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Original Article

Changing Attitude and Stigma towards Mental Illness through Education among the Rural School Students

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Abstract

Background: Mental disorder is associated with a significant amount of stigma in Indian culture. The stigmatizing attitude towards mental illness starts developing at a younger age and continuously evolves through adulthood. Educational interventions showed a significant reduction of stigma after acquiring new information.

Aim: The current study aimed at a change in attitude and reducing stigma related to mental illness through education.

Methodology: A total of 3478 students from the 9th to 12th class of rural schools participated in a one-time educational intervention program. Attitude towards the person with mental illness was assessed before and immediately after intervention using the California Assessment of Stigma Change Scale.

Results: It indicates a significant reduction in overall stigma towards mental illness. We also observed significant improvement in empowerment, recovery, and help-seeking attitude towards a person suffering from mental illness.

Conclusion: Educational program has proven useful in making school adolescents realized that the mental health problems are as common as other health problems. It has also useful to develop a positive attitude towards a person with mentally illness.

Keywords: Stigma, Attitude towards Mental Illness, Education, School students.

Introduction

Mental health and mental disorders are largely ignored or neglected which had resulted in an increased burden of disease in the community. Overall, mental and behavioral disorders are accounted for 12% of the global burden. The difficulties are continuously growing as mental health and disorders are not given the same importance as physical health and they are not covered frequently under health insurance plans [1]. The reasons for the high prevalence of mental illnesses range from the low level of mental health knowledge to lack of awareness regarding the bio-medical concept, social restrictiveness, stereotyping, pessimism, stigma, and cultural myths related to mental illness [2]. Most of the people are not able to recognize the symptoms of mental disorders and different types of psychological distress due to the paucity of information about mental disorders. People have different beliefs about mental illness and its treatment options resulting in hindrance to the recognition of and appropriate help-seeking behavior [3]. People having poor knowledge and negative views about mental illness, most of them avoid social contact believing that a person with mental illness is violent and dangerous [4]. Greater knowledge is associated with less social discrimination and a positive attitude towards mental illness [5].

Stigma is derived from the Greek word ‘stizein’ which was placed on slaves to indicate that they were of less value. It is a mark of social disgrace, attached to identify and devalue them. The

recognition of the differentiating mark and the subsequent devaluation of the person are two fundamental elements of stigma and the process of stigma. Stigma consists of three interrelated components, one is a stereotype which means negative belief about a group such as dangerousness, incompetence, and character weakness. Second is a prejudice which means belief or negative emotional reaction such as anger and fear. The third is discrimination which means behavior response to prejudice such as avoidance of work and housing opportunities [6]. Globally, in every culture, mentally ill patient has been stigmatized. The reason for this remains obscure, but it has a deleterious impact. These beliefs are still found in societies and cultures that consider being mentally ill as a shameful condition that causes bias towards a person or families of mentally ill person. Relatives and families of a mentally ill person face negative connotations and harm the marriage prospects of a young daughter or sister [7].

In Indian culture, a mental disorder is associated with a significant amount of stigma, resulting in neglect and marginalization. An individual with mental illness and his family faces many challenges in life such as low productivity, societal discrimination, and deprivation of opportunities [8]. A study reports that 90% of admitted mentally ill patients experienced stigma and 86% experienced discrimination. Caregivers of mentally ill patients also perceived stigma and were blamed by the community [9]. The stigmatizing attitude towards mental illness starts developing at a younger age around 5 years and continuously evolves through adulthood and does not emerge unpredictably after adulthood. It has been concluded that children lack clear knowledge and understanding of the mental illness [10].

There are three different strategies to overcome stigma. One is educational approaches about inaccurate stereotypes related to mental illnesses and replacing them with factual information. Second is contacting a person with mental illness. Third strategy is social activism or protest;

which highlight the injustices of various forms of stigma and chastise offenders for their stereotypes and discrimination [11]. Lack of knowledge about mental illness and psychiatric distress is a key factor in social stigma, awareness, and education training showed a significant reduction of stigma after acquiring new information about mental illnesses [12]. Educational interventions are effective as they directly replace incorrect information about knowledge and stereotype of mental illnesses. To make educational components effective, the focus should be on providing factual information in an interesting, clear, interactive, and simple way so that it is easy to understand for students [13]. Educating students of secondary schools about mental disorders improve knowledge of mental disorders, promotes a positive attitude, and helps in reducing the stigma [12].

