



# Perception towards Mental Illness in Southern Tamil Nadu: A Cross Sectional Study

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## ABSTRACT

**Background:** Psychiatric disorders are widely considered as a major contributor to the global burden of diseases worldwide. Psychiatric patients are subjected to cultural stereotypes and negative attitude by general population. This study aims to assess the perception towards mental illness among people of Mukkudal, Tirunelveli district, Tamil Nadu.

**Methods:** This is a cross-sectional survey conducted among 250 people aged above 18 years residing in Mukkudal village of Tirunelveli district, Tamil Nadu. Questionnaire including basic demographic information, BMI scale was used to assess the perception among general population.

**Results:** Out of 21 questions people were found to have poor perception towards 10 questions (>50%). 72% of people were found to believe that it is embarrassing to have a mentally ill person in their family. People belonging to the age group 40- 50; female by sex; Christian by religion; positive family history for mental illness; socio-economic class were found to have poor perception towards mental illness.

**Conclusions:** Creating awareness using film stars and Celebrities may help to improve the perception among lower socio economic classes. Strategies to increase social contact of public with people having mental illness could be considered in the implementation of anti- stigma programs.

**Keywords:** Psychiatric disorders, Perception, Tamil Nadu, BMI scale

## INTRODUCTION

Mental health disorders are widely recognized as a major contributor to global disease burden<sup>1</sup>. According to WHO's global burden of disease 2001, 33% of the years lived with disability (YLD) are due to neuropsychiatric disorders<sup>2</sup>. Despite its global presence, negative perception of mental illness and stigma associated with it is consistently present in people from all walks of life<sup>3</sup>.

Mental health issues are often ignored or considered to be a taboo and are subjected to cultural stereotypes by a majority of population<sup>3</sup>. A majority of people believes that it is embarrassing to

have a mentally ill person in their family. This stigma exists either because the psychiatric disorders are poorly understood by the people or are surrounded by prejudices<sup>4</sup>. These preconceived biases result in negative attitudes such as fear or intolerance towards mental illness. This is a vicious cycle and has a negative impact on the lives of not only mentally ill persons but also their family as well as treating psychiatrists<sup>3,5</sup>.

The stigma associated with mental disorders have proven to be a major hindrance in seeking medical care for such issues and thereby the poor quality of medical care available to them<sup>6,7</sup>.

To ensure effective delivery of mental health care it is always necessary to fight the stigma and prejudices associated with mental illness and to impart knowledge and awareness regarding mental health disorders among the general population. This explains the necessity of assessment of perception towards mental illness in the society.

Age, gender, socio-economic-cultural background, education, religion are certain variables that can influence the perception of people towards mental illness. Attitudes and beliefs tend to vary depending upon the age group which they belong to, gender, or social cultural and religious views. In this study, the perception of mental illness is analyzed based on these variables.

## OBJECTIVE

The study was conducted to assess the perception towards mental illness among people of Mukkudal village, Tirunelveli district, Tamil Nadu.

## METHODS

After getting clearance from institutional ethical committee, a cross sectional study was conducted among the People aged above 18 years of Mukkudal village, the field practicing area of Tirunelveli Medical College during the period of July - August 2018. This village had a population of 14983 according to the census 2011 data. Based on a study conducted by Eyasu H. Tesfamariam et al<sup>8</sup>, the

mean BMI dangerousness score was 2.68+0.80. By using this value sample size was estimated using the formula  $n=(Z\alpha^2 \times SD^2)/d^2$  where n = sample size;  $Z\alpha$  at 95% CI = 1.96; SD = standard deviation and d = precision. The calculated sample size n=246 rounded off to 250.

A house to house survey was conducted among people who were residing around the Mukkudal PHC were selected by convenient sampling. Those who willing to participate was included in the study and those who were mentally challenged or with chronic illness were excluded. Survey was conducted till the required sample size of 250 was reached.

