

## ORIGINAL PAPER

# Knowledge and attitude towards mental illness- A comparative study among rural and urban college students

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### ABSTRACT

**Introduction:** With 356 million in the age of 10-24 years; India has the world's largest youth population despite having a smaller general population than China. **Methods:** A descriptive and comparative study design was undertaken amongst 200 college students. The sampling technique adopted for the study was stratified random sampling. **Results:** 22% of the rural college students have inadequate knowledge towards mental illness followed by 73% having moderate level of knowledge; whereas 10% of urban college students have inadequate knowledge, followed by 64% having moderate knowledge level towards mental illness. Only 5% of rural students had adequate knowledge compared to 26% of urban college students having adequate knowledge regarding mental illness. 77% of the rural college students and 60% of urban college students have a moderate attitude level towards mental illness whereas, only 10% of the rural students had favourable attitude as compared to 28% urban students having favourable attitude towards mental illness. Knowledge and attitude of the students towards mental illness were found to be significantly associated with the location of the colleges (rural and urban) ( $p < 0.01$ ). A significant positive correlation has been found between the knowledge and attitude scores ( $p < 0.01$ ). Knowledge of the respondents was found to be associated with stream of education, educational status of the parents, occupational status of father, monthly income of the family and source of mental health information. Attitude of the respondents were found to be associated with stream of education, occupational status of father, monthly income of the family and source of mental health information. **Conclusion:** The study findings suggest the need of proper awareness programmes among the student community, which would help dispel any myths and misconceptions regarding mental illness.

**Keywords:** Knowledge, attitude, mental illness

### INTRODUCTION

Mental illness is common, affecting more than 25% of all people at some time during their lives. They are also universal, affecting people in all countries and societies, individuals of all ages, women and men, the rich and the poor, from urban and rural environment. They have an economic impact on societies and on the quality of life of individuals and families.<sup>1</sup> In India among the total population, 72.22% of the people live in rural areas and 27.78% in urban area. Among these adults between the age group of 15-59 years forms 56.9% of the total population.<sup>2</sup> The prevalence of mental disorders in India is high, as in other parts of the world.<sup>3</sup> It was estimated that at least 58/1000 people have a mental illness and about 10 million Indians suffer from severe mental illness.<sup>4,5</sup> In rural India, prevalence rates for all mental illness is 64.4 per 1000 population and urban part of the country it is 66.4 per 1000 population.<sup>6</sup> A latest UN report said that developing countries with large youth population could see their economics soar, provided they invest heavily in young people's education and health and protect their rights.<sup>7</sup>

### OBJECTIVES

1. To assess, compare and to determine the relation between the knowledge and attitude towards mental illness among the college students of selected rural and urban colleges.
2. To find out the association between socio-demographic variables and knowledge and attitude towards mental illness among the college students of selected rural and urban colleges.

### METHODOLOGY

A descriptive and comparative research design was carried out

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upon 200 college students: 100 students from rural college and 100 from urban college from Ist yr, II yr and III yr degree courses in arts, science and commerce stream with due informed consent. Stratified random sampling technique was used to select the students who fulfilled the inclusive criteria. The study was conducted in Khowang College (rural college), situated around 16 kms away from Dibrugarh town, Assam and in DHSK College (urban college) in the month of July 2015. A questionnaire was used which consists of Socio-demographic characteristics and self structured knowledge questionnaire.

The data analysis was consisted of descriptive and inferential statistics, the statistical tests used were Chi square test, Karl Pearson’s correlation coefficient, t- test and F- test. The significance level used was  $p < 0.05$ .

**RESULTS**

Among the rural college students, the mean age was found to be 18.91 years with a SD of 1.093 years, whereas, the mean age among urban college students is found to be 19.45 years and SD of 1.038 years.

In the present study, 5% of the rural college students had adequate knowledge, 73% had moderate level and 22% had inadequate level of knowledge on mental illness, whereas 26%, 64% and 10% of the urban college students had adequate, moderate and inadequate level of knowledge on mental illness. The difference in knowledge on mental illness between the rural and urban college students was found to be statistically significant (Table-1).

A significant difference was observed in the attitude level between the rural and urban college students. 10% of the rural college students had favourable attitude, 77% had moderate level and 13% had unfavourable attitude towards mental illness in comparison to 28%, 60% and 12% of the urban college students respectively (Table-1).

**Table 1** Knowledge and Attitude towards mental illness among the rural and urban college students

Variable		Rural	Urban	p-value
		No. (%)	No. (%)	
Knowledge Level	Adequate	5 (5%)	26 (26%)	$p < 0.001$
	Moderate	73 (73%)	64 (64%)	
	Inadequate	22 (22%)	10 (10%)	
Attitude Level	Favourable	10 (10%)	28 (28%)	$p < 0.01$
	Moderate	77 (77%)	60 (60%)	
	Unfavourable	13 (13%)	12 (12%)	

Comparison of mean of the knowledge and attitude scores revealed significant differences between the scores of the rural and urban college students for all the components of mental illness except S & S of Mental illness and Causes of Mental illness (Table 2).

