

Mental Health Literacy for Depression and Schizophrenia among Undergraduate Students in India

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ABSTRACT

This study aimed to examine the level of Mental Health Literacy in terms of diagnosis, treatment, prognosis and help-seeking behavior for Depression and Schizophrenia among Indian Undergraduate students and to draw a comparison with respect to levels of Mental Health Literacy among males and females. The study used a cross-sectional design with snowball sampling. It was carried out in India across various educational institutions. The participants included Undergraduate students aged between 18 and 23 years. All consenting participants were recruited for the study and Google forms consisting of two case vignettes, one for depression and one for Schizophrenia along with questions that followed them were distributed using snowball sampling between February and March 2020. The questions to assess Mental Health Literacy included were constructed in the domains of diagnosis/labelling the disorder, effectiveness of different treatment methods for the disorders, prognosis of the disorder and general help seeking behavior in terms of mental health related issues. Data was analyzed using IBM Statistical Package for Social Sciences V.21.0. Out of the 324 questionnaires that were completed and submitted, 162 (50%) respondents were males, 159 (49.07%) were females and 3 (0.03%) respondents preferred not to reveal their gender. Participants were able to diagnose/label Depression more accurately but were poor at diagnosing/labelling Schizophrenia. For indicating the presence of a psychological disorder in the vignettes, males demonstrated better Mental Health Literacy as compared to females. In terms of effectiveness of different types of therapies for treatment, religious interventions and using internet sources were rated as least effective treatments for both Depression and Schizophrenia while psychological therapy was rated as the most effective treatment for depression and psychological and drug therapy were rated as the most effective treatments for Schizophrenia. Higher prognosis ratings were given to Depression as compared to Schizophrenia. Females were more optimistic about the prognosis of both disorders as compared to males. Overall, participants demonstrate better Mental Health Literacy for depression as compared to schizophrenia, possibly due to the availability of internet resources, the increased prevalence of depression among the population and the increased attention given to mental health in the Indian context in the recent past.

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Mental Health Literacy (MHL) arose as a facet of Health Literacy after it was understood that the concept of Health went beyond the physiological or the physical aspect. The term Mental Health Literacy was first coined in 1997 and was defined as “Knowledge and beliefs about mental disorders that aid the recognition, management or prevention of these disorders” [1]. The main domains of Mental Health Literacy, hence, include recognition of disorders as they develop, information on how to prevent a mental disorder and effective help-seeking methods for these problems, various causes of mental disorders and adequate knowledge on how exactly to help oneself and others.

Since the time the concept of Mental Health Literacy was introduced by Jorm et al. in 1997, many studies have been conducted in terms of assessing the level of Mental Health Literacy among different strata of the population, across the globe. The initial studies targeted the adult population and it was found that overall, the level of Mental Health Literacy among adults was not high [1,2]. When it came to adolescents, the level of Mental Health Literacy was far less as compared to the adult population.[3]

Along the same lines as the global picture, there remains an enormous unaddressed need for Mental Health Literacy within the Indian population. Inadequacy exists in terms of both human resources and infrastructure within a developing country like India.[4] Despite improvements in various health indicators in the last couple of decades, India still significantly contributes to the global burden of disease and mental illnesses.

One mental disorder that has received most attention is depression. As per the World Health Organization, over 264 million people suffer from depression and close to 800,000 people die by suicide every year due to depression.[5] Although there are known, effective treatments for mental disorders, between 76% and 85% of people in middle and low income countries respectively receive no treatment for this disorder, owing to barriers especially related to lack of Mental Health Literacy.[6]

According to the National Mental Health Survey of India 2015-16, conducted by National Institute of Mental Health and Neurosciences (NIMHANS), the current prevalence for depression was 2.7% and the lifetime prevalence was 5.6%, indicating that 1 in 40 suffer from past depression while 1 in 20 suffer from current depression.[7] Depression is observed to be occurring in young adults in large percentages. In a highly competitive world, the pressure of academia can be a huge contributing factor to depression as can other factors such as neglect, physical and sexual abuse, substance abuse, the pressure of adhering to various societal demands and lack of adequate mental care.

