Mental Well-being Among Adolescents: A Cross-Sectional Survey

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Abstract

Background Adolescent mental well-being is a concern for health care specialists as the prevalence of mental health issues appears to peak in this age group.

Aim Our aim was to determine the level of mental well-being among adolescents.

Methods The study was conducted using the descriptive survey approach among 720 adolescents of 16 to 17 years. Baseline proforma and the Warwick–Edinburgh Mental Well-being Scale were the tools used to collect the data.

Results Almost three-fourth of adolescents had good mental well-being, whereas 2.08% experienced poor mental well-being. The chi-square test showed a significant association between mental well-being and selected demographic variables such as stream under study ($p = 0.001$), type of family ($p = 0.006$), area of residence ($p = 0.001$), educational status of the father ($p = 0.011$), and occupational status of the father ($p = 0.001$).

Conclusion Appropriate interventions by health care professionals are needed to focus on submerged risky behaviors and obstacles to promote mental well-being among adolescents.

Introduction

Teenage is a vital phase for building social and emotional elements that are significant for overall well-being. Considering the physical and physiological development that occurs in this period, the early and late adolescent groups are at quite distinct life stages and are biologically, cognitively, socially, and emotionally noticeable. Researchers have predicted that worldwide, nearly 20% of teens have behavioral or mental health issues; yet they remain underdiagnosed and unsorted. A report published in Mental Health America, 2022, depicted that 15.08% rates among adolescents was recorded in the world. Juvenile delinquency, physical or sexual abuse, addiction to psychoactive substances, academic rivalry, arrogance, frequent absenteeism from school, or dropping out are the major concerns among teens. These problems have a great impact on their involvement in curricular activities, scholastic achievement, relationship building, and mental and emotional well-being.

Around the globe, from the data, it is evident that nearly 10 to 20% of adolescents experience mental health issues; yet they remain underdiagnosed and unsorted. A report published in Mental Health America, 2022, depicted that 15.08%
of youth (between the age of 12 and 17 years) reported suffering from at least one major depressive episode in the past year. Indicators of mental illness can be neglected for a number of reasons, such as poor knowledge or understanding about mental well-being among parents or stigma that prevents them from obtaining care.\textsuperscript{3–7} Emotional instability commonly arises during the adolescent period. Hence, numerous risk-taking behaviors, such as the use of psychoactive substances or sexual violence, emerge during adolescence.\textsuperscript{1,8} These behaviors can be an unfavorable approach to dealing with mental health issues and can adversely affect and greatly influence the mental well-being of adolescents.\textsuperscript{5}

Based on the literature available on youth, there are distinct aspects that are anticipated to be problematic in nature and impede their mental well-being.\textsuperscript{1} The results of the 2015 survey done by the National Crime Records Bureau stated that around 8,934 adolescents commit suicide every year. In India, numerous studies show the prevalence of mental illness among the teenage population ranges from 0.48 to 29.40%. School-going teenage girls are more prone to stress and depressive symptoms. Almost 40 to 90% of the young population diagnosed with depressive disorder also showed symptoms of anxiety disorders, substance abuse, conduct disorders, and personality disorders.\textsuperscript{3} Substance abuse is a national concern in developing countries. The survey conducted in 2016 showed that the existence of binge drinking among the adolescent population was almost one-fourth of a percentage point; furthermore, males were at great risk.\textsuperscript{1,5}

It is vital to provide the necessary interventions to safeguard the mental health of youth, which are driven to enhance the protective factors and upgrade the opportunities to prevent risk-taking behaviors.\textsuperscript{8,9} There are certain measures to be implemented to promote adolescent mental health that aid in heightening resilience, so they can confront challenging circumstances or hardships in a positive way.\textsuperscript{1,2} Early detection and treatment involve addressing the needs of adolescents with defined mental health conditions.\textsuperscript{10} School and community-based interventions such as cognitive behavior models, life skills, problem solving, and stress management are known to decrease anxiety and depressive symptoms among youth.\textsuperscript{6,11} Hence, health professionals need to take specific actions to promote mental well-being, prevent mental disorders, provide care, enhance recovery, and reduce the mortality, morbidity, and disability of persons with mental disorders, including adolescents.\textsuperscript{1,12,13}

