IJMRP

Original Research Article.

Analysis of Prevalence of Depression and Anxiety Disorders Among School Going Children: An Institutional Based Study

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ABSTRACT

Background: Mental disorders like depression, anxiety in childhood can negatively affect healthy development by interfering with children's ability to achieve social, emotional, cognitive, and academic milestones and to function in daily settings. The present study was conducted to assess prevalence of depression and anxiety disorders among school going children.

Materials and Methods: The present cross-sectional study was conducted among adolescent students. The sample size for the study was 800. Demographic data was collected. Depression anxiety stress scale (DASS)–21 was used to detect depression, anxiety, and stress. Data was entered on microsoft excel software and statistical analysis was done using SPSS.

Results: In the present study total 800 students were studied out of which 63.75% were males and 36.25% were females. Overall prevalence of depression, anxiety and stress was 24.37%, 45.62%, 30% respectively. Most of students suffered from moderate type of depression and anxiety (45.12%, 33.97%) and normal stress (55.83%) respectively.

Conclusion: The present study concluded that anxiety was more prevalent in adolescent school children followed by stress and depression. Most of students suffered from moderate type of depression and anxiety and normal stress.

Keywords: Adolescent Students, Depression Anxiety Stress Scale (DASS)–21, Depression, Anxiety, Stress.

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INTRODUCTION

Adolescence is an important period of transition in human life. Due to various physical, hormonal, and behavioral changes during this period, it becomes a starting point to many mental health issues including depression and anxiety.[1,2] 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.[3] Depression is a common mental disorder, characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities, for at least two weeks.[4] Anxiety is an emotion characterized by feeling of tension, worried thoughts and physical change like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns.[5] Globally, the reported prevalence rates of mental disorders among children and adolescent range from 1% to 51%. According to the WHO reports, community-based studies revealed an overall prevalence rate for mental disorders around 20% in several national and cultural contexts.[6] 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).[7] Overall, both these conditions are associated with poor quality of life at the adolescent age group and also with significant negative consequences.[1] Untreated mental health problems among adolescents may lead to poor school performance, school dropout, strained family relationships, substance abuse, and engaging in risky sexual behaviors.[8] The present study was conducted to assess prevalence of depression and anxiety disorders among school going children.

MATERIALS AND METHODS

The present cross-sectional study was conducted among adolescent students. The sample size for the study was 800. Before the commencement of the study ethical approval was taken from the Ethical Committee of the institute and written consent was taken from the parents/guardians or teachers after

explaining the study. The students absent on the days of data collection were excluded from the study.

Demographic data was collected. Depression anxiety stress scale (DASS)–21 was used to detect depression, anxiety, and stress. The scale contains 21 items and was developed by Lovibond and Lovibond, which is a modified shorter version of DASS42 questionnaire.[9,10] Data was entered on microsoft excel software and statistical analysis was done using SPSS. Descriptive analysis was done by calculating proportions, means and standard deviation.

Table 1: Distribution according to gender

Gender	N (%)
Male	510(63.75%)
Female	290(36.25%)
Total	800(100%)

Table 2: Prevalence of depression, anxiety, and stress

Mental disorder	N (%)
Depression	195(24.37%)
Anxiety	365(45.62%)
Stress	240(30%)
Total	800(100%)

Table 3: Distribution according to the levels of severity according to DASS scale.

Variable	Depression	Anxiety	Stress
Normal	52(26.66%)	76(20.82%)	134(55.83%)
Moderate	88(45.12%)	124(33.97%)	65(27.08%)
Severe	34(17.43%)	78(21.36%)	32(13.33%)
Very Severe	21(10.76%)	87(23.83%)	9(3.75%)
Total	195(100%)	365(100%)	240(100%)

RESULTS

In the present study total 800 students were studied out of which 63.75% were males and 36.25% were females. Overall prevalence of depression, anxiety and stress was 24.37%, 45.62%, 30% respectively. Most of students suffered from moderate type of depression and anxiety (45.12%, 33.97%) and normal stress (55.83%) respectively.

DISCUSSION

India contributes 21% of adolescent's population in the world. One out of six children affected with mental disorder. Early Indian community-based studies reported the prevalence rate of psychiatric disorders among children ranging from 2.6% to 35.6%.[11]

Depression anxiety stress scale (DASS)–21 was used to detect depression, anxiety, and stress. The scale contains 21 items and was developed by Lovibond and Lovibond, which is a modified shorter version of DASS42 questionnaire.[9,10] Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/ agitated, irritable/ over-reactive impatient. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items.[9,10]

In the present study total 800 students were studied out of which 63.75% were males and 36.25% were females. Overall prevalence of depression, anxiety and stress was 24.37%, 45.62%, 30% respectively. Most of students suffered from moderate type of depression and anxiety (45.12%, 33.97%) and normal stress (55.83%) respectively.

Studies by Angold et al.[12] and Thapar et al.[13] which also reported that depression was higher among females which attributed to factors such as hormonal changes and exposure to stress.

Bhasin et al.[14] have also found that stress levels were significantly higher among the "board classes," that is, 10th and 12th as compared to the classes 9th and 11th.

Epidemiological studies have suggested that the prevalence rate for anxiety disorder vary from 5% to 17% among children and adolescents.[15] Deb et al. also found maximum anxiety in children aged 13–17 years.[16] In the study conducted by Malik et al, the prevalence of moderate depression (41.2%) was dominating.[17] However, Jha et al, Naushad et al observed mild type of depression most prevalent.[18,19]

CONCLUSION

The present study concluded that anxiety was more prevalent in adolescent school children followed by stress and depression. Most of students suffered from moderate type of depression and anxiety and normal stress.

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