

Analysis of Prevalence of Depression, Anxiety Among School Children: Study at a Tertiary Care Centre

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ABSTRACT

Background: In students academic stress emerge as a significant mental problem in recent years. The present study was conducted to assess the prevalence of depression and anxiety disorders among school children.

Materials & Methods: This community-based, cross-sectional study was designed to assess the prevalence of depression and anxiety disorders among school children. 200 students were selected for the study. Screening of participants, for depressive disorder and anxiety disorder was made. The data were statistically analyzed by Chi-square test using SPSS.

Results: In the present study total 200 students were included out of which 120 were males and 80 were females. In males' prevalence of depression was 12.5% and in females it was 22.5%. In males' prevalence of anxiety was 10% and in females it was 18.75%. Overall prevalence of depression and anxiety was 16.5% and 13.5% respectively.

Conclusion: The present study concluded that prevalence of depression and anxiety was more in females than males. Overall prevalence of depression and anxiety was 16.5% and 13.5% respectively.

KEYWORDS: Students, Depression, Anxiety.

INTRODUCTION

Psychiatric morbidity in children and adolescents, as defined by Rutter et al. is abnormality in behavior, emotions, and relationships which is developmentally inappropriate and of sufficient duration and severity to cause persistent suffering or handicap to the child and/or distress to the family or community.¹ According to the WHO reports, community-based studies revealed an overall prevalence rate for mental disorders around 20% in several national and cultural contexts.² Major depression was the fourth most prevalent human disease in 1990 and is expected to rank second by the year 2020 in adolescent age group (Lopez and Murray, 1998).³ About 20%–30% of adolescents have one major depressive episode before they reach adulthood.⁴ For a quarter of individuals with mood disorders like depression; these first emerge during adolescence.⁴ About 50%–75% of adolescents with anxiety disorders and impulse control disorders (such as conduct disorder or attention-deficit/hyperactivity disorder) develop these during adolescence.⁴ The symptoms of these disorders can lead to poor academic performance, low mood, interest is lost of communication with friends and family

members, substances abuse, feeling of abandonment, homicidal ideation, and suicidal tendency sadness feeling.⁵⁻⁷ The present study was conducted to assess the prevalence of depression and anxiety disorders among school children.

MATERIALS & METHODS

This community-based, cross-sectional study was designed to assess the prevalence of depression and anxiety disorders among school children and conducted at Department of Community Medicine, NRI Institute of Medical Sciences, Sanghivalasa, Visakhapatnam, Andhra Pradesh, India. This study was approved by the ethical committee of Institute. 200 students were selected for the study. Children in age group of 11–18 years, Children without concurrent physical illness were included in the study. Children below 11 and above 18 years of age, Children having neurodevelopmental disorders (mental retardation, etc.), Participants whose parent did not give written consent for participating in this study were excluded from the study. Sociodemographic details were recorded for each

participant. Children’s Depression Inventory (CDI), a 27-item, self-report symptom-oriented scale was used to screen for depression in children.⁸ For each item, the child had three possible answers; 0 indicating an absence of symptoms, 1 indicating mild symptoms, and 2 indicating definite symptoms. The total score ranged from 0 to 54. Total scores were calculated by adding the scores for each item. A total score of 19 or greater on CDI scale indicated potential depression.

Revised Children’s Manifest Anxiety Scale (RCMAS) was used to screen study participants for anxiety disorder.⁹ RCMAS is a 37-item scale. Each item is given

a score of 1 for a “yes” response and 0 for a “no” response. Total anxiety score was obtained for each participant by adding the scores for all items. An overall cutoff point of 19 was used to identify children experiencing clinically significant levels of anxiety. After screening of participants, diagnosis of depressive disorder and anxiety disorder was made by the present state examination in accordance with ICD-10 classification of mental and behavioral disorders; Diagnostic criteria for research (WHO 1993). The data were statistically analyzed by Chi-square test using SPSS.

Table 1: Prevalence of depression

Prevalence of depression	N(%)
Males (120)	15(12.5%)
Females (80)	18(22.5%)
Total (200)	33(16.5%)

Table 2: Prevalence of anxiety disorder

Prevalence of anxiety disorder	N(%)
Males (120)	12(10%)
Females (80)	15(18.75%)
Total (200)	27(13.5%)

RESULTS

In the present study total 200 students were included out of which 120 were males and 80 were females. In males prevalence of depression was 12.5% and in females it was 22.5%. In males prevalence of anxiety was 10% and in females it was 18.75%. Overall prevalence of depression and anxiety was 16.5% and 13.5% respectively.

DISCUSSION

In the present study total 200 students were included out of which 120 were males and 80 were females. In males’ prevalence of depression was 12.5% and in females it was 22.5%. In males’ prevalence of anxiety was 10% and in females it was 18.75%. Overall prevalence of depression and anxiety was 16.5% and 13.5% respectively.

Bansal *et al.* while conducting a study in public schools reported a prevalence of depression of 18.4%. This is still high when compared to the present study where we observed that the prevalence of depression was 5% among children who hailed from public schools and still lower, i.e., only 2% among children who hailed from private schools.¹⁰

Rodrigo *et al.*, did not find differences between 9th- and 10th-grade students, those in grade 11 had significantly greater scores of depression and severe anxiety; these findings suggest a link between higher levels of education and stress, sadness, and anxiety scores.¹¹

Mohanraj and Subbaiah conducted a study with the objective to study the prevalence of depression among private schoolchildren. They noted that the prevalence of depression among schoolchildren from private schools was 57% in 2010. This was very high compared to the present study findings where we found that the prevalence of depression among children from private schools was only 2%.¹² Several Indian studies conducted on adolescents have found a prevalence of depression ranging from 10% - 27%, which is much higher than our findings which can be attributed to different instruments used for measurements and different time duration.^{13,14}

CONCLUSION

The present study concluded that prevalence of depression and anxiety was more in females than males. Overall prevalence of depression and anxiety was 16.5% and 13.5% respectively.

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