Another disorder that has received a lot of attention is Schizophrenia. According to the World Health Organization, schizophrenia affects over 20 million people worldwide. It is also more commonly found to start earlier among males.[5] Stigmatization, discrimination and violation of human rights of people with schizophrenia are not uncommon. More than 70% of the people with schizophrenia do not receive appropriate care.[8] Over 90% of the people with untreated schizophrenia live in low and middle-income countries. Lack of access to mental health services is an important barrier. Individuals with schizophrenia are

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often labeled as ‘crazy’ or ‘mad’ and are not deemed worthy of any treatment as they are perceived as a lost cause in many cultures across the globe.

In India, where about 1.3 billion people reside, the prevalence of schizophrenia is 3.87/1000 according to the longitudinal “Study of Functional Psychoses in an Urban Community” (SOFPUC) carried out by Schizophrenia Research Foundation (SCARF), Chennai, conducted between 1981-1982 and 2001-2002. According to the National Mental Health Survey of India 2015-16 (NIMHANS), the weighted prevalence of schizophrenia is 0.4%, making it one of the most commonly occurring disorders in the psychotic spectrum.[7]

Research across the globe on the concept of Mental Health Literacy, especially among young adults between the ages of 18 and 25 suggests that around 50% of them are able to identify and label depression correctly while around 25% are able to identify psychosis. While people may be able to label the disorders accurately, the issue of seeking professional help to overcome them still persists.[9]

Empowering the youth to be able to identify and seek help as early as possible for mental health issues can serve to reduce the overall percentage of these disorders and can contribute to a mentally healthier population. The objective of this study was to find the extent of Mental Health Literacy that undergraduate students show regarding Depression and Schizophrenia, and to see whether they recognized it as a disorder and what treatment methods they thought would be useful for coping with the disorder. The study also explores the aspect of stigmatization against individuals who suffer from the aforementioned disorders in order to see what views students hold regarding help seeking behavior for themselves and for others.

MATERIALS AND METHODS

Objectives

This study aimed to examine the level of Mental Health Literacy in terms of diagnosis, treatment, prognosis and help-seeking behavior for Depression and Schizophrenia among Indian Undergraduate students and to draw a comparison with respect to levels of Mental Health Literacy among males and females.

Study design and setting

This study used a cross sectional approach and was carried out among undergraduate students within India. Data collection was done through the online mode using Google Forms.

Study population and Sampling strategy

The study was conducted among undergraduate students between the ages of 18 and 23 from different universities across India between February and March, 2020. Given that the responses to the questions following the case vignette were to be marked on a 7 point likert scale with 5 questions in one domain and 4 questions in another domain, a minimum of 5 to 20 responses for each item in the 7 point likert scale in each questions was anticipated, where the option of choosing was provided (One domain with 5 questions and one domain with 4 questions). With this formula, the minimum sample size for doing the study was 315 students. The study employed snowball sampling. A total of 364 responses were received via Google forms out of which 324 were valid and were considered for the study. The forms that were not completely filled and which did not meet the criteria for the study were not included. The collection of data from the students was done using a snowball sampling

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method between February and March 2021. The questionnaires were sent across to consenting adults with an informed consent form and details of the study attached before the case vignettes.

Inclusion and Exclusion criteria

Inclusion Criteria:

Young adults between the ages of 18 and 23 who are currently pursuing their undergraduate degree

Exclusion Criteria:

Individuals who have done a basic course in Psychology

Data collection and Materials

Case Vignettes on Depression and Schizophrenia with questions that follow in the domains of identification of the disorder, treatment, prognosis and help seeking behavior were used. The vignettes were based on similar previously established ones developed by Jorm et al, and were modified to suit the population of the present study after seeking permission for the same. The names of the individuals in the vignettes were changed and both the vignettes detailed individuals who satisfied the symptomatology of depression and schizophrenia according to the Diagnostic Statistical Manual of Mental Disorders Fourth Edition. The case vignettes were followed by open ended questions in the domains of diagnosis and help seeking behaviors and likert scales in the domains of treatment and prognosis.