**Materials and Methods**

A cross-sectional descriptive survey was undertaken to assess the mental well-being of adolescents. The investigator prepared a list of preuniversity colleges in Mangalore’s urban zone and selected six preuniversity colleges using cluster random sampling techniques. A total of 720 adolescents between the ages of 16 and 17 years studying in the First Year Arts, Commerce, and Science streams were selected for the study. The adolescents who were studying at preuniversity colleges on part-time or evening courses as well as being diagnosed with mental illness were excluded from the study. The sample size was calculated based on the previous study results conducted by Kaur et al\textsuperscript{14} by using a statistical formula:

\[ n = \frac{Z_\alpha \cdot p \cdot (1 - p)}{e^2} \]

where \( Z_\alpha = 1.96 \) at 95% of CI, \( p = 78.6\% \) (80%), allowable error (\( e \)) = 3%, \( n = 718 \), and final sample size = 720.

**Data Collection Instruments**

**Part I:** The demographic proforma consists of 13 items such as age (in years), gender, number of siblings, stream of study, area of residence, family type, educational status of the parents, occupational status of parents, family monthly income, and history of alcohol or drug abuse among parents.

**Part II:** The Warwick–Edinburgh Mental Well-being Scale (WEMWB).\textsuperscript{15} A standardized tool consisting of 14 items on a 1 to 5 Likert scale, 1 = none of the time to 5 = all of the time, was used to assess the mental well-being of adolescents. Scores range from a minimum of 14 to a maximum of 70 points. The reliability of the instrument was found to be 0.89, which indicated that the tool was highly reliable.

The study was approved by the Institutional Central Ethics Committee with registration number: NU/CEC/2020/0332 to carry out the study. Formal written permissions were obtained from the author of the WEMWB scale and the principals of six selected preuniversity colleges in the Mangalore zone. The pilot study was conducted in two preuniversity colleges at Mangalore, and it was found feasible and practicable. The main study was carried out from September 2021 to December 2021. Prior to the data collection, parental assent and informed consent were obtained by the investigator. The subjects were briefed on the aims and objectives of the study, and confidentiality was assured.

**Statistical Analysis**

The data analysis was performed using IBM Statistical Package for the Social Sciences (SPSS) version 23.0. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to describe the demographic variables and total scores of the WEMWB scale. Chi-square or Fisher’s exact test was used to find the association between mental well-being and selected demographic variables.

**Results**

The demographic data of the adolescents showed that the mean age was 17 years. The majority (\( n = 515, 71.9\% \)) were males. With regard to the number of siblings, more than half (\( n = 417, 57.9\% \)) of the adolescents had one to two siblings. The highest number of participants (\( n = 460, 63.8\% \)) belonged to commerce, 26.3% to science, and 9.9% to the arts streams. Three-fourths of the participants (\( n = 515,
75.8%) were from nuclear families, 53.5% lived in urban areas. The majority of them (n = 291:298, 40%) reported that their parents had a high-school education. Considering the family’s monthly income, 24.6% had a monthly income of Rs. 10,001 to Rs. 15,000 and 4.5% of the participants stated that their father consumed alcohol.

The data in Table 1 depict that the majority of the adolescents (73.61%) had high mental well-being, 24.30% had moderate mental well-being, and 2.08% had low mental well-being with a mean ± standard deviation (SD) of 53.61 ± 8.46.

Table 2 showed a highly significant association between mental well-being and selected demographic variables such as stream under study (p = 0.001), type of family (p = 0.006), area of residence (p = 0.001), educational status of the father (p = 0.011), and occupational status of the father (p = 0.001).