The correlations between the components of knowledge and components of attitude in rural and urban college students were presented in Table 3. In most of the components a significant positive correlation were observed.

**Table 2** Comparison of Knowledge and Attitude Scores between Rural and Urban colleges

Variables	College	Scores		p-value
		Mean	SD	
Meaning of Mental illness	Rural	3.38	1.40	0.001
	Urban	4.24	1.43	
Types of Mental illness	Rural	3.02	1.49	0.001
	Urban	4.09	1.74	
S&S of Mental illness	Rural	1.89	1.02	0.845
	Urban	1.92	1.13	
Causes of Mental illness	Rural	1.19	1.01	0.143
	Urban	1.40	1.01	
Treatment of Mental illness	Rural	5.20	2.25	0.01
	Urban	6.07	2.34	
Knowledge Score	Rural	14.70	4.86	0.001
	Urban	17.72	5.37	
Acceptance Score	Rural	53.81	5.78	0.001
	Urban	57.03	7.97	
Response Behaviour Score	Rural	18.50	1.97	0.001
	Urban	20.52	2.81	
Attitude Score	Rural	72.30	6.95	0.001
	Urban	77.67	9.39	

**Table 3** Correlations between sub areas of knowledge and attitude

		Acceptance Score		Response Behaviour Score		Attitude Score	
		Rural	Urban	Rural	Urban	Rural	Urban
		Meaning of Mental illness	<i>r</i>	0.320	0.212	0.059	0.145
	<i>p-value</i>	0.001	0.034	0.561	0.15	0.004	0.013
Types of Mental illness	<i>r</i>	0.279	0.393	0.165	0.379	0.281	0.460
	<i>p-value</i>	0.005	0.001	0.100	0.001	0.005	0.001
S&S of Mental illness	<i>r</i>	0.049	0.285	0.023	0.169	0.049	0.289
	<i>p-value</i>	0.626	0.004	0.824	0.093	0.631	0.003
Causes of Mental illness	<i>r</i>	-0.087	0.068	-0.023	.309	-0.077	0.14
	<i>p-value</i>	.39	0.503	0.822	0.002	0.446	0.164
Treatment of Mental illness	<i>r</i>	0.169	0.249	0.219	0.337	0.205	0.304
	<i>p-value</i>	0.093	0.012	0.029	0.001	0.041	0.002
Knowledge Score	<i>r</i>	0.250	0.365	0.169	0.401	0.259	0.435
	<i>p-value</i>	0.012	0.001	0.093	0.001	0.009	0.001

The present study revealed that knowledge of the respondents was significantly associated with the steam of education, educational status of their parents, occupational status of father, monthly income of the family and source of mental health information. Attitude of the respondents were found to be associated with stream of education, occupational status of father, monthly income of the family and source of mental health information (Table 4 and Table 5).

**Table 4** Knowledge and attitude differential across the source of Mental Health Information

Variables		Knowledge Score			Attitude Score		
		Mean	SD	p-value	Mean	SD	p-value
Source of Mental Health Information	Health personnel	14.89	4.972	0.001	75.15	7.843	0.019
	TV / Radio/ Cinema	16.49	4.864		74.47	8.346	
	Newspaper / Magazine / Books	17.71	5.069		75.39	9.445	
	Relatives / Family Members	15.06	4.736		74.94	10.133	
	Friends / Neighbors	11.20	5.718		77.40	11.082	
	No Prior Information	15.15	5.678		72.74	7.246	
	Multiple Response	20.72	3.847		81.67	9.184	