Data Analysis/Scoring

The software used for Data Analysis was Statistical Package for the Social Sciences Version 21.0. The responses for the likert scales were compared among disorders using Independent Samples t test to determine the differences between two independent groups. Personal data for sociodemographic details of the participants was collected and descriptive statistics was employed to summarize the results. The open-ended responses were grouped based on similarity of thematic content and the data for these were presented as the frequency of responses under each theme.

Patient/Public Involvement

No respondents were involved in designing or implementation of the study nor were the involved in defining the research question or the final outcome measures. There are no plans to involve respondents in the dissemination of the results.

RESULTS

Out of the 364 responses that were received, 324 were valid and were considered for the study. There were 159 (49.07 %) females, 162 (50 %) males and 3 individuals (0.03%) who preferred not to reveal their gender. Following the vignettes, the participants were asked whether or not a disorder was present. The participants (88.8%) accurately identified the presence of a psychological disorder following the depression vignette among which a higher percentage of males (52.43%) indicated the presence of the disorder as compared to females (46.52%). A majority of the participants (90.74%) correctly identified the presence of a psychological disorder following the schizophrenia vignette and similar to the depression vignette, a higher percentage of males (51.2%) indicated the presence of a psychological disorder as compared to females (47.77%) as indicated by Table 1. A lesser percentage of the respondents (67.7%) accurately identified the disorder as depression while only 24.1% accurately identified the disorder as Schizophrenia.

Table 1 Frequencies of response to presence of psychological disorder

Disorder	Is disorder present?	
	Yes	No
Depression	288 (88.8%)	36 (11.2%)
Schizophrenia	294 (90.74%)	30 (9.26%)

Respondents were next asked to identify the disorders present. Responses were coded as Depression in the presence of the words ‘Depressed/Depression’ (67.7%) and as Schizophrenia in the presence of the words ‘Schizophrenia/Paranoid Schizophrenia’ (24.1%). Other responses were categorized based on the similarity of thematic content as shown in Table 2. The most common alternative labels for depression were ‘Sadness’ (8.33%) and ‘Loneliness’ (3.39%) while the most common alternative labels for Schizophrenia were ‘Hallucinations’ (13.27%), ‘Delusions’ (10.1%) and ‘Psychotic Disorders’ (5.5%).

Table 2 Frequencies of response to vignettes describing the disorder as identified

Description	Depression Vignette	Schizophrenia Vignette
ADHD	2	0
Anxiety	5	0
Insomnia	11	0
Depression/depressed	195	18
Compulsive Disorder	1	0
Seasonal Affective Disorder	4	0
Fear/Fatigue	1	4
Stress/Low self esteem	7	21
Sadness	27	0
Loneliness	11	12
Mental Illness/Disturbance/Disorder	9	15
Bipolar Disorder/Mood Disorder	9	6
ASPD	0	8
Schizophrenia/Paranoid Schizophrenia	0	71
Delusions	0	33
Hallucinations	0	43
Phobia	0	27
Psychosis/Psychotic Disorders	0	18
Personality Disorder/Multiple Personality Disorder	0	3
Others	6	15
No label/Don’t Know	36	30
Total Responses	324	324

Respondents were asked to rate the efficacy of five different treatment modalities for both the disorders on a 7 likert scale. The treatment methods were ‘Effectiveness of Drug Therapy’, ‘Effectiveness of psychological therapy’, ‘Effectiveness of religious interventions’, ‘Effectiveness of talking to a family member or a friend’ and ‘Effectiveness of using internet sources for self treatment’. Psychological therapy was indicated as the most effective form of treatment by females (M= 5.71, SD = 1.34), and talking to a family member or a friend was rated as the most effective mode of treatment by males (M = 5.70, SD = 1.01) for the

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depression vignette. Least ratings were given to religious sources as a preferred source of therapy for depression by both males (M=2.70, SD = 1.63) and females (M= 3.2, SD = 1.8). On assessing the effectiveness of different types of therapies to treat Schizophrenia, drug therapy and psychological interventions were rated as the most effective forms of treatment while religious interventions were rated as the least effective form of treatment. Males preferred drug therapy (M=5.30, SD = 1.25) as compared to females (M=5.21, SD=1.67) while females prefer psychological therapy (5.67, SD=1.24) as compared to males (M=5.31, SD=1.21) as shown in Table 3.