Few studies in India assess the impact of education on stigma and attitude towards mental illness among school students. The current study therefore is aimed at improving in attitude and reducing stigma related to mental illness.

Methods

An interventional study was carried out about the effects of one-time educational intervention on stigma and attitude towards mental illness in school students. Permission from the District Education Officer was taken after explaining the due nature of the study. A list of rural secondary and higher secondary government and government-aided schools was taken from the district education department. A total of 140 schools were identified in the whole District and out of these only 40 schools from the rural area were selected by a simple random sampling method. Permission from the principals of respective schools was done via telephonic conversation and the date and time of the educational session were discussed to ensure maximum attendance.

The study objectives were explained to the participants and written consent was taken. All the students from class 9th to 12th who were present on the day of the educational program were asked to fill the semi-structured proforma containing demographic details of students, and the 'California Assessment of Stigma Change Questionnaire' as part of the pre-test. 'California assessment of stigma change scale' was translated into Gujarati language and back translated into English by language experts. After the pre-test, a single oral education session was conducted. Total 40 education sessions (one in each school) were conducted. Each session was conducted by a team of trained senior resident doctor and consultant psychiatrist in around 90 minutes' duration by using a module prepared by using WHO education material [14]. This module has different components about education of mental health. First module contains basic knowledge about Mental illness and treatment of common mental health problems. Second module contains how to respond to people with mental health problems and role of caregivers and family in mental disorders. Third module contains information about how to live well with mental health problems. Each module contains brief information so that students can easily understand about different mental health problems. These modules were translated in Gujarati language and back translated into English by language experts by virtue of his/her own knowledge, no particular software was used. At the end of the oral session, students were again requested to submit their responses in 'California Assessment of Stigma Change' scale as a part of the post-test. Ethical approval was taken from the institutional ethics committee. Written informed consent was taken from each participant and their class teacher.

Materials

The California Assessment of Stigma Change (CASC): This is a short battery to assess stigma, which contains below assessment. [15]

Attribution questionnaire (AQ9): This nine-item scale comprises single items for each of the nine factors that emerged from path analyses of responsibility and dangerousness: blame, pity, danger, help, fear, avoidance, coercion, and institutionalization. Items were presented in response to a brief vignette about Harry, ‘‘a 30-year-old man with mental illness’’ Research participants respond to individual items (e.g., ‘‘How dangerous would you feel Harry is?’’) on a 9-pointer Likert scale (9 = very much). Total AQ-9 scores range from 9 to 81, higher scores representing more stigmatizing views towards people with mental illness.

Personal empowerment scale (ES): It contains three items for the self-efficacy. A sample item is, ‘‘I see people with mental illness as capable people,’’ to which research participants answered using a 9-pointer scale of agreement (1=strongly disagree to 9 = strongly agree). Total scores range from 3 to 27, higher scores representing better views of empowerment regarding people with mental illness.

Recovery orientation scale (RS): It consists of three factors scale for personal confidence and hope, goal and success orientation, and no domination by symptoms. A sample item is ‘‘People with mental illness can do things as well as most other people’’ to which research participants answered using a 9-pointer scale (1=strongly disagree to 9 = strongly agree). Total scores range from 3 to 27, higher scores representing better views of recovery.

Care Seeking Questionnaire (CSQ): This is a 6-item questionnaire for psychological help-seeking willingness. Participants asked about the level of agreement (1=strongly disagree to 9 = strongly agree) with statements like, ‘‘I would speak to a psychiatrist if I were significantly anxious or depressed.’’ Scores range from 6 to 54, higher scores representing more willingness

to seek out services. The Cronbach's coefficient was 0.80 for Personal Empowerment Scale, 0.70 for Care Seeking Questionnaire, and 0.58 for Recovery Orientation Scale [15].

Statistical analysis

Data were collected from students on printed questionnaire using pen and paper. Data entry and analysis was done using Microsoft Excel and Epi-Info software. The socio-demographic profile and family history of mental illness have been expressed in terms of frequency and percentage. The data follows normal distribution as assessed by Kolmogorov-smirnov test. Mean and standard deviation of both pre and post-test were compared using the Paired-t-test to know the impact of the educational program, p-value <0.05 was considered as statistically significant.

Results

Total of 3492 students participated in this study and out of which 3478 participants completed pre and post-test proforma, and the rest of 14 students were excluded from the final analysis. Among them 67.51% were female and 32.49% were male participants. The mean age of the participants was 15.52 ± 1.28 years. 9.32% of the participants had a family history of mental illness. The distribution of demographic details of participants is mentioned in Table-1.