## Study procedure

After getting informed consent from the study population, the data regarding socio-demographic details and perception regarding mental illness were collected using a pre-validated interview schedule. BMI (Belief towards Mental Illness) scale was used to collect the data regarding perception of mental illness. It is a 21-item self-report measure of negative stereotypical views of mental illness. There is a Total Score and three subscales based on factor analysis: dangerousness, poor social and interpersonal skills, and incurability. The poor social skills subscale also taps feelings of shame about mental illness and the perception that the mentally ill are untrustworthy. Items are rated on a six point Likert scale ranging from 'completely disagree' (0) to 'completely agree' (5), with higher scores reflecting more negative beliefs<sup>8</sup>.

## BMI scale<sup>9</sup>

### Factor 1: Dangerousness (Score: 0 - 25)

1. A mentally ill person is more likely to harm others than a normal person
2. Mental disorders would require a much longer period of time to be cured than would other general diseases
3. It is good idea to stay away from people who have psychological disorder because their behaviour is dangerous
4. Mentally ill people are more likely to be criminals
5. I am afraid of people who are suffering from psychological disorder because the same disorder would affect me.

### Factor 2: Poor social and interpersonal skills (Score: 0 - 50)

1. The term 'psychological disorder' makes me feel embarrassed
2. A person with psychological disorder should have a job with only minor responsibilities
3. I am afraid of what my boss, friends & others would think if I were diagnosed as having a psychological disorder
4. It might be difficult for mentally ill people to follow social rules such as being punctual or keeping promises
5. I would be embarrassed if people knew that I dated a person who once received psychological treatment
6. A person with psychological disorder is less likely to function well as a parent
7. I would be embarrassed if a person in my family became mentally ill
8. Mentally ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities
9. Most people would not knowingly be friends with a mentally ill person
10. I would not trust the work of a mentally ill person assigned to my work team

### Factor 3: Incurability (Score: 0 - 30)

1. Psychological disorder is recurrent
2. Individuals diagnosed as mentally ill suffer from its symptoms throughout their life
3. People who have once received psychological treatment are likely to need further treatment in the future
4. I believe that psychological disorder can never be completely cured
5. The behaviour of people who have psychological disorders is unpredictable
6. Psychological disorder is unlikely to be cured regardless of treatment

**RESULTS**

A cross sectional study was conducted among 250 people of age above 18 years residing in Mukkudal Village of Tirunelveli district, Tamil Nadu. Among the study population majority belongs to the age group of less than 30 years (32%) with mean age of 41.05+15.76 years. Majority of them were male (53.6%), belonging to upper lower class (58.4%) and Hindu by religion (74.4%). Family history of mental illness was present in 5.6% of the study population (Table 1).

Perception towards mental illness was assessed using BMI scale. It has three factors Dangerousness, Poor social and interpersonal skills and Incurability. It was scored using 6 point likert scale.

In this study, the subjects were considered to have poor perception when they agree (Likert scale = 4) or completely agree (Likert scale = 5) the statement. Based on that, the percentage of people agreed to the statement were assessed for each factors of BMI scale.

**Table 1: Distribution of study subjects based on sociodemographic details**

Variables	Subjects (n=250) (%)
<b>Age group in years</b>	
<30	80 (32)
30 - 40	53 (21.2)
40 - 50	50 (20)
>/= 50	67 (26.8)
<b>Sex</b>	
Male	134 (53.6)
Female	116 (46.4)
<b>Socioeconomic status</b>	
Upper class	6 (2.4)
Upper middle	29 (11.6)
Lower middle	42 (16.8)
Upper lower	146 (58.4)
Lower	27 (10.8)
<b>Religion</b>	
Hindu	186 (74.4)
Christian	40 (16)
Muslim	24 (9.6)
<b>Family history of mental illness</b>	
Yes	14 (5.6)
No	236 (94.4)