Table 3 The mean, SD, p value, t value and degrees of freedom for males and females for effectiveness of different types of therapies for Depression and Schizophrenia (N=324)

Disorder and treatment	Male		Female		t value	Df	p value
	Mean	SD	Mean	SD			
Effectiveness of Drug therapy							
Depression	5.15	1.35	4.88	1.57	-1.697	306.43	0.910
Schizophrenia	5.30	1.25	5.21	1.67	-0.579	296.42	0.563
Effectiveness of Psychological therapy							
Depression	5.58	1.04	5.71	1.34	0.971	298.15	0.330
Schizophrenia	5.31	1.21	5.67	1.24	2.594	318.66	0.010*
Effectiveness of religious interventions							
Depression	2.70	1.63	3.24	1.85	2.882	311.13	0.004*
Schizophrenia	2.81	1.58	3.22	1.87	2.366	306.38	0.019*
Effectiveness of talking to a family member or friend							
Depression	5.70	1.01	5.35	1.53	-2.321	274.18	0.021*
Schizophrenia	5.09	1.38	4.97	1.79	-0.623	297.21	0.534
Effectiveness of using internet sources for self treatment							
Depression	2.88	1.37	3.16	1.65	1.802	306.16	0.073
Schizophrenia	2.82	1.41	2.96	1.72	0.942	304.82	0.347

The ratings for prognosis showed significant differences between males and females. On an average, females were more optimistic about the prognosis for both disorders as compared to males. In terms of help seeking behavior, respondents were asked about whether they would seek help for themselves for a mental health issue and whether they would recommend help

to others for a mental health issue. In terms of seeking help for themselves for mental health issues, 90.12% (292) of the participants responded in the affirmative while 9.88% (32) responded saying that they would not seek help for their mental health issues. When it came to recommending help for others for their mental health issues, 96.6% (313) of the participants said they would recommend help while 3.3% (11) said they wouldn't recommend help to someone known to them. They were then asked to highlight the sources of help-seeking that they considered would be effective. In terms of seeking help for themselves, out of the 292 participants who responded that they would seek help for their mental health issues 57.87% (169) of people prefer to talk to their family or friends while 34.5% prefer to seek professional help. A small percentage chose to seek help from religious authorities and their intimate partners (4.1% and 3.4% respectively). When it came to recommending help to others, it was seen that out of the 313 participants who responded that they would recommend help to others suffering from a mental health issue 53.03% (166) would recommend professional help while 35.78% (112) recommend talking to a family member or friend. A small percentage of people would recommend religious interventions and talking to an intimate partner (6.7% and 4.4% respectively) as shown in Table 4.

Table 4 Frequencies of response in terms of preferred sources of help

Preferred source of help	Self	For others known to them
Family and Friends	169	112
Religious Authorities	12	21
Mental Health Professionals/Therapist/Psychologist	101	166
Intimate Partner	10	14
Total	292	313

DISCUSSION

A vignette based measure was used for data collection with questions based on it, highlighting the domains of diagnosis, treatment, prognosis and help seeking behavior. This offers a more holistic perspective and a deeper understanding about the level of mental health literacy.

