

Knowledge of and Attitudes Toward Clinical Depression Among Health Providers in Gujarat, India

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ABSTRACT

Background: Clinical depression is a major leading cause of morbidity and mortality but it is oftentimes overlooked and undertreated. The negative perception and lack of understanding of this condition prevents millions of people from seeking appropriate and on-time medical help, leading to distress and increased burden for affected people and their families. The implementation of public education campaigns and training of non-psychiatric health professionals on mental health and clinical depression has been neglected in several countries, including India, which is the second most populous country in the world with a population of more than 1.2 billion people, almost one-fifth of the world's population.

Objective: This study sought to explore the knowledge and attitudes toward the diagnosis and treatment of clinical depression in nonpsychiatric health care providers in Vadodara, Gujarat, India.

Methods: A cross-sectional survey was conducted over a 4-week period in Gujarat, India among resident physicians and community health workers about their knowledge and views on clinical depression.

Findings: We found considerable stigma and misinformation about depression especially among health care workers in India. Most of the community health workers had a great deal of difficulty when defining clinical depression, and a large majority said that they never heard about depression or its definition and although the overwhelming majority of respondents did not believe that clinical depression results from a punishment from God (82% disagreed or strongly disagreed with this belief) or evil spirits (77.5%), a much smaller proportion disagreed with the assertions that depression was either solely due to difficult circumstances (38.2%) or that sufferers only had themselves to blame (47.2%). Meanwhile, only 32.6% disagreed with the position that clinical depression is a sign of weakness and 39.4% disagreed with the statement that suicide was a sign of weakness.

Conclusions: Our findings underscore the considerable public health priority facing India's policymakers and planners to better educate more non-psychiatric physicians and community health workers to identify, understand, and respond to early signs of mental illnesses, especially clinical depression.

Key Words: attitudes, depression, health knowledge, India, mental health illiteracy, mental illness, social stigma

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INTRODUCTION

Stigma against mental illness and mental health illiteracy has been strongly related to under-recognition of mental

disorders and short- and long-term disability and poverty. One of the most common mental illnesses is depression, a major leading cause of morbidity and mortality, with an estimated 350 million people¹ from all ages affected around the world. Depression is the most common psychiatric disorder in general practice, and about 1 in 10 patients seen in the primary care setting suffers from depressive symptoms.^{2,3} Evidence has shown that depressive disorders are strongly related to the occurrence and course of many chronic diseases, including diabetes, cancer, cardiovascular disease, asthma, and obesity,⁴ and can have devastating consequences, including suicide.

The World Health Organization estimates that nearly 1 million people worldwide commit suicide every

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year, including 170,000 in India and 140,000 in high-income countries.^{6,7} Clinical depression is projected to be the second cause of disability in the world in 2020,⁵ but is often overlooked and untreated. Although there are known, effective treatments for depression, fewer than half of those affected in the world (in some countries, fewer than 10%) receive such treatments. Barriers to effective care include a lack of resources, lack of trained health care providers, and social stigma associated with mental disorders.⁷

The negative perception and lack of understanding of clinical depression prevents millions of people from seeking appropriate and on-time medical help, leading to distress and increased burden, as well as increased morbidity and mortality for affected people and their families. Another problem with stigma is that a considerable number of those with clinical depression will fail to acknowledge their illness. Although stigma against mental illness and mental health illiteracy is common in many countries worldwide, its presence and negative effects are more prevalent in low-income and less-developed countries.

The benefits of awareness campaigns and public education about mental health are widely accepted; however, implementation has been neglected in several countries, including India, which is the second most populous country in the world with a population >1.2 billion. India has one of the fastest-growing economies, but invests <1% of its annual budget in mental health. Although it is considered a newly industrialized country, India continues to face the challenges of poverty, illiteracy, corruption, malnutrition, and an inadequate health system.⁸⁻¹⁰

Most of the current research on attitudes toward depression in India demonstrates limited knowledge regarding causation, as well as widespread negative views toward depression and mental illness in general. Indian studies have reported prevalence rates of depression that vary from 21%–83% in primary care practices.¹¹⁻¹³

A large number of studies have been published from India addressing various aspects of this commonly prevalent disorder. However, only a few studies have been directed specifically at the knowledge and attitude