Table-1 Demographic details of participants

Demographic variables	**Frequency (%)**
Gender	
Male	1130 (32.49)
Female	2348 (67.51)
Religion	
Hindu	3177 (91.34)
Muslim	187 (05.38)
Others	114 (03.28)

Age group	
13-14 years	953 (27.40)
15-16 years	1581 (45.46)
17-18 years	944 (27.14)
Family history of psychiatric illness- present	324 (9.32)

There was a statistically significant difference in the score of all the questionnaires of the AQ-9 (blame, pity, danger, help, fear, avoidance, coercion, and institutionalization) and the total score of AQ-9 before and after education program, as denoted by paired t test ($p<0.001$). The distribution of the effect of education and AQ-9 was depicted in Table-2.

Table-2: Effect of education on Attribution, Empowerment, Recovery and Care Seeking scale questionnaire

Attribution questionnaire (AQ-9)		**Mean score (SD)**		**t test (p value)**
		Pre-test	**Post test**	
1	I would feel pity for Harry.	4.26 (1.69)	2.67 (0.65)	60.985 (<0.001)
2	How dangerous would you feel Harry is?	4.11 (1.46)	3.02 (1.68)	29.583(<0.001)
3	How scared of Harry would you feel?	4.62 (1.69)	3.46 (2.22)	28.004(<0.001)
4	I would think that it was Harry's own fault that he is in the present condition.	4.64 (1.63)	2.90 (1.13)	56.106(<0.001)
5	I think it would be best for Harry's community if he were put away in a psychiatric hospital.	5.77 (1.58)	3.75 (2.68)	42.958(<0.001)
6	How angry would you feel at Harry?	4.26 (1.83)	2.39 (1.37)	56.738(<0.001)
7	How likely is it that you would help Harry?	4.10 (1.55)	2.66 (0.63)	55.073(<0.001)
8	I would try to stay away from Harry.	4.84 (1.63)	3.17 (2.21)	42.292(<0.001)
9	How much do you agree that Harry should be forced into treatment with his doctor even if he does not want to?	5.44 (1.90)	4.69 (2.48)	14.508(<0.001)
Empowerment questionnaire(ES)				
1	I feel people with mental illness are persons of worth, at least on an equal basis with others	3.61 (0.87)	7.40 (0.73)	-195.527(<0.001)
2	I see people with mental illness as capable people	3.64 (0.86)	7.56 (0.73)	-203.957(<0.001)
3	People with mental illness are able to do things as well as most other people	3.81 (1.08)	7.48 (0.76)	-163.521(<0.001)

Recovery questionnaire (RS)				
1	People with mental illness are hopeful about their future	3.60 (1.00)	7.46 (0.82)	-195.527(<0.001)
2	People with mental illness have goals in life they want to reach	3.73 (0.95)	8.00 (0.71)	-203.957(<0.001)
3	Coping with mental illness is not the main focus of the lives of people with mental illness	3.95 (1.09)	7.92 (0.70)	-163.521(<0.001)
Care Seeking Questionnaire (CSQ)				
1	I would speak to a primary care doctor if I were significantly anxious or depressed	5.44 (0.85)	8.28 (0.66)	-154.196
2	I would speak to a psychiatrist if I were significantly anxious or depressed	5.07 (0.83)	8.45 (0.59)	-196.697
3	I would speak to a counselor if I were significantly anxious or depressed	4.25 (0.93)	8.40 (0.59)	-223.858
4	I would speak to a minister or other clergy member if I were significantly anxious or depressed	4.58 (1.02)	8.53 (0.50)	-210.083
5	I would speak to a friend or family member if I were significantly anxious or depressed	4.86 (1.04)	8.50 (0.60)	-180.226
6	I would seek help from a peer support or self-help program if I were significantly anxious or depressed	4.69 (1.02)	8.28 (0.61)	-178.144

There was a statistically significant difference in the score of all the questionnaires and the total score of the ES, RS, and CSQ before and after education program, as denoted by paired t test ($p<0.001$). Distribution of the effect of education and different sub-scale of CASC was depicted in above Table-3.

