



Knowledge of and Attitudes Towards Mental Illness Among ASHA and Anganwadi Workers in Vadodara District, Gujarat State, India

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Published online: 28 January 2019

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Abstract

Unmet needs in mental health care are high in low and middle-income countries like India. We propose recruiting community health workers (CHWs) to provide mental health services and address the treatment gap, but there is limited data available on the training needs for this potential role. The aim of this study is to help determine what type of formal mental health training and programming could most benefit CHWs in India. This was a cross sectional study design. Self-administered surveys were conducted amongst CHWs in the villages of Vadodara District, Gujarat, India. Statistical analyses included two tailed t-tests using Microsoft Excel 2011. The most common causes for mental illness were attributed to anxiety (61%) and brain disease (61%) followed by stress (45%) and alcohol use disorder (38%). CHWs were dismissive of faith healers ability to treat mental illness (72.9%) showing a strong approval for recommending psychiatric care for the mentally ill (84.4%). Over 50% of participants believed that mentally ill have a lower IQ and that they were unpredictable, but at the same time asserted that people with mental illness can live in the community (80.8%), and recover if given treatment and support (91.8%). Results are promising with CHWs displaying basic knowledge of the etiology and treatment of disease harboring positive attitudes towards psychiatrist's ability to treat mental illness. Future direction should focus on training CHWs towards minimizing stigmatizing views and increasing their knowledge of mental illness in order to scale up mental health services in these low resource communities.

Keywords Community health workers · Mental health · India

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Introduction

It is estimated that the burden of mental illness in India will increase by 2025 [1]. India is considered a newly industrialized nation with one of the fastest growing economies, yet it only allocates less than 1% of its annual budget towards the treatment of mental health conditions [2–4]. There is only one psychiatrist per 200,000 Indian citizens, totaling merely only 5000 psychiatrists for a population of over 1.2 billion, highlighting the scarcity of resources [2–4] and reflecting a profound shortage of professionals compared to other countries [5]. In India as it much of the world, Community Health Workers (CHWs) are often patients' only point of contact with the healthcare system, underscoring the imperative to explore how CHWs can be recruited to help identify and at least facilitate the treatment of mental illness. As a potential resource for delivery of mental health care, it is important to analyze the knowledge of, perceptions and attitudes that the CHWs have towards mental illness so that their training needs can be identified.

Our team of collaborators from the Icahn School of Medicine in partnership with the local Mental Illness and Neurological Disorders (MINDS) foundation and Sumandeep Vidyapeeth University (SVU) conducted a study to gauge the knowledge of and attitudes towards mental illness among CHWs in the villages of Vadodara District, Gujarat State, India. To the best of our knowledge, such a study has never been done before among CHWs in India. Examining the knowledge and attitudes of CHWs will be helpful as the first step to assess and potentially implement a plan to integrate mental health care into the work of these CHWs.

Study Methods and Design

Sample CHWs consisted of Accredited Social Health Activists (ASHA) and Anganwadi workers (AWW). ASHA serve as community health activists to help promote utilization of existing health services [6]. AWW provide integrated services which include supplementary nutrition, immunization, health checkups, and referral services to children below 6 years of age as well as to expectant and nursing mothers [7].

In order to stratify data and observe perceptual and attitudinal differences if any, between the urban and rural workers, we ensured equal representation from both settings. A village was considered urban if it was within 5 km of the city limit and rural if it was beyond this 5 km radius.

Survey Instrument The survey was a 42-item, multiple-choice-answer, self-administered questionnaire to consenting subjects who met the inclusion criteria. This instrument was modified from a questionnaire used in previous studies (available upon request) [2, 8, 9]. All questions were closed- ended statements, with five Likert-scale answer choices: *strongly agree, agree, neutral, disagree, and strongly disagree*.

Data Processing and Analysis All statistical analyses included two tailed t-tests, which were conducted using Microsoft Excel 2011. Results were analyzed as frequencies (i.e., percentages) and any significances between groups was calculated at $p < 0.05$. In conducting data analysis, we categorized responses as either 'Ideal' or 'Stigmatized' based on the question stem. A neutral response was also considered 'Stigmatized'.

Results

Socio-Demographic Characteristics

A convenience sample of 100 participants was completed. A total of 45 villages surrounding Vadodara District were represented. Mean age of the CHWs was 39.2 years (SD 8.76). All participants were females. 38% of the workers had spent about 5–10 years at their position. 82% of the participants were married, 99% were Hindu and 61.6% had completed at least the 12th grade. Only 7.4% of the respondents recounted having undergone some form of mental health training. Overall, CHWs reported seeing 13.4 patients on average per week. ASHA workers reported seeing 19.2 patients and AWW seeing 7.2 patients with any given complaint on average per week.