A 25-year-old, married, female housewife, with three children. The patient reports that she was in her usual state of health until approximately four weeks ago, when she began to experience the gradual onset of sadness, low mood, decreased motivation, difficulties falling and staying sleep, poor appetite, and trouble concentrating and remembering things. Upon questioning, she states that she has lost her interest in participating in the mother's group meeting and also describes how her housework has become an uncharacteristic burden for her. Not only does it not interest her as it almost always had before, but also she finds she cannot get herself to focus on it. She has never tried to end her life and denied having a plan to do it, but increasingly feels her life has become worthless and finds she cannot stop wondering if her family might be better off if she were dead. She had visited a local traditional healer to get help twice and had sacrificed a red chicken cock once, but her condition is not improving. The patient also acknowledged that her symptoms are affecting her level of functioning and she has been unable to take care of her family. She also stated that she has been unable to control her symptoms despite several attempts. There is no other significant medical history that can contribute to her current condition.

Figure 1. Vignette for clinical depression.

toward depressive illness among nonpsychiatric health professionals at all levels of training and community health workers, who in many cases are the first point of contact with patients with depressive disorders.

This study sought to explore the knowledge and attitudes toward the diagnosis and treatment of clinical depression in nonpsychiatric health care providers in Vadodara, Gujarat, India. Research has begun to demonstrate the feasibility of delivery of psychiatric interventions in nonspecialized health care settings, but further study is required in this emerging area of practice and research.

METHODS

A cross-sectional survey was conducted over a 4-week period in February 2013. Using a 42-item questionnaire, we surveyed 89 participants about their knowledge and views on clinical depression (survey available on request). Participants included resident physicians and physician clinicians at Sumandeep Vidyapeeth University (SVU) in Vadodara in the Department of Community Medicine and community health workers from 6 rural villages served by SVU in its collaboration with the Minds Foundation (www.mindsfoundation.org) to improve rural access to mental health care. The survey was a modification of one used in 2011 in Saint Vincent/Grenadines by our lead investigator.¹⁴ It consisted of demographic questions and closed-ended statements to which respondents were asked to indicate their level of agreement with 1 of 5 choices: *strongly agree*, *agree*, *neutral*, *disagree*, and *strongly disagree*. A single open-ended question asked the following: “What do you understand by the term *depression*?”

Focus groups also were conducted with community health workers and resident physicians, who were presented with a vignette (Fig. 1) describing a woman experiencing symptoms of depression that met the *Diagnostic and Statistical Manual of Mental Disorders* (4th Edition), text revision¹⁵ diagnostic criteria for major depression and were asked about their attitudes toward this.

Focus group members were asked to identify the presented condition of the person described, the most common interventions in the community, and the most common ways to approach similar cases. Respondents were also asked about their understanding of the causation, triggers, treatment, and prognosis of the presented condition. Throughout the study, we used local facilitators (often psychiatry residents at SVU) who were culturally and linguistically fluent.

Quantitative analysis consisted of quantifying the frequency of responses and ascertaining the percentage of ideal responses, as described in the results. Principle components analysis also was used to group the single questions of the survey into broader categories and identify the main topics of interest.

Qualitative analysis was possible on the single open-ended question in the survey (“What do you understand by the term *depression*?”), as well as on transcripts of the focus group sessions, and performed according to the procedure previously used by our group.¹⁴ Responses in Gujarati were translated by one of the investigators (S.V.) into English, and then 3 investigators (S.A., S.V., and C.L.K.) separately coded the transcripts for salient themes. The 3 coding sets were then reviewed to reach consensus themes.

This study was approved by the institutional review boards of both SVU and the Icahn School of Medicine at Mount Sinai.

RESULTS

Quantitative Results

The principal components analysis yielded 4 principal components unto which the quantitative survey questions loaded. The principal components were as follows:

1. Respondents’ perceptions of clinical depression and of depressed people from a nonclinical standpoint.
2. Respondents’ knowledge of clinical depression as a brain disease and whether it can be treated as any other disease.
3. Knowledge on the causes of and the potential medical treatments for depression.
4. Perceptions of the potential implications of depression on social relations.

Responses to individual questions are presented in 4 tables according to each of the principal component.