Table-3: Effect of education on different scales of CASC

Scale	Mean score (SD)		t test (p value)
	Pre	Post	
Attribution score	42.01(7.10)	28.72(9.26)	70.746 (<0.001)
Empowerment scale score	11.06(1.94)	22.44(1.12)	-297.373(<0.001)
Recovery scale score	11.28(2.06)	23.38(1.39)	-289.569(<0.001)
Care Seeking Questionnaire score	22.88(2.55)	50.43(1.29)	-446.024(<0.001)

CASC- California Assessment of Stigma Change, **SD-** Standard Deviation

Discussion

Before the educational program, school students had a more negative attitude towards mental illness and reported a mentally ill person as dangerous, felt pity and tried to stay away from the person with mental illness, blamed them, and wanted to forcefully put them away in a psychiatric hospital. To date, there is limited published literature about the impact of education on the attitude towards the mentally ill among Indian students. After the educational program, it was observed that students held a more positive attitude toward people with mental illness as well as in all components of attribution such as blame, pity, danger, help, fear, avoidance, coercion, and institutionalization. Similarly, Pinfold et al (2005) found that short educational workshops can produce significant positive change in young people's views about mental illness in 635 school students from the UK and 1501 from Canada of age group 14-16 years [16]. Del Casale et al (2013) found a significant reduction of stigma attributed towards mental illness after the acquisition of new information about mental health in high-school students aged between 16 and 18 years using the 'Standardized Stigmatization Questionnaire' (SSQ)[12]. Pejović et al (2009) conducted a study among sixty-three high school voluntary students of Serbia using opinion about mental illness questionnaire and reported that there had been a significant reduction in social discrimination, social restriction, and increased awareness about mental illness after program implementation [17]. Naylor et al (2009) also found that there was a significant reduction in stigma and promotion of positive health through increasing knowledge by awareness program in 14-15 years old students from schools of Greater London, England by using 'Mental Health Questionnaire'[18]. Kutcher et al (2015) found a significant positive impact on mental health knowledge and attitude towards mental illness in 147 Canadian school students of 9th-grade using classroom exposure Mental Health and High School Curriculum Guide (The Guide)

[19]. Overall, the effect of education about mental illness in school students is very helpful to change the negative attitude and to reduce the stigma towards mental illness.

Present study findings also suggest a significant improvement in empowerment, recovery, and help-seeking attitude towards mental illness. Similarly, Corrigan et al (2001) found that education significantly helps in changing attitudes about mental illness in 152 adults from Chicagoby using the 'Psychiatric Disability Attribution Questionnaire (PDAQ)'. They used three different strategies which include education, contact, and protest for changing stigmatizing attitudes as an intervention [20]. Watson et al (2004) found that the program was effective in improving attitude, knowledge about mental illness, and it had increased students' willingness to access treatment for mental illness in a study of 1500 middle school student of grades 6th-8th using a brief educational program [21]. A systemic review of school students found a significant positive impact of school mental health literacy programs on change in attitude, improved knowledge, and help-seeking behavior towards mental illness by using 'Opinion about Mental Illness Questionnaire (OMI)'[22]. Lanfredi et al (2019) observed a significant change in knowledge, positive attitude, empowerment, and recovery towards mental illness after providing education about mental illness in a study among 242 students of 12th grade students using 'California Assessment of Stigma Change and Revised Attribution Questionnaire (CASC)'[23]. Saporito et al (2011) observed significantly less explicit stigma and greater openness to seek treatment by using'Attitudes toward Seeking Professional Psychological Help (ATSPPH) [24]. While Pinto et al (2011) found that participants did not experience any change in mental illness-related stigma and mental health literacy immediately, but was effective intermediately after 4-8 weeks post-intervention by using 'Revised Attribution Questionnaire'. This may be possible due to heightened sensitivity towards mental illness through media and television which masked the

immediate gain of attributes towards mental illness [25]. In the end, education is a very effective tool to break the barrier of stigma toward the mental illness.

As the limitation, the cross-sectional nature of the study precludes any causal interpretations. Longitudinal and experimental studies are required to better elucidate causality. Further studies should examine whether the impact of the anti-stigma intervention is maintained across time by ensuring follow up. There was no control group in this study which is required to compare effectiveness. Moreover, hypothetical vignettes were used in the survey and might not truly reflect the experience of conceptualizing a problem in real life.

To conclude, the educational program has proven useful in school-going adolescents in making them realize that mental health problems are as common as other health problems and are inseparable from health. Hence, education can help in creating meaningful opportunities to promote mental health and in reducing high-risk behaviours, and in developing a positive attitude towards a person with a mentally ill individual. Implementation of education programs for school-going adolescents is much needed to eliminate the stigma for a mentally ill person.

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