Research Article

A Comparative Study to Assess the Knowledge and Attitude towards Mental Illness among Adults in Selected Urban and Rural Area


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Abstract: A comparative descriptive study was conducted to compare the knowledge, attitude regarding mental illness among adults between urban and rural area. A total of 100 adults were adopted in selected urban and rural areas by using purposive sampling technique. Data was collected by using structured knowledge questionnaire and Likert’s scale. Data was also analyzed by descriptive statistics (mean, median, frequency and percentage) and Chi squared ($\chi^2$) test. The result revealed that the majority 82% of adults had good knowledge in urban but 78% of rural adults had poor knowledge about mental illness. The majority 86% of rural adults had negative attitude towards mental illness whereas in urban, majority of 94% adults had negative attitude towards mental illness. The calculated ‘t’ value (‘t (99)’=13.3, p< 0.05) was greater than the table value (‘t (99)’=1.987) at 5% level. Hence, there was significant difference of knowledge scores of adults regarding mental illness between urban and rural. The calculated ‘t’ value (‘t (99)’=18.72, P< 0.05) was greater than the table value (‘t (99)’=1.987) at 5% level. Hence, there was significant difference of attitude score regarding mental illness among adults between urban and rural area. There was significant association of monthly family income ($\chi^2$= 46.409), education ($\chi^2$=28.652), occupation ($\chi^2$=35.84) and participation in mental awareness programme ($\chi^2$=12.857) at p<0.05 with knowledge level on mental illness. Moreover, there was also significant association of monthly family income ($\chi^2$= 48.377), education ($\chi^2$=27.938), occupation ($\chi^2$=27.166) and participation in mental awareness programme ($\chi^2$=8.975) at p<0.05 with attitude regarding. The study findings suggest the need of proper awareness programmes among the adults of rural and building positive orientation and encouraging preventive measures towards mental illness among adults is necessary for effective promotion of community mental health.

Keywords: Adult, attitude, comparative, knowledge, mental illness, rural, urban, area.

Introduction

Mental illness can occur at any time, to anyone. It occurs when a state of physical, mental, social and spiritual well-being is disturbed. According to World (Mental) Health Report 2019, 20 million people worldwide suffer from schizophrenia and 264 million suffering from depression. Mental disorders are a great source of distress, impaired productivity and diminished quality of life for several people and families.1,2 It was estimated that at least 58/1000 people have a mental illness and about 10 million Indians suffer from severe mental illness.3,4 Mental illness due to mental health problems leads to increasing burden to society and also harming the public. It is highly prevalent over the world, which is alarming to health workers in order to prevent and manage the mental health problems. A recent systematic review and meta-analysis of public attitudes have shown that despite
improvements in mental health literacy, public attitudes and desire for social distance have remained stable over time. A study done by Kabir et al. [6] found that literacy was significantly associated with positive attitudes towards the mentally illness, while the knowledge of the public interferes the attitudes towards mental illness and its treatment, therefore support from the community is required.

In regard with the knowledge regarding the contributing risk factors for psychiatric problems among people and perception about mental illness outcomes in terms of bio psychosocial consequences are greatly important aspect. Therefore, it is very necessary to refine and broaden nursing process skills in treatment planning to include the impact of mental illness on families and the community.

The knowledge and attitude toward mental illness is a key factor for every age group. In India, majority of adults residing in rural and urban communities face different kinds of mental illness due to various factors such as family problems, work pressure, economical issue, lack of employment and drought etc. Hence, it is an important to understand the knowledge and attitude of adults in the rural and urban community regarding mental illness in an order to spread the awareness about mental illness and availability of mental health-care services for the community.

Objectives
1) To assess the knowledge of adults regarding mental illness in selected rural and urban area.
2) To assess the attitude of adult towards mental illness in selected rural area and urban area.
3) To compare the knowledge and attitude scores of adults towards mental illness between selected rural and urban area.

Hypothesis
1) $H_1$: There will be significant differences of knowledge level and attitude score regarding mental illness of adults between urban and rural area.
2) $H_2$: There will be significant association of knowledge level and attitude score regarding mental illness of adults in urban and rural area with selected demographic variables.

Methodology
Study design: Non-experimental Comparative Descriptive Survey Design.
Study Area: The study was conducted in Urban and rural area of Solapur district.
Target population: All adults residing in the rural and urban area of Solapur district.
Accessible Population: Adults who were in the age group between 21 and 41 years residing in the selected rural and urban area of Solapur district and fulfilling sampling criteria.
Sample and sample size: In urban 50 and rural 50 adults were selected in the study.
Sampling technique: By using purposive sampling technique was used in this study.

Inclusion criteria
✓ Adults those were residing in selected urban and rural area.
✓ Adults those who were male and female in the age group between 21 and 41 years of age.
✓ Adults those able to read, speak and understand Marathi and/or Hindi and/or English.

