Gender Based Differences in Mental Health Outcomes among Young Adults in Srikakulam, Andhra Pradesh

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Abstract

Background: According to WHO “Health is a state of physical, mental & social wellbeing” but mental health needs are neglected due to the low availability of services & less community participation. Young adults are more prone to get mental health problems due to transition both physically & mentally. Females have more mood disorders & males have substance use disorders, gender disparities in mental health are not clear, so we aimed to investigate the gender differences in mental health outcomes.

Objective: To assess individual & social factors responsible for mental health problems & to estimate the level of awareness regarding mental health services available in the community.

Materials & methods: This cross-sectional survey was carried out among young adults (18-25 years). Participants were given (GHQ-12), a self-administered questionnaire. The collected data was stored & tabulated in Microsoft Excel. Mean, Percentages, and Chi-square tests were used to find the association & differences between various factors using Microsoft Excel.

Results: Out of 240 students only 29% were found to have awareness regarding mental health services at a community level. Female students were found to have higher stigma rather than males which is statistically significant (chi square-6.285, p-value-0.018).

Conclusion: Males & females have mental health issues but there are no significant gender differences. Females were found to have more stigma. Mental health awareness programs at institutes can promote good mental health.

Keywords: Gender differences, health-seeking behaviors, mental health awareness, stigma, young adults.

Introduction

Mental health is an integral part of health, not only mere absence of mental illness.[¹] According to WHO “Mental health is a state of wellbeing in which an individual realizes his or her potential, can cope with normal stress of life, can work productively and is able to make a contribution...
Mental health problems are universal, occurs in all countries, under all ages. Mental health issues are multifactorial, associated with various factors like standard of living, academic pressure, discrimination, myths, stigma, lack of awareness results in disease severity. Adolescent years are peak time for the onset of common mental disorders if left untreated leads to suicides. 1 in every 100 deaths is a suicide, one suicide for every 25 minutes, 90% of suicides are due to mental health issues. Mental health issues increase with increasing age resulting in premature deaths, so it is necessary to investigate at the age when they are known to occur. The greatest population gets benefited by promoting factors for good mental health care, leaving the effective, yet little specialist care available for the people with adverse mental health issues. Women & men differ in terms of their role, responsibility, knowledge & position in the society, their access & use of health services influence the vulnerability to disease. Evidence linking gender socialization to mental health problems is rare, so the study was conducted to identify gender differences in mental health outcomes & to explore the factors associated with it.

Materials & Methods

Study design: Cross-sectional, descriptive type.

Study setting: Engineering & degree colleges of Srikakulam, Andhra Pradesh.

Study period: 4 months (1st April 2022 to 31st July 2022).

Inclusion criteria:

- All the available students from different departments were covered based on voluntary participation.

Exclusion criteria:

- Students absent on the day of our visit.
- Students who are writing exams on the day are also excluded.

Sample size: A total of 240 students were selected through convenient sampling & also meeting the inclusion & exclusion criteria were considered as study subjects.

Sampling method: First from the list of colleges near to Srikakulam town, 5 colleges were selected following multi-stage random sampling method and then 3 colleges have given permission for data collection, I have collected from 2 colleges thereby my sample size got completed.

Data collection tools: General health questionnaire (GHQ-12), is a self-administered questionnaire designed to detect current mental health disturbances and disorders as screening tools in primary care settings.

Methodology

This is a cross-sectional, questionnaire based study carried out in an engineering & degree college of Srikakulam during the above mentioned study period, after explaining the research & its purpose, verbal consent was taken from all the participants, the consented participants were administered with general health questionnaire (GHQ-12) to identify the presence of nonspecific psychiatric morbidities like anxiety, depression & psychological distress & other common mental disorders. The study tool was pretested & prepared after an extensive review of available literature. It is a tool with a 2 point scoring (Yes/No). Self-administered questions were added, Checking was done, that there was no discussion among them while filling, the questionnaire was filled with the help of PAPI (paper & pencil interview), the doubts were clarified by the investigator, and confidentiality was maintained throughout the study. Youth were asked regarding positive about life, suicidal ideation, capability of own decision making. For each item negative emotion was coded as 1 & 0 otherwise. The items were summed up for a total score ranging (0-12), indicating mental health problems with increased scores. Gender discrimination was questioned by asking any gender-based abuse & any biased allocation of domestic work at home.