Table 1. Responses Indicating the Ideal Perception of Clinical Depression and Depressed People

Responses	%
Depression results from God’s punishment	82.0
Depression is due to possession by evil spirits	77.5
Depression is solely due to unfavorable social circumstances	38.2
Only people with a family history of depression can suffer from depression	66.3
People with depression can live in the community	74.2
Afraid to have a conversation with someone who has depression	56.0
A person with depression has only him- or herself to blame	47.2
People with depression are hard to talk with	39.3
It is shameful to have depression	70.8
You would be ashamed to mention if someone in your family has depression	73.0
Depression is a sign of failure	66.3
Depression is a sign of weakness and sensibility	32.6
People who attempt suicide are weak	39.4

A few items that loaded onto more than 1 component are listed more than once. Responses were tabulated according to the most ideal responses to each question, equating to the tabulation of the 2 responses on the desired side of neutral responses. For example, for statements where the ideal response was to disagree with the statement (ie, "Depression results from God's punishment"), the result reported is the percentage of responses that were either *disagree* or *strongly disagree*. In cases of questions where the ideal response was to agree with the statement (ie, "Brain disease can be a cause of depression"), the result is the percentage of responses that were either *agree* or *strongly agree*. In the few instances where a question was a matter of observation and could not be ascertained a priori, the ideal response was that which indicated a positive and accepting circumstance for people with mental illness. For example, for the survey statement "People are caring toward persons with depression," the result represents the percentage of respondents who indicated they agree or strongly agree.

Perception of clinical depression and depressed people. Although the overwhelming majority of respondents did not believe that clinical depression results from a punishment from God (82% disagreed or strongly disagreed with this belief) or evil spirits (77.5%), a much smaller proportion disagreed with the assertions that depression was either solely due to difficult circumstances (38.2%) or that sufferers only had themselves to blame (47.2%). Meanwhile, only 32.6% disagreed with the position that clinical depression is a sign of weakness and 39.4% disagreed with the statement that suicide was a sign of weakness. Only 39.3% of these community health care

Table 2. Responses Indicating Ideal Knowledge about Clinical Depression as a Treatable Brain Disease

Responses	%
A traumatic event or shock can be a cause of depression	82.0
Brain disease can be a cause of depression	58.4
Treatment and support can help people with depression improve	91.2
Treatment can help people with depression lead normal lives	84.3
People with depression can eventually recover	76.4
People with depression can be successfully treated with medication	76.4
Traditional healers can successfully treat depression	46.1
Psychiatrists can successfully treat depression	78.6
If a patient or someone close to me were showing signs of depression, I would refer them to a psychiatrist	87.6
A person with depression could pull him or herself together if he or she wanted	22.5

Table 3. Responses Indicating Ideal Knowledge of Causes and Treatments of Clinical Depression

Responses	%
A traumatic event or shock can be a cause of depression	82.0
Genetic inheritance may be a cause of depression	51.7
Poverty can be a cause of depression	53.9
People with depression are unpredictable	56.2
Psychiatric illness deserves as much attention as physical illness	83.1
Antidepressants will cause addiction	31.5
People with mental illness can be successfully treated using psychotherapy	78.7
If a patient or someone close to me were showing signs of depression, I would refer them to a healer	55.1

workers disagreed with the view that people with depression are hard to talk to (Table 1).

Knowledge about clinical depression as a treatable brain disease. Responses reflected a commonly held belief that traumatic events can cause clinical depression (82%), but fewer agreed that depression could result from brain disease (58.4%). There was considerable optimism that people with clinical depression could get better with treatment and support (91.2%), lead normal lives due to treatment (84%), and eventually recover (76.4%). Still, less than half of the respondents (46.1%) disagreed with the view that traditional healers could successfully treat clinical depression, and only 22.5% disagreed with the view that sufferers could pull themselves together if they wanted to (Table 2).