Knowledge of Mental Illness

Table 1 shows respondents' knowledge of mental illness based on the survey questionnaire. Overall, the CHWs demonstrated adequate knowledge about mental illness, acknowledging that children can indeed suffer from mental illness (68.4%), that people with mental illness can recover and live a normal life if given proper treatment and support (91.8%), and that psychotherapy could successfully treat adults (88.5%) and children (87.6%) with a mental illness.

While analysis between ASHA and AWW showed no significant differences between the groups, urban CHWs were significantly more likely to be knowledgeable about of mental

Table 1 Knowledge of etiology and treatment of mental illness among the subject population

Statement	Yes				
	<i>N</i>	<i>n</i>	%		
Which of the following can cause mental illness? Check all that apply.					
Alcohol use disorder	100	38	38		
Anxiety	100	61	61		
Traumatic event	100	37	37		
Possession by evil spirit	100	4	4		
Shock	100	30	30		
Brain disease	100	61	61		
Genetic inheritance	100	25	25		
Stress	100	45	45		
Poverty	100	32	32		
Punishment from God	100	9	9		
Statement	<i>N</i>	<i>n</i>	%	Stigmatized <i>n</i>	%
Only people who have a family history of mental illness can suffer from a mental illness themselves	100	64	64.0	36	36.0
Children can suffer from mental illness	98	67	68.4	31	31.6
Children with mental illness can be successfully treated with medication.	96	85	88.5	11	11.5
People with mental illness can recover and live normal lives if given treatment and support	98	90	91.8	8	8.2
People with mental illness can be successfully treated with medication	98	84	85.7	14	14.3
Adults with mental illness can be successfully treated using psychotherapy	96	85	88.5	11	11.5
Psychiatric medication will cause addiction	98	75	76.5	23	23.5
Children with mental illness can be successfully treated using psychotherapy	97	85	87.6	12	12.4
Traditional healers can successfully treat mental illness	95	69	71.9	26	28.1
Psychiatrists can successfully treat mental illness	96	81	84.4	15	15.6

illness than their rural counterparts on the following items: the utility of psychotherapy ($p = 0.047$); the addictiveness of psychiatric medications ($p = 0.025$) and the mental health impact of healers ($p = 0.009$).

Attitudes and Perception

Table 2 shows CHWs' attitudes and perceptions towards mental illness. Overall, stigmatized views were prevalent, with over 50% of respondents admitting they would be disturbed to work with or share a room with someone who has a mental illness, feeling that people with mental illness are dangerous, unpredictable, hard to talk with and have a lower IQ, as well as denying that people with mental illness could be as successful at work as others. There were also some ideal responses with majority of respondents believing that people with mental illness could live in the community (80.8%) and that psychiatric illness deserved just as much attention as physical illness (78.6%).

ASHA workers reported more ideal attitudes towards mental illness than AWW among the following statements.

1. People with mental illness should not marry ($p = 0.036$)
2. People with mental illness can work in regular jobs ($p = 0.047$)
3. People with mental illness can be as successful at work as others ($p = 0.026$)
4. Mental illness deserves as much attention as physical illness ($p = 0.040$)

Table 2 Attitude and perception of mental illness as a population

Statement	Ideal			Stigmatized	
	N	n	%	n	%
Mental illness is a sign of failure	97	55	56.7	42	43.3
It is shameful to have mental illness	100	73	73.0	27	27.0
People with mental illness can live in the community	99	80	80.8	19	19.2
People with mental illness should not marry	100	65	65.0	35	35.0
You would be afraid of someone with mental illness staying next door	98	64	65.3	34	34.7
You would be disturbed to work in your workplace with someone who has mental illness	98	44	44.9	54	55.1
People with mental illness can work in regular jobs	99	54	54.5	45	45.5
People with mental illness can be as successful at work as others	98	37	37.8	61	62.2
You would be afraid to have a conversation with someone who has mental illness	98	65	66.3	33	33.7
You would be willing to maintain a friendship with someone who has mental illness	99	74	74.7	25	25.3
You would be willing to share a room with someone who has mental illness	97	46	47.4	51	52.6
People with mental illness are dangerous	97	47	48.5	50	51.5
People with mental illness are unpredictable	98	42	42.9	56	57.1
People with mental illness are hard to talk with	98	43	43.9	55	56.1
A person with mental illness has only him/herself to blame for his/her condition	99	56	56.6	43	43.4
People with mental illness are mentally retarded	99	51	51.5	48	48.5
People with mental illness have lower IQ	98	35	35.7	63	64.3
You would be ashamed to mention someone in your family has mental illness	96	68	70.8	28	29.2
People are generally caring and sympathetic toward persons with mental illness	96	64	66.7	32	33.3
Psychiatric illness deserves as much attention as physical illness	98	77	78.6	21	21.4