Exclusion criteria
✓ Adults those who critically ill patients.
✓ Adults those were not willing to participate in the study.

Data collection instrument
The tool consists of three sections.

Section A: Demographic variables such as age, gender, marital status, educational qualification, occupation, family monthly income, type of family, religion, residence and participation in mental awareness programme.
Section B: It consists of 20 items of structured knowledge questionnaire regarding knowledge of Mental Illness.

Section C: It consists of 20 items of Five Point Modified Attitude Likert’s Scale regarding Mental Illness.

Reliability: The reliability of the tool is computed by using split half technique with the raw score method. The scores were calculated by split half method. The reliability coefficient (r) was calculated and the score is equal to 0.74. If score of (r) is greater than 0.70 then the test is reliable. As the score of (r) in this test is 0.68 the test is reliable. Since the knowledge and attitude reliability co-efficient >0.70 the tool was found to be reliable and feasible.

Validity: The tool was sent to 10 experts, out of whom 09 were received back with their valuable suggestions and comments on the study tool. The necessary modifications have been done as per the expert's advice.

Data collection procedure: Initially permission was taken from taluka and district health officer to conduct the study, then investigator visited house to house survey and found the adults those who were fulfilling sampling criteria. Samples were taken consent for data collection and given structured knowledge questionnaire and Five Point Modified Attitude Likert’s Scale to assess the knowledge and attitude regarding mental illness.

Data analysis: Data was checked for completeness and consistency and the data compiled by using descriptive statistics (mean, median, frequency, percentage), Karl Pearson’s Correlation Coefficient was used to find the relationship between knowledge and attitude scores, Unpaired ‘t’ test was done to compare the Knowledge score between rural and urban area. Chi square (χ²) test was done by using SPSS version 20.

Ethical consideration: Ethical clearance was obtained from institutional ethical committee.

Results
Part I: Frequency wise and percentage wise distribution of sample, according to their selected demographic variables.

Table 1. Frequency wise and percentage wise distribution of samples according to their age in urban and rural area (n₁=50; n₂=50)

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Category</th>
<th>Urban</th>
<th></th>
<th>Rural</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Percentage (%)</td>
<td>Frequency</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Age (in Years)</td>
<td>21 to 25</td>
<td>7</td>
<td>14</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>26 to 30</td>
<td>18</td>
<td>36</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>31 to 35</td>
<td>17</td>
<td>34</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>36 to 41</td>
<td>8</td>
<td>16</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>26</td>
<td>52</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24</td>
<td>48</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Religion</td>
<td>Hindu</td>
<td>33</td>
<td>66</td>
<td>31</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>17</td>
<td>34</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Monthly Family Income (in Rupees)</td>
<td>Above 20001</td>
<td>1</td>
<td>2</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Below 5000</td>
<td>3</td>
<td>6</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>5001 to 10000</td>
<td>18</td>
<td>36</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>10001 to 20000</td>
<td>28</td>
<td>56</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>
Part II: Comparison of Level of knowledge regarding Mental Illness between Urban and Rural area.

The above Figure 1, depicts that majority 82% of adults had good knowledge in urban but 78% of rural adults had poor knowledge about mental illness.

Table 2. Mean, standard deviation and ‘t’ value of knowledge score regarding mental illness between urban and rural area (n₁=50; n₂=50)

<table>
<thead>
<tr>
<th>Area</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean difference</th>
<th>Df</th>
<th>‘t’ value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>7.78</td>
<td>2.62</td>
<td></td>
<td>8.38</td>
<td>13.3</td>
<td>0.000</td>
</tr>
<tr>
<td>Urban</td>
<td>16.16</td>
<td>3.6</td>
<td></td>
<td>99</td>
<td>1.987</td>
<td>0.050</td>
</tr>
</tbody>
</table>

The table 2 shows that the mean knowledge score in urban adults was higher as compared to rural adults. The calculated ‘t’ value (‘t (99)’=13.3, p< 0.05) was greater than the table value (‘t (99)’=1.987) at 5% level. Hence, the H₁ was accepted and concluded that there was significant difference of knowledge scores of adults regarding mental illness between urban and rural.
Part III: Comparison of attitude regarding Mental Illness between Urban and Rural area.

Figure 2. Distribution of study participants according to attitude between urban and rural.

Figure 2, revealed that majority 86% of rural adults had negative attitude towards mental illness whereas in urban, majority of 94% adults had negative attitude towards mental illness.

