' knowledge, no study has investigated these relationships in an integrated primary care setting. It was hypothesized

that lower levels of stigma and higher endorsement of psychological and environmental causes of mental illness would be positively associated with referrals to BH specialists, while higher blaming of patients for their problems and belief in biological causes of mental illness would be negatively associated with referral rates.

Method

Participants

Participants were 22 PCPs [14 female; 19 White; $M_{\text{age}} = 45.73$ years, standard deviation (SD) = 12.36] from three integrated primary care clinics, all part of the same Federally Qualified Health Center (FQHC). Data were collected from all PCPs in the FQHC system. The average length of time practicing medicine and practicing at an integrated clinic was 11.46 (SD = 12.98) years and 2.73 (SD = 2.52) years, respectively. Practice specialties were: family practice ($n = 12$), pediatrics ($n = 7$), and women's health ($n = 3$).

Procedure

Data collection took place during a 1-month period in December 2014. Participants completed the survey during their lunch hour at the clinic. After providing written informed consent, participants completed questionnaires, were debriefed, and were compensated with \$25 cash and lunch. Study participation took approximately 15 minutes. All procedures were approved by the university's Institutional Review Board and the executive director at the FQHC.

Materials

Demographics

Participants were asked questions to assess gender, race, ethnicity, medical specialty, time practicing medicine, and time practicing at an integrated clinic.

Blame

Blame was assessed with three questions developed by Robbins and colleagues [4]. The questions ask how often PCPs feel patients (1) cause their mental illness, (2) cause their mental illness to persist, and (3) exaggerate their symptoms. Responses are on a four-point scale (1 = *never* to 4 = *always*). Items were averaged, with higher scores indicating greater patient blaming ($\alpha = 0.72$).

Stigma

Stigma was assessed using a modified Social Distance Scale [8]. PCPs were asked to imagine that they knew someone being treated for a mental health problem. They indicated how willing they would be to interact with this person in different contexts (1 = *very willing* to 5 = *definitely unwilling*). Items were averaged, with higher scores indicating greater mental illness stigma ($\alpha = 0.87$).

Causes of mental illness

Belief in the causes of mental illness was assessed using the Perceived Etiology Scale [9], modified by Larkings and Brown [8]. Items presented causes of mental illness that fell into three categories—environmental (three items, e.g., lack of social support; $\alpha = 0.70$), biological (three items, e.g., a chemical or hormone imbalance; $\alpha = 0.57$), and psychological (three items, e.g., lack of willpower; $\alpha = 0.80$). Participants indicate to what extent each one is a cause of mental illness (1 = *definitely not a cause* to 7 = *definitely a cause*). Scores for items on each subscale were averaged, with higher scores indicating that category was seen as playing a greater role in the cause of mental illness.

Referral to behavioral health

Referral rates to integrated BH specialists were calculated for each PCP as a percentage of the unique patients the PCP saw (during the 3-month period prior to the day of data collection) that were referred to integrated BH specialists. Data for referral rates were extracted from electronic medical records.

Results

Descriptive statistics

Analyses were completed in March 2015. Descriptive statistics are in Table 1. Of the total number of patients PCPs had seen over the prior 3 months, an average of 16% (SD = 11%) were referred to BH specialists.

Demographic characteristics related to referrals to behavioral health specialists

Age, gender, years practicing medicine, and years practicing in an integrated care setting were not significantly related to referral rates to BH specialists (p values > 0.10). However, family practice PCPs referred a significantly greater proportion of their patients to BH specialists (20.8%) compared

Table 1. Correlations among predictor variables and PCP referral rates to integrated behavioral health specialists.

Variable	M (SD)	Correlation with referral rate
Causes of mental illness		
Psychological	4.56 (1.46)	$r = 0.01, p = 0.964$
Biological	6.06 (0.75)	$r = -0.44, p = 0.041$
Environmental	6.10 (0.75)	$r = -0.17, p = 0.448$
Stigma	2.29 (0.72)	$r = 0.22, p = 0.336$
Blame	2.48 (0.66)	$r = 0.29, p = 0.196$

to pediatricians (10.3%) and women's health PCPs (8.0%), $F_{(2,19)} = 3.95, p = 0.037$.

Hypothesis testing

Correlations between referral rates and the predictors (blame, stigma, and beliefs about causes of mental illness) are shown in Table 1. Contrary to study hypotheses, blame and stigma were not directly related to referral rates to BH specialists. In terms of beliefs about causes of mental illness, only endorsement of biological causes was related to referral rates. Additional analyses revealed stigma and blame were not related to beliefs about causes of mental illness.

Discussion

This study revealed beliefs about biological causes of mental illness, but not stigma or blame, related to lower referrals to BH specialists in an integrated primary care setting. PCPs generally believed BH problems resulted from biological causes. As such, they may have been inclined to treat problems with medications rather than with behavioral interventions, despite these interventions typically being as or more effective for alleviating common BH concerns [10]. Educating PCPs about the psychological and social determinants of BH problems might increase referral behavior.

Referral rates were unrelated to most demographic variables, although family practice PCPs referred more of their patients to BH specialists than did pediatricians or women's health PCPs. It is possible patient panels in family practice included more people with chronic illnesses, stress, or who may have been seeking care for unexplained medical symptoms compared to patients seen in pediatrics or women's health, where visits tend to be focused on annual check-ups or well child visits.

Although every PCP in this FQHC system participated, the sample size was small and cannot be generalized to other settings. In addition, while the study included the actual referral behavior of PCPs,

each participant self-reported attitudes and the study did not include other predictors of referral behavior, including patient characteristics, which may be as or more important for referrals [3]. Future studies should seek to replicate this study in other integrated clinics, include patient- and practice-level characteristics, and utilize a prospective research design.

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