Participants were able to recognize that the symptoms of schizophrenia indicate a psychological disorder, but those of depression were not recognized as a disorder by a small percentage of the participants. Even though depression is a common disorder, the recognition that it is a mental health issue that requires professional help as opposed to being a temporary mood swing or just a bad day, was not adequate. The symptoms of schizophrenia were more easily recognized as being abnormal and the presence of a psychological disorder was indicated more in the schizophrenia vignette. Depression was labeled by many as “Sadness”, “Loneliness” or “Lack of sleep”, which shows that the symptoms of depression can be passed off as not being severe enough to warrant attention as compared to those of Schizophrenia.

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However, when the participants were asked to identify and label the disorder, depression was diagnosed more accurately as compared to schizophrenia. These results are similar to those of previous studies which used case vignettes and found that a more common disorder like depression is identified correctly more often than a less common disorder like schizophrenia [10,11]. This indicates that the general population is better at identifying and labeling depression more accurately than Schizophrenia when it is already established that the depressive symptoms indicate the presence of a disorder. Another significant finding in the study is that individuals have misidentified Schizophrenia as Depression. This points to a tendency to over-diagnose depression because of how common it is as a disorder and this finding is in tandem with previous literature.[12]

There is also a certain sense of stigma perceived in the manner in which participants named the disorder in the schizophrenia vignette. Participants used stigmatizing labels such as “Mentally Retarded” or “Mental Disturbance”. Similar findings have been reported by existing studies as well. [13,14,15] Stigma towards mental illnesses stems from the misconception that people who are suffering from mental disorders are incompetent or dangerous and this is more evident in the case of psychotic disorders like schizophrenia owing to the overt symptoms that can be observed.[13]

On assessing the effectiveness of different types of therapies for the treatment of depression, Psychological therapy was indicated as the most effective form of treatment, closely followed by talking to a family member or a friend. The collectivistic Indian culture emphasizes forming and maintaining close social and familial bonds, and this kind of social support is especially important in terms of dealing with mental health issues. This finding is consistent with previous studies that suggest that sources of informal help such as family members or friends were preferred over medication for depression.[16] Lesser ratings were given to Drug therapy as a preferred source of treatment.

On assessing the effectiveness of different types of therapies to treat Schizophrenia, drug therapy and psychological interventions were rated as the most effective forms of treatment while religious interventions were rated as the least effective form of treatment. Drug therapy is being viewed in a more positive light in the recent past as opposed to before. Previous researches have shed light on the idea that lay people’s views about medicines in mental health have changed over the years[17] and new drugs are seen as having less harmful effects and greater benefits than in the past[10] The reason drug therapy is rated higher for schizophrenia than for depression could be because the symptoms of schizophrenia presented in the vignette may have seemed more severe compared to the symptoms of depression. Drug therapy could be seen as a more intense and a quicker treatment for a disorder like schizophrenia that has more pronounced symptoms which hinder normal functioning.

Drawing a gender comparison it can be seen that females preferred seeking psychological help for depression more than males while males indicated higher ratings for drug therapy than females. Literature suggests that males are more likely to favor medication such as sleeping pills or tranquilizers as forms of treatment for depression,[18] offering an explanation as to why depression in males is often masked by problems such as substance use and drug addiction.[19,20]

Females gave a higher rating for seeking psychological help for schizophrenia as compared to males. These findings suggest that males are less likely to consider the services of mental

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health professionals as effective, supporting the view that males are generally less likely to value mental health assistance as compared to females.[18,21,22]

Both males and females considered religious interventions as the least effective form of treatment. This could be an indicator that the youth of today leans more towards scientific and empirically established forms of treatment. When it comes to the effectiveness of talking to family members about one's mental health issue, there was no significant gender difference in terms of schizophrenia but males rated a higher effectiveness in terms of depression for the same. These findings are on par with existing literature which suggests that males are more likely to externalize the causes of depression and attribute it to peer pressure or familial discords rather than consider it an internal issue.[23,24] Considering this finding, talking to a family member about a mental health issue like depression could be a form of confrontation or gaining more empathy because of the shared background.

