Original Article

Perceived Stigma Regarding Mental Illnesses among Rural Adults in Vellore, Tamil Nadu, South India

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ABSTRACT

Background: Stigma is an important factor that determines whether individuals seek treatment for mental illnesses. Studies assessing public perceptions regarding mental illnesses are scarce in India. This study documents the stigma perceived by a rural population toward patients with mental illness and their families. Materials and Methods: A cross-sectional pilot study was done in five villages, selected by simple random sampling, from a rural block in Vellore, Tamil Nadu. Households in each village were selected by systematic random sampling. From the selected households, 150 subjects aged 18–65 years, without known mental disorders, were chosen by convenience sampling, based on availability. Stigma was assessed using the Devaluation of Consumers Scale (DCS) and Devaluation of Consumer's Families Scale (DCFS). Results: The proportion with high perceptions of stigma associated with mentally ill persons was 63.8%, among the 150 interviewed rural respondents (women: 112, median age: 37 years). The proportion which perceived that there was public stigma toward families of those with mental illnesses was 43.4%. Older respondents (>37 years) had higher perceptions of stigma (odds ratio: 2.07; 95% confidence interval: 1.02–4.20) than others. Conclusion: The high perception of stigma associated with persons who are mentally ill as well as their families needs to be kept in mind while planning interventions to decrease the treatment gap for psychiatric morbidity, especially in rural areas.

Key words: Mental illnesses, perception, stigma

Key messages: A large proportion of the rural population perceives that there is a high stigma toward those with mental illnesses and their families.

INTRODUCTION

Approximately 30% of the world's population suffers from mental and behavioral disorders, of which around

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70% does not receive appropriate treatment, with unipolar depression causing the greatest morbidity.^[1,2]

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According to the National Mental Health Survey 2016, 10.6% of adults in India have "any mental disorder" (excluding tobacco use) and 2.7% have depressive disorders, with a treatment gap of >75% for psychotic disorders and neuroses.^[3] The reasons for the treatment gap include low awareness, inaccessible health care, costs, alternative remedies like religious/supernatural, as well as stigma, which is widespread, especially in Asia. [4] Stigma prevents affected people and their families from admitting to or accepting the condition and reduces health-seeking behavior, resulting in a treatment gap. Stigma can be assessed by scales measuring self-stigma, perceived stigma, or public stigma (respondents' beliefs regarding the attitude of others in the community toward people with mental illness or toward their families).[5]

A few studies from Chennai, Kolkata, Karnataka, Delhi, and Maharashtra have assessed public attitudes toward those with mental illness as well as their families. [6-11] The prevalence of perceived stigma varies due to diversities in cultural beliefs, socioeconomic status, and access to healthcare. [6]

This study assessed perceptions of stigma among adults in a rural block in south India, where previous studies have shown high suicide rates, including among adolescents and the elderly.^[12-15]

MATERIALS AND METHODS

A cross-sectional pilot study was carried out in Kaniyambadi, a rural block in Vellore district, Tamil Nadu, among those aged between 18 and 65 years, excluding persons with known mental illness. Five clusters (villages) were selected using simple random sampling out of 82 villages. The sample size was calculated to be 150 based on an expected prevalence of 50% perceived stigma and a design effect of 1.5. In each village, 30 households were selected by systematic random sampling. Within each selected household, one adult participant aged between 18 and 65 years was included, based on availability and consent (convenience sampling within the household). Perception of stigma was assessed through an interviewer-based questionnaire using the DCS (Devaluation of Consumers Scale) and DCFS (Devaluation of Consumers' Families Scale),[16] translated and pilot tested in Tamil. The DCS assesses perception of stigma toward persons with mental illnesses in terms of community reaction, job prospects and social life, assessing the domains of "status reduction," "role restriction," and "friendship refusal," with an internal consistency/reliability score of 0.82.[16] The DCFS evaluates perceived stigma towards families of those with mental illnesses, in the domains of "community rejection" (looking down on families

with mentally ill persons), "causal attribution" (blaming family for the illness), and "uncaring parents" (judging parents with affected children as being less responsible and caring than others), with an internal consistency/reliability score of 0.71–0.77.^[16] Knowledge was tested using a vignette (on depression) and assessing whether the case was identified as a mental illness, with the selection of an appropriate course of action.

Statistical analysis was performed using SPSS version 16.0 for Windows (SPSS Inc., Chicago, IL, USA). Categorical variables were expressed as proportions. Mean percentage agreement to the statements indicating perceived stigma was also calculated for the DCS and DCFS scales. To assess factors associated with perceptions of stigma, the responses were scored using a Likert scale of 1–4 and a total score calculated. The median score of the participants was used to categorize as high or low perceptions of stigma. Odds ratios (ORs) were calculated using logistic regression, adjusting for age, sex, education, family history of mental illness, having known someone with a mental illness, and exposure to previous educational messages on mental illness.