**Table 2: Distribution of study subjects based on agreement level (n=250)**

BMI SCALE	Subjects agreed*
<b>Factor 1: Dangerousness (Score: 0 - 25)</b>	
1. A mentally ill person is more likely to harm others than a normal person	67 (26.8)
2. Mental disorders would require a much longer period of time to be cured than would other general diseases	122 (48.8)
3. It may be a good idea to stay away from people who have psychological disorder because their behaviour is dangerous	78 (31.2)
4. Mentally ill people are more likely to be criminals	65 (26)
5. I am afraid of people who are suffering from psychological disorder because the same disorder would affect me.	54 (21.6)
<b>Factor 2: Poor social and interpersonal skills(Score: 0 - 50)</b>	
1. The term 'psychological disorder' makes me feel embarrassed	148 (59.2)
2. A person with psychological disorder should have a job with only minor responsibilities	148 (59.2)
3. I am afraid of what my boss, friends and others would think if I were diagnosed as having a psychological disorder	138 (55.2)
4. It might be difficult for mentally ill people to follow social rules such as being punctual or keeping promises	164 (65.6)
5. I would be embarrassed if people knew that I dated a person who once received psychological treatment	75 (30)
6. A person with psychological disorder is less likely to function well as a parent	119 (47.6)
7. I would be embarrassed if a person in my family became mentally ill	181 (72.4)
8. Mentally ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities	138 (55.2)
9. Most people would not knowingly be friends with a mentally ill person	137 (54.8)
10. I would not trust the work of a mentally ill person assigned to my work team	104 (41.6)
<b>Factor 3: Incurability(Score: 0 - 30)</b>	
1. Psychological disorder is recurrent	83 (33.2)
2. Individuals diagnosed as mentally ill suffer from its symptoms throughout their life	132 (52.8)
3. People who have once received psychological treatment are likely to need further treatment in the future	132 (52.8)
4. I believe that psychological disorder can never be completely cured	56 (22.4)
5. The behavior of people who have psychological disorders is unpredictable	135 (54)
6. Psychological disorder is unlikely to be cured regardless of treatment	79 (31.6)

\* Subjects that agree with the statement (Likert scale 4 or 5)

**Table 3: Distribution of subjects based on BMI scale**

Factors	Mean + SD(n=250)	Range
Dangerousness	10.49 + 4.85	0 – 25
Poor social and interpersonal skills	28.96 + 7.65	4 – 50
Incurability	14.89 + 5.38	1 – 28
Overall	54.34+ 14.68	8 – 95

**Table 4: Association between sociodemographic factors and BMI scale**

Variables	Domains (n=250)			
	Dangerousness	Poor social & interpersonal skills	Incurability	Overall
<b>Sex</b>				
Male (n=134)	10.54+4.9	29.07+8.11	15.37+5.5	54.99+15.86
Female (n=116)	10.43+4.8	28.83+7.12	14.34+5.2	53.59+13.22
<b>P value</b>	0.854	0.8	0.129	0.454
<b>Religion</b>				
Hindu (n=186)	10.86+4.99	29.45+7.66	14.84+5.5	55.15+15.21
Christian (n=40)	10.1+4.51	27.93+7.59	15.58+4.83	53.60+13.33
Muslim (n=24)	8.29+3.58	26.88+7.43	14.17+5.38	49.33+11.80
<b>P value</b>	<b>0.043</b>	0.194	0.579	0.178
<b>Age group</b>				
<30 (n =80 )	10.56+4.49	27.33+6.58	15.28+5.02	53.16+12.08
30 - 40 (n = 53)	10.11+5.01	29.25+8.30	14.68+4.64	54.04+15.05
40 - 50 (n = 50)	11.10+5.30	30.38+8.03	15.28+5.80	56.76+16.28
>/= 50 (n = 67)	10.25+4.84	29.63+7.83	14.31+6.02	54.19+16.04
<b>P value</b>	0.734	0.113	0.679	0.595
<b>Socioeconomic status</b>				
Upper class (n = 6)	9.5+7.18	29.83+5.11	14.83+4.67	54.17+15.34
Upper middle (n = 29)	11.38+5.77	30.18+8.86	16.14+5.94	57.69+18.10
Lower middle (n = 42)	10.02+3.97	28.55+7.98	14.88+5.09	53.45+13.99
Upper lower (n = 146)	10.40+4.79	28.32+7.58	14.51+5.32	53.22+14.28
Lower middle (n = 27)	11.0+4.95	31.59+6.14	15.67+5.73	58.26+13.52
<b>P value</b>	0.745	0.272	0.583	0.351
<b>Family history of mental illness</b>				
Yes (n =14 )	12.57+3.46	28.71+7.98	20.57+3.63	61.86+11.88
No (n = 236)	10.37+4.89	28.97+7.65	14.56+5.28	53.90+14.73
<b>P value</b>	0.099	0.902	<b>&lt;0.001</b>	<b>0.049</b>