**Discussion**

The present study findings depict that the majority of the adolescents (73.61%) had good mental well-being, 24.30% had average mental well-being, and 2.08% had poor mental well-being with mean ± SD of 53.61 ± 8.46. The findings are compatible with the study conducted by Khan et al, in which half the number of adolescents (43.4%) showed a moderate level of psychological well-being, 33.3% had a high level, and 23.2% reported a low level of psychological well-being. The findings of a similar study conducted by Lekshmi et al showed the mean ± SD of the well-being score as 85.17 ± 11.38 with a 95% CI. These findings concur with the study conducted by Brandseth et al, which depicted the mean ± SD of the adolescent mental well-being score as 3.50 ± 0.88.

The current study results showed a significant association between mental well-being and selected demographic variables such as age (p = 0.001), domicile (p = 0.023), and type of school (p = 0.042). The present study results are congruent with the study carried out by Lekshmi et al, and they show a significant association between the well-being of adolescents and sociodemographic variables such as age (p = 0.001), domicile (p = 0.023), and type of school (p = 0.042).

**Table 1** Frequency, percentage distribution, mean, and standard deviation of mental well-being among adolescents (N = 720).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Grading</th>
<th>Range of score</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
<th>Mean ± SD</th>
<th>Mean %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of mental well-being</td>
<td>High mental well-being</td>
<td>70–61</td>
<td>530</td>
<td>73.61</td>
<td>53.61 ± 8.46</td>
<td>76.58</td>
</tr>
<tr>
<td></td>
<td>Moderate mental well-being</td>
<td>60–43</td>
<td>175</td>
<td>24.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low mental well-being</td>
<td>42–14</td>
<td>15</td>
<td>2.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Abbreviation: SD, standard deviation.
Note: Minimum score = 14.
Note: Maximum score = 70.

**Table 2** Association between mental well-being among adolescents with selected demographic variables (N = 720).

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variable</th>
<th>Chi-square value</th>
<th>df</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age (in years)</td>
<td>1.000</td>
<td>1</td>
<td>1.000</td>
</tr>
<tr>
<td>2.</td>
<td>Gender</td>
<td>1.656 (Fisher’s exact)</td>
<td>1</td>
<td>0.198</td>
</tr>
<tr>
<td>3.</td>
<td>No. of siblings</td>
<td>3.761</td>
<td>3</td>
<td>0.288</td>
</tr>
<tr>
<td>4.</td>
<td>Stream under study</td>
<td>48.865</td>
<td>2</td>
<td>0.001*</td>
</tr>
<tr>
<td>5.</td>
<td>Type of family</td>
<td>12.547</td>
<td>2</td>
<td>0.006*</td>
</tr>
<tr>
<td>6.</td>
<td>Area of residence</td>
<td>14.212</td>
<td>1</td>
<td>0.001*</td>
</tr>
<tr>
<td>7.</td>
<td>Educational status of father</td>
<td>16.649</td>
<td>5</td>
<td>0.011*</td>
</tr>
<tr>
<td>8.</td>
<td>Educational status of mother</td>
<td>11.894</td>
<td>5</td>
<td>0.064</td>
</tr>
<tr>
<td>9.</td>
<td>Occupational status of father</td>
<td>24.193</td>
<td>5</td>
<td>0.001*</td>
</tr>
<tr>
<td>10.</td>
<td>Occupational status of mother</td>
<td>8.668</td>
<td>5</td>
<td>0.123</td>
</tr>
<tr>
<td>11.</td>
<td>Family monthly income (in rupees)</td>
<td>6.122</td>
<td>4</td>
<td>0.190</td>
</tr>
<tr>
<td>12.</td>
<td>History of alcohol/drug abuse of father</td>
<td>4.778</td>
<td>1</td>
<td>0.092</td>
</tr>
<tr>
<td>13.</td>
<td>History of alcohol/drug abuse of mother</td>
<td>3.151</td>
<td>1</td>
<td>0.207</td>
</tr>
</tbody>
</table>

Abbreviation: df, degree of freedom.
Note: p-Value > 0.05.
*Highly significant.
Conclusion

The present study revealed that nearly one-fourth of adolescents need interventions to promote their mental well-being. Serious efforts by the health care professionals in collaboration with the colleges and the parents are therefore essential to safeguarding the wellness of adolescents.

Note

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Conflict of Interest
None declared.

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