



Prevalence of depression and its associated factors among adolescents: A descriptive study

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Abstract

Background/objectives: Depression is one of the common mental health issues among adolescents. Aim of the study was to assess the prevalence of depression and its associated factors among adolescents.

Design: A non-experimental descriptive study was designed and conducted.

Settings/participants: From 22nd till 28th March 2022 seven schools participated in the study. In total, 210 participants were included. The participants were within the age group 13-16 years.

Methods: The data collection was performed based on socio-demographic variable questionnaire, associated factor questionnaire and a standardized data collection form for depression screening (i.e. short mood and feeling questionnaire(SMFQ)). Descriptive and inferential statistics were conducted.

Results: In total, 210 participants the prevalence of depression was 37%. Some of the associated factors of depression were adolescents never share their feelings with their parents, Parents never boost their self-esteem, parents never satisfy their basic needs, followed by

parents never supports them in choosing their career and gets angry on them for a small reason. None of the socio-demographic variables were significantly associated with depression.

Conclusion: The prevalence of depression among adolescents was one third and was associated with multiple factors.

Keywords: Adolescents, Depression, Prevalence

Introduction

In terms of growth and development, adolescence may be described as a period of transition between childhood and maturity. The world health organization defines an adolescent as someone between the ages of 10 and 19 years old. Adolescence is often equated with puberty and the subsequent cycle of physical changes that lead to reproductive maturity in some societies. ¹

Globally, 10-20% of children and adolescents suffer from some form of psychological distress. ² Social isolation, stigma, discrimination, and other human rights abuses threaten the well-being of adolescents with mental illnesses. They may have challenges in school, risky behavior, and physical problems. Fourteen

percent of teenagers are expected to suffer from a mental illness that goes undiagnosed, according to the WHO.³

This widespread mental health disease, which increases the risk of suicide and has been linked to social and academic difficulties, is known as depression.⁴ Mood swings and other short-lived emotional responses to the day to day stressors are often distinct from depression. Depression can have severe repercussions for one's health if it is both frequent and severe. As a result, depression is frequently regarded as the leading cause of disability and as making a significant contribution to the global disease burden.⁵

Depression's symptoms might be difficult for parents to identify since they can be mistaken for the ordinary feelings of adolescence and adolescent adjustment. American Academy of Child and Adolescent Psychiatry (AACAP) indicates that signs of depression in adolescents include: irritability, sorrow, and tears; alterations in appetite or weight; and decreased interest in activities. Suicidal thoughts, withdrawal symptoms and deteriorating grades are some of the most common symptoms of boredom, as are complaints of decreased energy, difficulties concentrating, alcohol or drug abuse, and other mood disturbances.⁶ Family history of depression and psychosocial stress are the two most important risk factors for depression in adolescence. A combination of genetic, developmental, sex hormones, and psychological stressors all contribute to an increased risk of adolescent psychiatric problems. Depression is therefore described as a collection of certain symptoms and associated impairments.⁷

Adolescent depression is one of the most common medical conditions that goes undiagnosed. Because of the emotional turmoil caused by the transition from childhood into adulthood, adolescents are more

susceptible to depression. Parents and teachers should be made aware of the need to recognize and support sad students in their schools.⁸ This study aimed to assess the prevalence of depression and its associated factors among adolescents.

Methods

Study design and settings: The research design selected for the study was a non-experimental descriptive research design, and the settings of the study was selected schools of Bangalore.

Ethical consideration: The study was approved by the ethics committee of Ramaiah Medical College on 30th July 2021 (Reg.No ECR/215/Inst/KA/2013/RR-19).

Participants: The participants of this study were adolescents studying in class 8th, 9th and 10th of selected schools Bangalore.

Data collection form: Data collection form consists of three sections:

Section A: Socio-demographic data: It includes Age, gender, educational level, type of family, parents marital status, monthly family income, number of siblings, leisure activities, number of friends.