The collected data was stored & tabulated in Microsoft Excel, the questions related to cognitive symptoms, anxiety, depression and somatic symptoms were categorized dichotomously as yes/no. mean, percentages, chi square tests were used to find the association between various factors using Microsoft Excel.
Institutional ethics committee has approved to perform before the start of the study.

**Results**

A total of 240 students, 120 boys & 120 girls, participated in the study. The mean age of students is 21 years.

In this study, 40% of young adults reported three or more symptoms suggestive of mental health problems.

Among overall students, 50 (41.6 %) of males & 47 (39.2%) of females are affected [Table-1].

Inability to concentrate is the highest reported symptom next to facing trouble in overcoming difficulties & feeling depressed is the lowest recorded symptom among young adults based on the GHQ12 score.

Several factors have shown statistically significant associations in showing symptoms suggestive of mentally deviant behaviors.

Family history of mental illness has a strong statistical association; factors like feelings of disfigurement, sleeping problems, and lack of own decision-making, are associated with mental health problems which are significant with p-value <0.05. [Table-1]

Social factors like parental education, and type of family have no significant association, and factors like daily physical activity, awareness of mental health importance, duration of social media usage, addictions, and associated stigma have no association in causing mental health problems.[Table 1].

There are mental health issues in both males and females but gender differences in terms of suicidal ideas, own decision-making, gender abuse, and others remained neutral, females are more interested in learning new things than males, and females are less aware of mental health importance in day to day life, stigma is more associated with females which are statistically significant.[Table-4]

**Table 1: Distribution of Young Adults Based on Their GHQ Score and Psychosocial Factors & Other Factors.**

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>GHQ SCORE</th>
<th>CHI SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;3</td>
<td>&lt;3</td>
</tr>
<tr>
<td></td>
<td>97</td>
<td>143</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>50(48.5)</td>
<td>70(71.5)</td>
</tr>
<tr>
<td>Females</td>
<td>47(48.5)</td>
<td>70(71.5)</td>
</tr>
<tr>
<td>Parents education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary education</td>
<td>54(55.6)</td>
<td>85(59.44)</td>
</tr>
<tr>
<td>Secondary education</td>
<td>43(44.3)</td>
<td>58(40.55)</td>
</tr>
<tr>
<td>Type of family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>73(75.25)</td>
<td>106(74.1)</td>
</tr>
<tr>
<td>Joint</td>
<td>24(24.7)</td>
<td>37(25.8)</td>
</tr>
<tr>
<td>Mental health awareness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>51(52.57)</td>
<td>92(64.3)</td>
</tr>
<tr>
<td>No</td>
<td>46(47.4)</td>
<td>51(35.66)</td>
</tr>
<tr>
<td>Stigma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>72(74.2)</td>
<td>116(81.11)</td>
</tr>
<tr>
<td>No</td>
<td>25(25.7)</td>
<td>27(18.88)</td>
</tr>
<tr>
<td>Family history of mental illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>19 (19.50)</td>
<td>11 (7.69)</td>
</tr>
<tr>
<td>No</td>
<td>78 (80.4)</td>
<td>132 (92.3)</td>
</tr>
</tbody>
</table>
FACTORS | GHQ SCORE | CHI SQUARE
---|---|---
| >3 | <3 |
Physical activity | 97 | 143 | P value-0.12
Yes | 66 | 31 | 143
No | 110 | 33 | 0.12
Feel of disfigurement | 54(55.6) | 25(17.4) | P value-<0.00001
Yes | 54(55.6) | 25(17.4) | 0.00001
No | 43(44.32) | 118(82.51) | 0.12
Difficulty in sleep | 40(41.23) | 14(9.79) | P value <0.00001
Yes | 40(41.23) | 14(9.79) | 0.00001
No | 57(58.76) | 129(90.20) | 0.12
Own decision making | 60(61.85) | 130(90.90) | P value <0.00001
Yes | 60(61.85) | 130(90.90) | 0.00001
No | 37(38.14) | 13(9.09) | 0.12
Addictions | 9 | 5 | P value 0.67
Yes | 9 | 5 | 0.67
No | 41 | 65 | 0.12