Analysis between urban vs. rural workers showed a significant difference only in willingness to maintain friendship with someone who has a mental illness ($p = 0.045$) with the rural workers more willing to do so.

Discussion

CHWs can help address the substantial unmet need for mental health care in a Low and Middle Income Country (LMIC) like India. Because of their unique work with the rural Indian population, CHWs could be a valuable resource to bridge the mental health gap. Analyzing their perception and attitudes toward mental health is an important step towards incorporating them into India's system of mental health care.

Our overall results are promising. CHWs displayed basic knowledge of the etiology and treatment of disease and generally harbored positive attitudes towards psychiatrists' ability to treat mental illness. Where stigmatizing views were prevalent, the CHWs also displayed a welcoming attitude towards the mentally ill in the community by, for example, showing high levels of willingness to maintain a friendship with someone who has a mental illness and agreeing with the assertion that people with mental illness can live in the community. On the one hand they displayed stigmatized views of people with mental illness but on the other they tended to believe that mental illness deserved as much attention as physical illness. From this, it could be deduced that CHWs seem to hold stigmatized view of the mentally ill but not of mental illness itself, and trainings may potentially help address these conflicting attitudes.

Though there are limited studies analyzing knowledge and perception of mental illness in CHWs in India [2], our results are consistent with studies from other LMICs, including ones showing general positive attitudes towards depressed patients among primary health care workers [10, 11], and identifying of psychosocial factors such as misuse of alcohol/drugs and life stresses as causative agents to mental illness far more than biological and supernatural causes among primary healthcare workers [12]. Meanwhile, studies of health workers that have integrated some form of a mental health-training curriculum have generally found improved attitudes, knowledge, motivation and support towards patients [13, 14].

Our findings suggest that future CHW trainings should have a significant focus on stigma relative to knowledge gaps. And, training ASHA workers might be a good place to start. Our results suggest that they may have less stigmatized attitudes than the AWW, making them easier to train given limited resources. This would also be beneficial because our results indicated that ASHA workers encounter more patients on average. This is consistent with their more active role in healthcare delivery [15].

However, it is important to consider that overburdening the CHWs with additional responsibilities might be a risk, particularly if trainings are conducted without administrative support for helping CHWs incorporate the training into their practice with adequate resources, supervision, and even compensation [16]. Mendenhall et al. (2014) reported that task sharing in mental health services is perceived to be feasible as long there is an ongoing structured supportive supervision at the community level; there is an increased number of human resources as well as better access to medications; and proper training and compensation for involved health workers [17].

Our study has several limitations. First, the sample may be subject to selection bias. 45 villages were targeted to collect information from 100 subjects, which may have resulted in over-sampling in some easier to reach villages easier and under-sampling of workers from difficult-to-reach villages. Second, villages were selected from only Vadodara for convenience. Third, respondents may have been likely to display more favorable attitude towards mental illness based on social desirability. Despite these limitations, however, this study uniquely gauged mental health needs and resources in India through the eyes of CHWs. We hope that this study informs future outreach and educational programs to transform mental health dynamics in Gujarat, if not all of India.

Acknowledgements We are grateful to The MINDS Foundation, the Department of Psychiatry at SVU, and the Icahn School of Medicine at Mount Sinai's Summer Program in Global Health for their support; and the Department of Population Health Science and Policy at Mount Sinai for their expertise and guidance in statistical analysis; and the villages and its members for their time and cooperation to this study.

Funding This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. This work was supported by the Program for Global Health at the Icahn School of Medicine at Mount Sinai.

Compliance with Ethical Standards

Conflict of Interest Qainat N. Shah declares she has no conflict of interest. Pooja A. Dave declares she has no conflict of interest. Dr. Daniella Loh declares she has no conflict of interest. Dr. Raghu Appasani declares he has no conflict of interest. Dr. Craig Katz declares she has no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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