Table 3. Mean, standard deviation and ‘t’ value of attitude score regarding mental illness between urban and rural area (n₁=50; n₂=50)

<table>
<thead>
<tr>
<th>Area</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Mean difference</th>
<th>Df</th>
<th>‘t’ value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>33.7</td>
<td>12.5</td>
<td></td>
<td>99</td>
<td>18.72</td>
<td>0.000</td>
</tr>
<tr>
<td>Urban</td>
<td>81.2</td>
<td>12.8</td>
<td>47.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table 3 shows that the mean attitude score in urban adults was higher as compared to rural adults. The calculated ‘t’ value (‘t (99)=18.72, p< 0.05) was greater than the table value (‘t (99)=1.987) at 5% level. Hence, the H₁ was accepted and conclude that there was significant difference of attitude score regarding mental illness among adults between urban and rural area.

Part IV: Association between Level of Knowledge and demographic variables in Urban and Rural.

The calculated chi-square ($\chi^2$) value is more than the table value, there was significant association of some demographic variables such as monthly family income ($\chi^2=46.409$), education ($\chi^2=28.652$), occupation ($\chi^2=35.84$) and participation in mental awareness programme ($\chi^2=12.857$) at p<0.05, with knowledge level on mental illness. Hence, the H₂ was accepted.

Part V: Association between Attitude score and demographic variables in Urban and Rural.

In regard, association of attitude score towards mental illness with demographic variables of adults, the calculated chi-square ($\chi^2$) value is more than the table value and there was significant association of monthly family income ($\chi^2= 48.377$), education ($\chi^2=27.938$), occupation ($\chi^2=27.166$) and participation in mental awareness programme ($\chi^2=8.975$) at p<0.05. Hence the H₂ was accepted.

Discussion

There was marked significant differences between rural and urban adults’ knowledge on mental illness. In the present study, among the rural area participants’ majority of 39(78%) had poor, 08(16%) had an average, which was very low 31(62%) compared to the study conducted in Punjab. In urban area majority 41(82%) of participants had good knowledge, 07(14%) had an average knowledge, but in other study it was higher 32(64%).
In relation of comparison of level knowledge, the mean knowledge score in urban (16.16) adults was higher as compared to rural (7.78) adults. The study done in Punjab, could not found significant differences of knowledge scores between urban and rural areas.\(^8\)

In concern with the attitude of adults, majority 43(86\%) had negative and only 7(14\%) had positive attitude towards mental illness in rural area whereas, in urban, majority 47(94\%) of them had positive and only few 03(06\%) of them had negative attitude towards mental illness. There was a huge differences found in other study, where 27 (54\%) of adults showed neutral attitude in urban area and 29 (58\%) adults had positive attitude in rural area regarding mental illness.\(^8\) This may be due to perception of mental illness varies from region to region. But there was a similar finding were revealed in other studies that (95\%),\(^9\) (90\%),\(^10\) (97.5\%)\(^11\) of adults had positive attitude toward mental illness.

Moreover, regarding the comparison of attitude mean score of mental illness among adults, there was higher (81.2) mean score in urban compared to rural (33.7). The study done in Punjab, could not observed significant differences of attitude score between urban and rural areas.\(^8\)

In the current study found that there was significant association between Monthly Family Income (\(\chi^2= 46.409\)), Education (\(\chi^2=28.652\)), Occupation (\(\chi^2=35.84\)), Exposure with mentally ill patient (\(\chi^2=24.801\)) and Participation in mental awareness programme (\(\chi^2=12.857\)), with Knowledge level on Mental Illness, whereas in other study there was only significant association of knowledge score with educational qualification and monthly income of adults in urban and rural area,\(^8\) significant association between the marital status and knowledge of adults.\(^9\) Hence, it illustrates that as the education progress, the knowledge may inclines.

In regard, association of attitude score towards mental illness with demographic variables of adults, there was significant association of monthly family income (\(\chi^2= 48.377\)), education (\(\chi^2=27.938\)), occupation (\(\chi^2=27.166\)), exposure with mentally ill patient (\(\chi^2=16.304\)) and participation in mental awareness programme (\(\chi^2=8.975\)) whereas in other study\(^9\) there was significant association with educational status, religion, and sensitization program.

**Conclusion**

The findings of this study highlighted that majority of the adults had good knowledge in urban in comparison with rural but majority of adults had poor knowledge in rural compared to urban regarding mental illness, this may be due to highly educated people reside in urban and positive attitude toward mental illness. Moreover, majority of urban adults had positive attitude, but almost similar majority of rural adults elicited negative attitude towards mental illness. The knowledge and attitude of had been associated with monthly family income, education, occupation, exposure with mentally ill patient and participation in mental awareness programme. However, increasing the awareness about mental illness is significantly necessary in rural adults. Furthermore, building positive orientation and encouraging preventive measures towards mental illness among adults is necessary for effective promotion of community mental health.

**Conflicts of interest:** There is no conflict of interest of any kind.

**References**