The study was approved by the Institutional Review Board and Ethics Committee of the concerned tertiary healthcare institution (IRB min number 10323; dated 5-9-2016). Informed written consent was taken, and confidentiality maintained using unique identifiers.

RESULTS

Of 160 subjects who were approached, 10 refused to consent to participate. Three-fourths (112) of the 150 participants were women, 82.0% (123) were married, and 93.3% (140) were literate. The median age of the respondents was 37 years. Around one-fourth (23.3%) of the participants had a family member with mental illness, while 50.7% (76) had been previously exposed to awareness programmes/health information on mental illness (newspapers, television, books, pamphlets, etc.).

While 63.8% of the participants perceived that most people devalue persons with mental illnesses, 43.4% felt that most people devalue families of such persons (mean percent agreement with statements indicating stigma, Table 1). The percentage of respondents who agreed to individual statements regarding how people devalue a person with mental illness or their families is shown in Table 1. While 83.3% felt that a person with serious mental illness was dangerous, 52% felt that having a mental illness was worse than being addicted to drugs. A majority (72%) of respondents felt that people look down on someone who was once a patient in a mental hospital, and 75.3% felt that young women

Table 1: Perceptions of stigma shown by agreement to statements denoting perceived stigma

Statements in the questionnaire		Agreed number (%) (n=150)
Status reduction	Most people think that a person with serious mental illness is dangerous and unpredictable	125 (83.3)
	Most people feel that having a mental illness is worse than being addicted to drugs	78 (52.0)
	Most people look down on someone who once was a patient in a mental hospital	108 (72.0)
	Most people think less of a person who has been a patient in a mental hospital	105 (70.0)
	Most people feel that entering psychiatric treatment is a sign of personal failure	82 (54.7)
restriction profit for the striction profit fo	Most employees will not hire a person who once had a serious mental illness if he/she is qualified for the job	54 (36.0)
	Most young women would not marry a man who has been treated for a serious mental disorder	113 (75.3)
Friendship refusal	Most people would not accept a person who once had a serious mental illness as a close friend	104 (69.3)
A. Devaluati	on of consumer scale*	63.78%
rejection	Most people look down on families that have a member who is mentally ill living with them	89 (59.3)
	Most people in my community would rather not be friends with families that have a relative who is mentally ill living with them	69 (46.0)
	Most people would rather not visit families that have a member who is mentally ill	91 (60.7)
Causal attribution	Most people will not treat families with a member who is mentally ill in the same way they treat other families	107 (71.3)
	Most people blame parents for the mental illness of their children	73 (48.7)
Uncaring parents	Most people believe that parents of children with mental illness are not as responsible and caring as other parents	19 (12.7)
B. Devaluation	on of consumer families scale*	43.38%

^{*}Average proportion of perceptions of stigma based on individual responses

would not marry a man who has been treated for a serious mental disorder.

Nearly half (48.7%) said that people blame parents for the mental illnesses of their children and 59.3% felt that people look down on families with a member who is mentally ill [Table 1].

Older respondents (>37 years) were more likely to perceive stigma (64.9%) than younger respondents

(44.9%), after adjusting for gender, education, family history of mental illness, or having known someone with a mental illness, OR: 2.07, 95% confidence Interval (CI): 1.02–4.20. There were no gender differences in perceptions of stigma (males: 57.9%, females: 52.9%, P value = 0.577). There was no significant difference in the proportions of perceived stigma between those who had a family history of mental illness (62.9%) compared with others (50.9%), adjusted OR: 1.47 (95% CI: 0.64–3.39), P value = 0.214. There was also no significant difference in perceptions of stigma among those who knew someone with a mental illness, e.g. work colleague or friend (61.5%), compared with others (50.0%), adjusted OR: 1.47 (95% CI: 0.71–3.02), P value = 0.177.

Only 53% identified the case scenario (depression) as a mental illness, and all 80 of them recommended seeking external help. While 28 respondents (35.0%) said that professional health caregivers need to be approached, family and friends were the choices for the source of help for 51 (64%). Of those who identified the vignette as a mental illness, only 49 (61%) were aware of the availability of medications for mental illnesses such as depression. Participants with an education above the eighth grade (median) were more likely to identify the vignette as a mental illness (OR: 2.38, 95% CI: 1.24–4.61).

DISCUSSION

This community-based pilot study from rural Tamil Nadu documents public perceptions of stigma toward patients with mental illnesses and their families. The strength of the study is that it is a population-based survey, although the generalisability is restricted to similar parts of south India.