Knowledge of causes and treatments of clinical depression. Slightly more than half of the respondents believed that poverty (53.9%) or genetics (51.7%) could be a cause of depression, whereas 56.2%

Table 4. Responses Indicating Ideal View About the Place of Clinically Depressed People in Society

Responses	%
People are caring toward persons with depression	48.3
People with depression can work in regular jobs	60.7
People with depression can be as successful at work as others	42.7
You would be willing to maintain a friendship with someone who has depression	65.0
You would be willing to share a room with someone who has depression	47.2
I am comfortable diagnosing depression	48.3
I am comfortable treating depression	47.2
You would be afraid to have a conversation with someone who has depression	62.9

challenged the view that people with depression are unpredictable. As elsewhere in the survey (see [Table 2](#) and associated discussion), 44.9% would refer someone with signs of depression to a healer, and only 31.5% of the health care workers surveyed disputed the belief that antidepressants would cause addiction ([Table 3](#)).

The place of clinically depressed people in society. Approximately half of the health care workers who participated in the survey felt comfortable diagnosing (48.3%) or treating (47.2%) clinical depression. Almost half (48.3%) believed that people were caring toward depression sufferers. When asked about working, 60.7% of respondents indicated that these sufferers could work in regular jobs, and even less (42.7%) believed they could be as successful as other workers. In the interpersonal realm, 62.9% of the participants denied they would be afraid to have a conversation with someone who was depressed, and a comparable 65% said they would be willing to maintain a friendship with them ([Table 4](#)).

Qualitative Results

Survey question. Responses to the question regarding respondents' understanding about clinical depression revealed 3 broad themes. First, community health workers were much less able to describe clinical depression than physicians were able to. A large number of the community health workers also acknowledged not knowing about depression in very honest terms, for example, writing, "I don't know anything about depression" and "We don't know anything about depression. So please make us understand about it."

Second, when community health workers did express an understanding of clinical depression, they often did so in very somatic terms. For example, one respondent characterized it as a "feeling of vertigo, suppression of appetite, mental stress, hypotension, cloudiness of vision."

Third, and to the contrary, physician participants seemed to be able to give concise descriptions that captured the essence and syndromal nature of clinical depression. Here is one emblematic example: Clinical depression is "a mental state or chronic mental disorder characterized by feelings of sadness, loneliness, low self-esteem and self-reproach, accompanying signs include psychomotor retardation, withdrawal from social contacts, and vegetative states such a loss of appetite and insomnia."

Focus groups. Four themes stood out from the focus groups surrounding the depression vignette, as follows:

1. Sometimes community members will be abusive toward people with clinical depression.
2. Participants demonstrated a reasonable awareness of the need to make referrals to a specialist ("higher center").
3. Respondents seemed to have little professional experience with clinical depression and to not think it is common.
4. Contrary to the findings from the survey, participants were not enthusiastic about the helpfulness of faith healers.

DISCUSSION

We observed uneven comprehension of the symptomatology and causation of depression, along with consistent stigma and social discrimination. Not surprisingly, community health workers' responses were more problematic than physicians' responses. Physicians had less difficulty understanding and approaching mental health issues. Many of the participants could not correctly recognize clinical depression or its causation and did not understand the meanings of its term (even when explained in a culturally sensitive way). A study conducted by Armstrong et al¹⁶ among community health workers in Bangalore, India, found that the participants had minimal knowledge of mental health, but also found a correlation to the use of the Western model of psychiatry terminologies when describing the presenting symptoms.

Some of the factors found in our study contributing to unfavorable perception and limited knowledge toward mental illness, especially clinical depression, include the following:

- Stigma against mental illness: Stigma against mental illness poses a profound barrier to recognition and care for these problems. Some of the effects of stigma include discrimination and social isolation of people with mental illness, denial of illness, refusal to pursue treatment, and poor treatment compliance. The negative effects of stigma can even overshadow the effect of disability directly attributable to the disorder.¹⁷ Another study from India found that 36.9% of rural participants, 43.2% of urban participants, and 44.7% of medical professionals would oppose marriage with a person recovered from mental illness.¹⁸ Stigma is also perpetuated by health service providers, and it is critical to address this issue in professional training, as well as in clinical practice.¹⁹
- Mental health illiteracy and misconception of mental illness: Many of the participants of the focus groups had a great deal of difficulty when asked to define clinical depression, and a large majority said that they never heard about depression or its definition. Mental health illiteracy can potentially impair people's help-seeking behavior and people's response in times of crises and can delay treatment.