In Dangerousness majority 48.8% agreed to the statement "Mental disorders would require a much longer period of time to be cured than would other general diseases", in Poor social and interpersonal skills 72.4% agreed to the statement "I would be embarrassed if a person in my family became mentally ill" and in Incurability 54% agreed to the statement "The behaviour of people who have psychological disorders is unpredictable" (Table 2).

Each statement has a score ranges from 0 to 5. The average score for factor dangerousness was 10.49+4.85, Poor social and interpersonal skills 28.96+7.65 and Incurability 14.89+5.38. Overall mean score was 54.34+14.68 (Table 3).

Univariate analysis was done to assess the factors associated with poor perception. The factors included were sex, religion, age group, socioeconomic status and family history of mental illness. Factors which found to be significant were religion and family history of mental illness. People who were Hindu by religion have higher mean danger-

ousness score compared to Christians and Muslims (p=0.043) and people with family history of mental illness have higher mean scores in Incurability (p<0.001) and overall score (p=0.049)(Table 4).

## DISCUSSION

In the present study majority of the people (72.4%) agreed that "They would be embarrassed if a person in my family became mentally ill". In a study conducted by Dr. Neeli Uma Jyothi et al<sup>10</sup>, 100% of the participants agreed that "They get afraid of what others would think if they were diagnosed as having a psychological disorder". The percentage of poor perception for the BMI scale statements ranges from 21.6% to 72.4%.

As per the study conducted by Ganesh K et al<sup>11</sup>, 60% of study subjects afraid to have someone with mental illness as neighbor and 55% were ashamed to mention that anyone in their family had mental illness. This shows negative perception and attiti-



tude towards mental illness.

In a study conducted by Aruna et al<sup>3</sup>, around 49.7% of students believed patients with psychiatric disorders, even when recovered, would not be productively employed by others and more than 50% of students were not comfortable in talking with psychiatric patients. It is evident that even medical undergraduates have poor perceptions towards mental illness.

Based on a study conducted by Harshal Salve et al<sup>12</sup>, nearly 80% of participants felt that community ignores mentally ill patients and their families. Almost one-third of participants perceived that the mental disorders can be prevented by keeping friendly home environment and sharing problems, thoughts with others.

In the present study religion was significantly associated with the dangerousness score. Spirituality or religion has the relationship with mental health either in a positive or negative manner depends on whether it's a positive or negative religious belief. As per the study by Jugal et al<sup>13</sup>, a large number of people believed that daily worshipping and keeping fasts can reduce the bad effects. A significant proportion of people believed that destiny or work started on an auspicious day can be the only factors behind one's successes.

Family history of mental illness was another factor found to have significant association with incurability and overall BMI score. In a study conducted by Vijayalakshmi Poreddi et al<sup>14</sup>, majority of the caregivers of mentally ill patients were holding stigmatizing attitudes toward people with mental illness in relation to social participation, treatment, work, marriage and recovery. Similarly, the prevalence of stigma towards mental illness was high (74.1%) as per the study conducted by Bhumika T Venkatesh et al<sup>15</sup> in South India.

The present study explored the level of perception regarding mental health and it showed varying level of perception according to subscales. More than 20% of population have poor perception regarding mental health in all subscales (Table 2). It indicates the need for educating the community regarding mental health especially among the caregivers. This will prevent discrimination and stigmatizing attitude towards mentally ill persons. Also a community based comprehensive mental health programme including socio cultural knowledge has to be implemented for a sustainable improvement in mental health perception.