Overall, there was better rating for prognosis in terms of depression as compared to schizophrenia. Due to the high prevalence of depression over Schizophrenia, individuals are more aware of the possibility of symptoms improving and for people suffering from depression to eventually be able to lead a relatively normal life. Literature suggests that the prognosis of depression has been rated the highest as compared to other disorders.[25,26]

Participants demonstrated an understanding that Schizophrenia has relatively lesser prognosis as compared to Depression, indicating good mental health literacy. The results could also be as mentioned above because in the recent past, mass media and internet sources have spotlighted many people, including famous celebrities, who openly talk about their experiences with depression and how they overcame it. Seeing them lead a normal after dealing with their depression could have influenced participants into thinking that depression has a better prognosis.

The mean ratings for the prognosis among males and females indicates that on an average, females gave higher prognosis ratings for both depression and schizophrenia as compared to males indicating that they are more positive about the prognosis of mental disorders as compared to males. This finding is consistent with previous studies that have indicated that females were more optimistic about the prognosis of mental disorders.[27,28]

A significant finding of this study is that when participants were asked if they would seek help for their own mental health issues, more participants replied negatively as opposed to when they were asked if they would recommend help to someone they know. This may be due to the stigma attached towards personally seeking help for a mental health issue.[16]

When asked about the preferred source of help, the responses differed between seeking help for themselves versus recommending help to others whom they know. When it came to seeking help for themselves, more than half of the participants preferred to seek help from their friends and family members. However, when it came to recommending help to people known to them, recommending professional help was preferred as opposed to recommending help from friends or family members. This disparity in sources of help for self and others could stem from the fact that there is some kind of stigma associated with seeking mental health assistance for self. This result is consistent with previous findings that people prefer not to seek professional help for their own mental health issues, even if they are moderately severe.[29] With this finding, it can be seen that on a personal level, people are less willing to engage in therapy and are more confident that confiding in their kith and

kin would lead to a better outcome for their problems. Previous studies also indicate that people prefer seeking help from family members or friends first and only then do they consider seeking professional help[30]

Overall, it was found that the level of Mental Health Literacy was higher for depression as compared to schizophrenia. While seeking help for physiological issues is not seen as a problem, seeking help for mental health issues is viewed negatively, especially in the Indian context where mental health issues aren't spoken about extensively. A vast majority of people fear social judgment and ridicule if they open up about their mental health, though this trend is slowly changing and taking a more positive trajectory.

CONCLUSION

Results indicate that there is better Mental Health Literacy in terms of depression as compared to schizophrenia among Indian Undergraduate students. Significant differences are seen between males and females in the domain of prognosis as females gave higher prognosis ratings for both disorders compared to males. Overall, females demonstrated better mental Health Literacy as compared to males in the domains of treatment and prognosis, while in terms of identifying the presence of a psychological disorder in the given vignettes, males demonstrated more accuracy than females. In terms of help seeking behavior, more people chose to recommend help for mental disorders than take help for the same. Professional help was recommended the most to others while in terms of seeking help for the self, more informal sources such as talking to family members or friends was preferred.

The findings of the study can contribute to creating programs to spread awareness in terms of Mental Health in general and the two disorders that have been included in the study, specifically. It is necessary to have a more holistic understanding of mental health in terms of knowing disorders and being able to recognize them, knowing which mode of treatment is the best, understanding the prognosis and seeking help or recommending others for help in terms of mental health issues. Mental Health Literacy goes beyond just recognizing a disorder. Thus, when interventions are planned, they can be planned keeping in mind all the domains of Mental Health literacy as this will help eradicate the problem of labeling as well as the social stigma attached to seeking help for a mental health issue.

This study was carried out among young adults, which can lead to laying emphasis on how the growing concerns of mental health can be addressed amongst the youth. It is necessary to address this, especially among young college-going students because it can contribute in them developing a more informed opinion on mental health issues and can help them look at mental health as a necessary aspect to their own and others' wellbeing. Since the youth are the change makers in society, their awareness of mental disorders and how to approach them can contribute to them spreading this information among their circles, which can create a positive change.

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Conflict of Interest

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