Section B: Associated factors questionnaire: It includes breakdown of family relationships, troubles at school, Physical abuse by family members, alcohol abuse, Smoking by father, lack of supportive environment in school, spending less time in studies and, lower level of participation in cultural activities.

Section C: Mood and feelings questionnaire: short version (SMFQ 1995): The Short Mood and Feelings Questionnaire (SMFQ; Angold et al., 1995) is a 13- item self-report questionnaire designed to measure core depressive symptomology in children and adolescents aged 6- 17 years old. More specifically, it assesses the presence of affective and cognitive symptoms of depression that have been experienced in the past 2

weeks. Items are rated on a 3-point Likert scale (not true = 0; sometimes true = 1; true = 2). Scores are calculated by summing the point values on each item response. ⁹

Scoring and Interpretation: The scores range from 0 to 26. Higher scores on the Moods and Feeling Questionnaire: Short version (SMFQ) suggests more severe depressive symptoms.

Score 0 – 12 = Not Depressed

Score 13 – 26 = Depressed

Data Collection Methods

This study investigated depression among adolescents from 22nd till 28th March 2022. A formal permission was obtained from the respective authority of 7 selected schools’ namely, LCR School, Balak English School, Vidyashree public school, Ramaiah high school, Sunrise English School, SrinidhiVidhyaNiketan high school, Subash Memorial English School, Bangalore. The purpose of the study was explained by the researcher to all the students of class 8th, 9th and 10th standards. Assent and consent forms were distributed to the students who were willing and told to get the forms back with their parent’s signatures. The date of data collection was given by the particular schools as per their convenience. Total of 210 subjects who fulfilled the inclusion and exclusion criteria were selected for the study including all 7 above-mentioned schools by using **systematic random sampling technique**. Time taken to complete the three sets of the questionnaire was around 30-40 minutes.

2.7 Statistical analysis

Descriptive Statistics and Inferential Statistics were used for analysis the data, Frequency and percentage

Table 1: Frequency and percentage distribution of participants with regard to depression. n=210

Depression	Frequency(f)	Percentage (%)
Not depressed	133	63.3
Depressed	77	36.7

distribution were used to describe the socio-demographic variables and associated factors. Mean and standard deviation were used for depression scores and Chi-square test was used to find out the association between depression and selected socio-demographic variables respectively.

Results

Participants: The adolescents studying in class 8th, 9th and 10th in selected schools of Bangalore.

Main results

The Table 1 reveals that out of 210 adolescents 63.3% were found to be not depressed, whereas 36.7% were found to be depressed.

The Table 2 reveals that mean of depression among participants who were not depressed are 8.41± 3.124 and those who were depressed are 15.65 ± 2.684 with a total mean of 11.07 ± 4.58.

Table 3 reveals that there is a significant association between the associated factors, adolescents share their feelings with their parent/s ($\chi^2=9.246$, p=.010), their parent/s boosts their self-esteem ($\chi^2=10.447$, p=.005), their parent/s satisfies their basic needs. ($\chi^2=9.788$, p=.007) and adolescents parent/s supports them in choosing their career ($\chi^2=10.722$, p=.005) and they get scolding’s from their family members ($\chi^2=6.691$, p=.035) and depression.

Table 2: Mean and standard deviation of depression score. n=210

Depression Score	Minimum Score	Maximum Score	Mean	Standard Deviation
Not Depressed(0-12) N=133	0	12	8.41	±3.124
Depressed (13-26)N=77	13	25	15.65	±2.684
Total	0	25	11.07	±4.583

Table 3: Association between selected factors with regard to depression. n=210

Sn	Associated Factors	Chi-Square (χ^2)	p-VALUE
1	Adolescents never share their feelings with their parent's.	9.246	.010
2	Adolescents parent/s never boosts self-esteem.	10.447	.005
3	Adolescents parent/s never satisfies their basic needs.	9.788	.007
4	Adolescent's parent/s never supports them in choosing my career.	10.722	.005
5	Adolescents get scolding's from their family members.	6.691	.035