## CONCLUSION

Misconceptions regarding the mental illness contribute to stigma which leads to poor utilization of

health services. Hence it is important to assess the perception or belief regarding mental health in the community to improve health seeking behaviour of the community. The present study explored the poor perception regarding mental health among the general population and showed a significant relationship with family history suggests the need for awareness among caregivers of mentally ill persons.

Ethical approval: Appropriate clearance obtained from institutional ethical committee and informed consent from study subjects were obtained.

## REFERENCES

1. Funk M. Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level. Retrieved on. 2016 Oct;30.
2. World Health Organization, Noncommunicable Disease and Mental Health Cluster. Investing in mental health. Geneva: World Health Organization; 2003.
3. Aruna G, Mittal S, Yadiyal MB, Acharya C, Acharya S, Uppulari C. Perception, knowledge, and attitude toward mental disorders and psychiatry among medical undergraduates in Karnataka: A cross-sectional study. *Indian journal of psychiatry*. 2016 Jan;58(1):70.
4. Trivedi JK, Dhyani M. Undergraduate psychiatric education in South Asian countries. *Indian journal of psychiatry*. 2007 Jul;49(3):163.
5. Hesse K, Kriston L, Mehl S, Wittorf A, Wiedemann W, Wölwer W, Klingberg S. The vicious cycle of family atmosphere, interpersonal self-concepts, and paranoia in schizophrenia – a longitudinal study. *Schizophrenia bulletin*. 2015 Apr 29;41(6):1403-12.
6. Schomerus G, Angermeyer MC. Stigma and its impact on help-seeking for mental disorders: what do we know?. *Epidemiology and Psychiatric Sciences*. 2008 Mar;17(1):31-7.
7. Girma E, Möller-Leimkühler AM, Dehning S, Mueller N, Tesfaye M, Froeschl G. Self-stigma among caregivers of people with mental illness: toward caregivers' empowerment. *Journal of multidisciplinary healthcare*. 2014;7:37.
8. Hirai M, Clum GA. Development, reliability, and validity of the beliefs toward mental illness scale. *Journal of psychopathology and Behavioral Assessment*. 2000 Sep 1;22(3):221-36.
9. Tesfamariam EH, Tekie MM, Tesfa AY, Hadgu DH, Awalom EA, Ghebremedhin EB, Tquabo NA. Attitude towards Mental Illness among Secondary School Students in Asmara, Eritrea: A Cross-Sectional Study. *Psychiatry Journal*. 2018;2018.
10. Jyothi NU, Bollu M, Ali SF, Chaitanya DS, Mounika S. A Questionnaire Survey on Student's Attitudes towards Individuals with Mental Illness. *Journal of Pharmaceutical Sciences and Research*. 2015 Jul 1;7(7):393.
11. Ganesh K. Knowledge and attitude of mental illness among general public of Southern India. *Natl J (Wash)*. 2011;2:175-8.
12. Salve H, Goswami K, Sagar R, Nongkynrih B, Sreenivas V. Perception and attitude towards mental illness in an urban

- community in South Delhi-A community based study. Indian journal of psychological medicine. 2013 Apr;35(2):154.
13. Jugal K, Mukherjee R, Parashar M, Jiloha RC, Ingle GK. Beliefs and attitudes towards mental health among medical professionals in Delhi. Indian journal of community medicine. 2007 Jul 1;32(3):198.
  14. Poreddi V, Blrudu R, Thimmaiah R, Math SB. Mental health literacy among caregivers of persons with mental illness: A descriptive survey. Journal of neurosciences in rural practice. 2015 Jul;6(3):355.
  15. Venkatesh BT, Andrews T, Mayya SS, Singh MM, Parsekar SS. Perception of stigma toward mental illness in South India. Journal of family medicine and primary care. 2015 Jul;4(3):449.