Illiteracy or poor education is a consistent risk factor for common mental disorders, and some studies also have demonstrated a relationship between educational level and the risk of such disorders.²⁰

A study by Kishore et al,¹⁸ with a sample of 360 individuals from urban and rural communities of Delhi and 76 medical professionals, found that mental disorders were thought to be due to loss of semen or vaginal secretion (33.9% rural, 8.6% urban, 1.3% professionals), God's punishment for past sins (39.6% rural, 20.7% urban, 5.2% professionals), and polluted air (51.5% rural, 11.5% urban, 5.2% professionals). 34.8% of the rural participants and 18% of the urban participants believed that children do not get mental disorders. Finally, 40.2% in rural areas, 33.3% in urban areas, and 7.9% professionals believed that mental illnesses are untreatable.

- **Poverty:** The most urgent problem facing mental health care in Asia is the lack of personal and financial resources.²¹ According to 2010 data from the United Nations Development Programme, an estimated 29.8% of Indians live below the country's national poverty line.²² Data from the World Bank estimates that 32.7% (400 million) live with <\$1.25 a day, and 68.7% (841 million) live with <\$2 a day. The World Health Organization report on mental health states, "Mental disorders occur in persons of all genders, ages, and backgrounds, but poverty, unemployment, poor education, and poor nutrition may pave the way for maladaptive behavior, depressive illness, and broken families."²⁰ When people struggle to obtain the basic elements to survive, they may experience under-recognition and lack of awareness of other areas, including mental health issues.
- **Culture and treatment-seeking behavior:** Studies have shown that culture influences the epidemiology, phenomenology, outcome, and treatment of depressive (affective) disorder. Culture greatly influences the way in which depressive symptoms are expressed.²³ We found in our study that many of the participants in the focus group understood depressive symptoms as somatic complaints, which correlates with other studies in India and less-developed countries, which report physical symptoms to be one of the most common presenting symptoms in depression.²³

A significant number of studies have compared the differences in symptomatology of clinical depression between Indians and patients from Western countries, and found that Indian patients often present with somatic symptoms unlike those from the West, as this is a culturally accepted manifestation of psychic distress.²⁴ Guilt, often considered a core concept of depression, is less commonly seen

in the Eastern population due to religio-cultural influences.²⁴⁻³²

With regard to help-seeking behavior in India, studies have shown that a large number of people with mental disorders remain untreated, and those families who do seek treatment will often turn to nonallopathic providers, including practitioners of Indian traditional medicine, religious healers, faith healers, and astrologers.³³ Indeed, 46% of the participants in our study said that traditional healers could successfully treat depression. 21.3% of the participants responded negatively when asked if psychiatrists can effectively treat clinical depression. It is estimated that only 10% of individuals with mental disorders are receiving evidence-based interventions.³⁴

Traditional Indian family values consider family members capable of solving all problems, and seeking help from "outsiders" is considered disgusting and shameful.²⁵ Motivational factors to follow traditional healing practices include cultural faith, inadequate recovery with allopathic treatment, economic factors, social stigma, and easy approachability.²⁹⁻³¹

- **Limited mental health services:** India is the third largest country in Asia after Russia and China and the second most populous country in the world, but it only has approximately 5000 psychiatrists, which is equal to 1 psychiatrist per 200,000 people, as opposed to 42 per 100,000 people in Switzerland, 14.5 per 100,000 people in the United States, and <10 in Mexico, Turkey, Chile, Korea, and Poland per 100,000 people.³⁵ The available mental health professionals in India are mostly located in urban areas. This increases the barriers to seek help and contributes to the stigmatization of the mentally ill.²¹

CONCLUSIONS

We found considerable stigma and misinformation, if not outright lack of knowledge, about depression among health care workers in India. These factors can be expected to significantly contribute to the under-recognition and undertreatment of persons with clinical depression in India despite it being a highly prevalent condition and a major contributor to morbidity across the world. Given that India has only 5000 psychiatrists for a populace of 1 billion people and that in general people with clinical depression are much more likely to present to non-mental health professionals, our findings underscore the considerable public health priority facing India's policymakers and planners to better educate more non-psychiatric physicians and community health workers to identify, understand, and respond to early signs of mental illnesses, especially clinical depression.

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