Stigma toward mental illnesses is one of the reasons for a "low demand" for mental health care, along with other barriers, such as poor awareness and cultural beliefs.^[3] Qualitative findings from the National Mental Health Survey 2016 also pointed to stigma as one reason for poor utilization of health care for mental illnesses.^[3]

Almost three-fourths (72%) of the study respondents felt that people look down on those with a history of hospitalization for mental illness, indicating the high stigma associated with serious mental illnesses. This corresponded with a similar study done in Mumbai, where 60.8% of the general population believed the same.^[7] In this study from rural Vellore, only 36% felt that employers would be less willing to hire a person with a mental illness as compared with 71.6% in Mumbai.^[7] This may reflect differences in socioeconomic status and occupational experiences as it may be less difficult to

obtain some form of employment in a rural area than in an urban area, even for those with a mental illness. Thus, role restriction due to mental illness was lower in this rural study, for employment, than the study from urban Mumbai which included a large proportion of armed personnel. [7] However, nearly three-fourths (75.3%) of our rural participants felt that young women would be unwilling to marry a man who has been treated for a serious mental illness. This was higher than the results from an urban study from Chennai and Kolkata, where around half of the respondents believed that young women would be reluctant to date a man who has been admitted for a mental illness. [6]

In this study, 69.3% felt that most people would not accept a person who once had a mental illness as a close friend. This was much higher than Chennai and Kolkata, where only 26.5%–36.1% felt that most people would not accept a former mentally ill patient as a close friend, indicating that friendship refusal due to mental illness, a measure of stigma, is higher in rural settings.^[6]

Less than half of our rural respondents (48.7%) felt that parents are blamed for the mental illnesses of their children, whereas nearly 78.4% felt the same in Mumbai.^[7]

The overall proportion which perceived that most people devalue persons with mental illnesses was 63.8% in this study, similar to a study in New York among caregivers of patients with serious mental illnesses, of whom 70% perceived that there was public stigma toward patients with mental illnesses.^[16]

The lower perception of stigma among younger respondents in this study may reflect education and exposure to mass media and implies changing societal attitudes.

Although this study from Vellore was limited by small study size, purely quantitative methodology, location restricted to a block in rural Tamil Nadu, and over-representation of women due to difficulties with sampling in the community, it highlights the magnitude of stigma as perceived by rural communities toward mental illnesses.

Besides widespread stigma in the general community, studies have also found nonpsychiatric healthcare and paramedical personnel to have stigmatizing attitudes against those with mental illnesses.^[17-19] Although in our study there was no significant association between perceptions of stigma and family history of mental illness or contact with someone else with a mental illness, one survey from a teaching hospital among nonpsychiatric medical professionals also found that

social contact with an affected person was associated with less socially restrictive attitudes. [17] In view of this barrier of stigmatizing attitudes among healthcare workers, an interventional study aimed at reducing stigma through targeting nonspecialist healthcare workers is being planned in low-resource settings in Nepal. [20]

The World Health Day theme 2017 "Depression: Let's talk," highlighted the importance of spreading awareness and promoting health-seeking behavior.[21] The WHO campaign was built on the premise that talking about depression would reduce stigma, breaking down barriers, and encouraging people to seek help. Education and social contact with affected people have been found to be the most effective antistigma measures.[22] A review of interventional studies to reduce stigma revealed the paucity of evidence from low and middle-income countries. [23] An interventional study in Karnataka involved educational methods, such as slide shows, discussions, street plays, and printed material, and found a reduction in stigmatizing attitudes postintervention.^[24] Further interventional research is needed in India in different locations and cultural settings, with studies aimed at evaluating community-wide educational programs, including formal assessment of changes in public awareness and stigma.

The prevalence of common mental morbidities in India is highest for urban metros, while it is only marginally higher in nonmetros compared with rural areas. [3] Although rural areas have a lower prevalence of mental disorders, the lower educational level may lead to a higher level of public stigma, and consequently to a higher treatment gap in the rural areas. This was shown in a study from Assam, Uttar Pradesh, and Kolkata, in which stigmatizing attitudes toward mental illnesses were higher in the rural areas, indicating the need for intensified educational efforts. [25]

In conclusion, this population-based study from rural Vellore highlights the high magnitude of stigma toward patients with psychiatric illnesses and their families, indicated by almost three-fourths of the respondents feeling that people look down at those with a history of hospitalization for mental illness, as well as their families. Such a high level of public perception of stigma can potentially deter treatment for mental illnesses and needs to be addressed.

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Conflicts of interest

There are no conflicts of interest.

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