Table 2: Gender Differences in Mental Health Outcomes

<table>
<thead>
<tr>
<th>Psychosocial factors</th>
<th>Males</th>
<th>Females</th>
<th>P- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty in sleep</td>
<td>22(18.3)</td>
<td>32(26.6)</td>
<td>0.12</td>
</tr>
<tr>
<td>Feel of disfigurement</td>
<td>40(33.3)</td>
<td>39(32.5)</td>
<td>0.12</td>
</tr>
<tr>
<td>Difficulty in control of thoughts</td>
<td>35(29.1)</td>
<td>42(35)</td>
<td>0.333</td>
</tr>
<tr>
<td>Interested in learning things</td>
<td>105(87.5)</td>
<td>114(95)</td>
<td>0.039</td>
</tr>
<tr>
<td>Own decision making</td>
<td>99(82.5)</td>
<td>91(75.8)</td>
<td>0.203</td>
</tr>
<tr>
<td>Positive about life</td>
<td>81(67.5)</td>
<td>85(70.8)</td>
<td>0.57</td>
</tr>
<tr>
<td>Suicidal ideas</td>
<td>14(11.6)</td>
<td>10(8.33)</td>
<td>0.38</td>
</tr>
<tr>
<td>Level of awareness</td>
<td>81(67.5)</td>
<td>62(51.66)</td>
<td>0.012</td>
</tr>
<tr>
<td>Stigma</td>
<td>86(71.6)</td>
<td>102(85)</td>
<td>0.012</td>
</tr>
<tr>
<td>Gender-based abuse</td>
<td>5(4.16)</td>
<td>1(0.83)</td>
<td>0.9</td>
</tr>
<tr>
<td>Cooked or cleaned at homes</td>
<td>95(79.1)</td>
<td>94(78.33)</td>
<td>0.87</td>
</tr>
<tr>
<td>Physical activity</td>
<td>92(76.6)</td>
<td>84(70)</td>
<td>0.24</td>
</tr>
<tr>
<td>Academic adaptability</td>
<td>76(63.3)</td>
<td>81(67.5)</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Discussion

Most of the earlier studies were done in early adolescence but late adolescence & young adulthood is the period of changing identity, where the gender gap emerges in mental health.

Earlier studies have used different scales to identify only depression, anxiety & psychological distress, which is practically difficult for screening purposes for different ages.

Mangal et al, used GHQ12 questionnaire which is a short, simple & reliable tool for identifying common mental health problems similar to the present study.[3]

- Mangal et al, Common mental disorders and their determinants in adolescent school girls found that almost half (48.78%) of adolescent girls reported 3 or more symptoms from GHQ12 score, feeling of disfigurement, difficulty sleep, academic pressure, comparison with peers has a statistically significant association with mental health problems as per GHQ scores which is similar to the present study.[3]
- Anjara et al, has found parents’ education & occupation are not significantly associated but wealth has a negative association with reported mental health problems.[9]
• Substance use and suicidal ideation among adolescents in Kerala used a personal experience screening questionnaire (PESQ) & suicidal ideation scale (SIS) for screening. They approved that substance use is positively correlated with suicidal ideation, Substance abuse is more in males but suicidal ideation is more in females.[10]

• Swikruthi Behera, Srinikhila Satya Santhoshi Lakshmi Paluri, Alpana Mishra have done a cross-sectional study on students of professional colleges in Visakhapatnam to estimate the prevalence of psychological stress, anxiety, & depression using a self-administered questionnaire, they found that higher prevalence in males, nursing students are having more depression than other professional degrees, medical students are having lowest depression than any other non-medical professionals. [11]

• Earlier study examined 467 young adults to identify the impact of the duration of screen time on mental health and found that no harm & may be beneficial. [12]

• Young adults who are having social contacts are feeling secure & reported less depression & stress than others. [13]

• Bansal et al, reported that difficulty in coping with studies which is similar to the present study. [14]

Conclusion

The present study found the prevalence of common mental health issues among young adults(18-24 years) is 40%. The study concludes that there are mental health issues but gender differences are insignificant, and family history is showing a strong association, so targeted screening for individuals having a family history of mental illness is beneficial, stigma is less in males than females and mental health awareness is more in males than females, so there is a need for improving mental health importance awareness in the community.

Ethical Clearance: Taken from the Institutional Ethical Committee

Conflict Of Interest: Nil.

Funding: Self.

References