**Table 5** Knowledge and attitude differential across socio-demographic variables

Variables		Knowledge Score			Attitude Score		
		Mean	SD	p-value	Mean	SD	p-value
Age Group	Upto 20 years	16.38	5.287	0.189	75.09	8.865	0.620
	> 20 years	14.76	5.629		74.10	6.920	
Gender	Male	16.28	5.478	0.838	74.89	8.731	0.866
	Female	16.12	5.176		75.10	8.646	
Educational Status	TDC Yr I	15.87	6.023	0.662	75.02	8.644	0.537
	TDC Yr II	16.63	3.768		75.96	9.893	
	TDC Yr III	16.48	5.196		74.02	7.506	
Stream	Arts	15.01	5.081	<0.001	74.41	8.023	0.020
	Science	19.19	5.041		77.42	9.712	
	Commerce	17.30	4.111		70.20	9.151	
Educational Status of Father	Professional Degree	15.57	5.543	0.042	72.00	9.397	0.210
	Graduate/Postgraduate	17.75	4.977		76.98	9.935	
	Intermediate/Diploma	16.94	5.684		76.94	8.333	
	High School	15.79	5.515		74.25	8.070	
	Middle School	12.46	3.992		72.15	6.162	
	Primary School	15.37	4.913		74.68	7.775	
	Illiterate	16.00	5.774		71.25	2.500	
Educational Status of Mother	Professional Degree	13.29	5.992	0.002	73.86	9.442	0.999
	Graduate/Postgraduate	17.67	4.958		74.93	9.788	
	Intermediate/Diploma	23.17	3.312		74.00	6.450	
	High School	15.68	5.446		74.97	8.474	
	Middle School	16.84	3.746		75.84	9.094	
Occupation of Father	Primary School	15.11	4.999	0.006	74.74	7.709	0.011
	Illiterate	13.77	5.464		75.46	8.800	
	Professional	15.43	4.860		73.29	9.447	
	Govt. Service	17.85	5.418		77.63	9.175	
	Pvt. Service	17.24	6.379		75.59	10.081	
Occupation of Mother	Business	15.40	5.289	0.257	74.33	7.980	0.23
	Agriculture	15.49	4.398		73.63	7.474	
	Unemployed	12.50	4.703		69.07	6.673	
	Professional	14.00	4.781		71.63	9.226	
	Govt. Service	17.91	4.686		73.44	9.581	
Monthly Income of the Family	Pvt. Service	15.00	9.274	0.006	81.00	8.406	0.047
	Business	14.78	5.652		73.44	6.167	
	Agriculture	15.18	4.945		73.32	7.631	
	Unemployed	16.29	5.414		75.93	8.693	
	>= Rs. 20000	17.35	5.400		76.14	9.142	
	Rs. 10,000-19999	17.44	5.073		77.06	9.439	
	Rs. 7500-9999	17.67	4.899		76.22	11.606	
Type of Family	Rs. 5000-7499	13.52	4.996	0.286	75.05	7.473	0.660
	Rs. 3000-4999	15.88	5.076		73.58	7.621	
	Rs. 1001-2999	14.81	5.049		73.38	8.229	
	< Rs. 1001	13.50	4.861		69.50	3.804	
	Nuclear	16.59	5.466		75.36	8.874	
Any Family History of MI	Joint	15.93	4.971	0.009	74.67	8.227	0.086
	Extended	14.56	5.501		73.50	9.011	
	Yes	10.67	0.816		69.00	3.464	
Distance to nearest Health Centre	No	16.38	5.322	0.317	75.17	8.722	0.054
	Upto 5 Km	16.38	5.319		75.50	8.661	
	> 5 Km	15.34	5.404		72.28	8.348	

**DISCUSSION**

The finding of adequate level of knowledge among urban college students (26%) compared to (5%) rural college students may be due to the better access to both print and electronic media as evident by the response of the urban college students in the socio-demographic data regarding source of mental health information. Similar findings were reported by Amy C Watson et al,<sup>8</sup> where they found that students had some understanding of mental illness as a problem of the brain with biological and psychosocial causes. The finding of 28% urban college students

having favourable attitude towards mental illness as compared to the finding of 10% rural college students can be related to the finding of a positive correlation between knowledge and attitude towards mental illness. Similar findings were reported by Sushrut Jadhav et al,<sup>9</sup> who found a more liberal and tolerant attitude towards mental illness among the urban Indians than rural Indians having more stigmatizing attitudes in contrast to the findings of Mahto RK, Verma PK, Verma AN et al,<sup>10</sup> who did not find any significant level of difference between male and female students' attitude regarding mental illness. Better knowledge is often reported to result in improved attitudes towards people with mental illness and a belief that mental illnesses are treatable can encourage early treatment seeking and promote better outcomes.<sup>11</sup> The study finding of a significant difference between knowledge and attitude of rural and urban college students is supported by the findings of Vijay P More et al,<sup>12</sup> who found a significant difference between knowledge and attitude of urban and rural adults. However, no significant difference between knowledge and attitude score was found between rural and urban family members of mentally ill patients; also no correlation was found between knowledge of both rural and urban family members by Gogoi K and Baruah A.<sup>13</sup> A significant association of knowledge and attitude with the socio-demographic variables of stream of education, occupational status of father, monthly income of the family, source of mental health information among rural and urban respondents regarding mental illness at p<0.05 was found in the present study, as was seen in the findings of Mahto RK, Verma PK, Verma AN et al.<sup>10</sup> The findings of a significant association of knowledge with demographic variables of educational status of parents, family history of mental illness among urban respondents was supported by Farid F Youssef et al,<sup>14</sup> who found higher knowledge score among those people who knew someone with a mental illness. The finding of a significant association of knowledge demographic variable of economic status and educational status among urban respondents is also supported by the findings of Vijay P More.<sup>12</sup> Though no significant association was found among the knowledge and attitude with the demographic variable of age, sex, educational status, type of family and distance to nearest health centre in the present study; it has been found through research that opinion about mental illness plays vital role in long-term care of mentally ill patients and people frame,<sup>15</sup> a picture about mental illness and mentally ill patients in their mind, which generally guides their behaviour, so public must be educated to bring about positive changes in attitude.

**Conclusion:** The findings of 26% adequate knowledge score among urban college students followed by 5% knowledge score among the rural college students indicates the need for educational programmes to be implemented in the collegiate program to equip the younger generation with adequate knowledge, which would develop favourable attitude towards mental illness, which is essential for the better treatment and follow up of mental illness.

The present study also suggests the need of proper awareness programmes among the student community, which would help dispel any myths and misconceptions regarding mental illness.

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**Ethical clearance:** Taken.

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**Contribution of authors:** I declare that this work was done by the authors named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors.




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