Discussion

The present study shows that the prevalence of depression among adolescents is 36.7%. Which is comparable to 38%, found in a study conducted in Noida, Uttar Pradesh¹⁰. Another study conducted in south India (Mangalore)¹¹ and Rohtak, Haryana¹², India shows a high prevalence of depression is 49% and 53% respectively. A few more studies conducted in Bellary, Karnataka¹³, and Raipur India show that the prevalence of depression is 65% and 59% respectively. Observation in the present study shows less prevalence of depression among studies conducted in the Indian community i.e. Goa¹⁴, Eastern Uttar Pradesh¹⁵, and Ballabgarh Haryana¹⁶ which shows that the prevalence of depression is 0.5%, 14.5%, and 20% respectively. Prevalence of depression in the present study tells that depression exist among adolescents even if the prevalence rate is either higher or lower in many studies mentioned above. Therefore early diagnosis is crucial in preventing the progression of depression among adolescents.

The present study shows that some of the factors that are associated with depression among adolescents are, that adolescents never share their feelings with their parents

(p=.010), Parents never boost their self-esteem (p=.005), their parents never satisfy their basic needs, followed by parents never supports them in choosing their career and gets angry on them for a small reason (p<0.05)

Studies conducted in Chandigarh, north India shows that anger of parents towards adolescents (p<0.05) is one of the associated factors of depression among adolescents¹⁷. A study conducted in Canada¹⁸ shows that, shows that beating and scolding by parents or other family members (p=0.05), are some of the associated factors of depression among adolescents. Another study conducted in Nepal¹⁹ shows that drinking status of parents (p=0.000) is one of the associated factors of depression among adolescents.

The finding shows that there might be a possible association between the various factors and depression among adolescents but it cannot establish the causal relationships. Therefore broader spectrum of similar kinds of studies in large populations in interventional settings needs to be conducted for a clear picture of the real situation. The present study shows that there is no significant association between depression and selected socio-demographic variables.

The study findings are supported by a study conducted in Karnataka²⁰ and Maharashtra²¹ India which shows no statistical significance between depression and selected socio-demographic variables

Observation in the present study contradicted studies conducted in Bangalore, Karnataka, which shows that the annual income was found to have been statistically significant with depression (p-value 0.036)²². Another study conducted in Bihar shows that depression is significantly associated with age and gender (p-value <0.05)²³. Few more studies in china and port city show that poor families (p-value=0.000), Parents' educational status (p-value=0.000)²⁴, and parents' marital status (p-value<0.05)²⁵, are some of the factors which are statistically significant with depression.

Association could not be ruled out for any of the variables in the present study. The variables studied as factors associated with depression may be explored further with a larger sample size, which may give more precise results.

Limitation

The authenticity of the information is based on the response of the subjects. Since the study was conducted on 210 adolescents from only seven schools, the findings of the study may not be generalized.

Conclusion

The overall prevalence of depression among adolescents was at high level, and multiple factors are associated with adolescents' depression. Based on the study results, initiative should be taken to overcome it before it worsens by paying attention to various coping mechanisms and utilizing a proper support system.

Implications

Steps should be taken to educate adolescents as well as parents regarding the factors associated with depression. The nurses who work in the school health setting should

have knowledge about the impact of depression and its associated factors in adolescent life and how to deal with those cases. Health promotion programs can be organized, which should be focused on adequate sleep, socializing with other peers, group activities, recreational activities, developing effective interpersonal relationships, performing activities of daily living, regular exercises, healthy food habits, etc.

Future Directions

Parents should be brought together and educated regarding how to early identify children's depression and how to help them to overcome it. Awareness materials like handouts, and leaflets should be distributed at schools. The study can be replicated in a different setting with a large diverse population. A Longitudinal study can be conducted to assess the prevalence of depression and its factors associated with adolescents.

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