Original Research Article

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20183862

Psychiatric morbidity among school students

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Received: 21 August 2018 Accepted: 31 August 2018

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ABSTRACT

Background: Psychiatric morbidity represents most important problem among all children including school going children worldwide, prevalence of psychiatric disorders among children has been reported to be 14-20% across various studies Child and adolescent population are susceptible for psychiatric morbidity; we plan to evaluate the prevalence of psychiatric morbidity among school going students of class 8 and 9.

Methods: It was a cross sectional observational study. Study was conducted in two steps, firstly screening was done with GHQ-12 along with socio-demographic data sheets, on second step students scoring above GHQ cutoff score were interviewed by consultant psychiatrist and diagnosis was made as per ICD 10 DCR.

Results: A total of 128 students, consisting of 73 male and 55 females (57% and 43% respectively) with mean age of 13.02±0.58 years participated. With GHQ screening 38 students scored above the cut-off marks and finally 6 children were diagnosed as generalized anxiety disorder, 6 as Depression, 1 as elimination disorder (nocturnal enuresis), 3 as separation anxiety, 4 cases of OCD, and 2 cases of Panic disorder totaling to 21 (16.41%) students.

Conclusions: This study finds a prevalence of 16.41% of the psychiatric morbidity among school students.

Keywords: Prevalence, Psychiatric morbidity, School students

INTRODUCTION

There are estimated 1.2 billion adolescents worldwide, where as in India, the adolescent population is approximately 243 million. Psychiatric morbidity represents most important problem among all children including school going children worldwide, Prevalence of psychiatric disorders among children has been reported to be 14-20% across various studies. According to World Health Report (2000), 20% of children and adolescents suffer from mental illness worldwide. A recent Indian study has reported the incidence of childhood psychiatric disorders as 18/1000/year and yet another Indian study reported a prevalence of 29.4%. Among all psychiatric illness various types of anxiety are the most prevalent, across most of the studies, an estimated overall

prevalence rate of anxiety is approximately 8%; however the range of reported anxiety disorders among child and adolescent population is 4-25%. 6-8

There are various factors that may be attributing to psychiatric morbidity, which may be beyond the scope of this introduction, but few issues like gender, parenting, sibs, peers, schooling and other socio-cultural factors are most important in Indian context and may also have a relation to the severity and types of anxiety and other psychopathology. There may be various types of anxiety including separation anxiety, social phobia, generalized anxiety, and panic with agora-phobia, obsessive compulsive and specific phobic disorders causing numerous problems in their life. There are lack of Indian studies reporting prevalence of psychiatric morbidity of

child and adolescent population, especially in school going children. In view of the paucity of Indian studies on prevalence of psychiatric morbidity among school students and the contradictory findings of earlier research, we planned this cross-sectional observational study to assess the psychiatric morbidity among class VIII to IX students.

METHODS

This was a cross-sectional school-based study, conducted at an english medium high school at Agra, Uttar Pradesh, India during June 2018. The permission for carrying out the study was obtained from school authorities. Voluntary consent was obtained after sharing the objectives of the study and reassuring the participants about their anonymity (by not recording their names) and the confidentiality of information they were providing. The printed data sheets were distributed in the class room and consenting students completed and submitted the sociodemographic data sheet and scale questionnaire.

Subjects

All students of both sexes studying in class VIII and IX, who gave consent, were included for the study. Those with any diagnosed concurrent chronic medical illness and other disabilities were excluded. Tools used were Socio demographic data sheet and GHQ-12.

Tools

socio-demographic data sheet

The socio demographic data sheet included age, gender, number of siblings, parenting style, hobbies and health concerns. To maintain the confidentiality of individual student the name and roll number of the students were not recorded.

GHQ 12

The General Health Questionnaire (GHQ) designed by Goldberg (1972)¹⁰ is an effective first stage screening tool for the detection of non-psychotic psychiatric illnesses. It is simple, easy to administer, acceptable and has high validity. Yet, even the 12-itcm version, the shortest standardized version of the GHQ, takes upto 6 minutes to administer. A shorter screening tool will be of advantage in the crowded out patient and primary care settings in India.

Procedure

It was a cross sectional observational study. Study was conducted in two steps, in the first step all subjects were assessed for inclusion-exclusion criteria, and on qualification they were requested to fill up self-designed questionnaire consisting of questions pertaining to sociodemographic data and GHQ-12 printed on a single sheet

paper. This paper was distributed among students and submitted back by students on completion of questionnaire. On second step GHQ scoring was done and students scoring above cutoff score were asked to be interviewed by consultant psychiatrist and diagnosis was made as per ICD 10 DCR.

Statistical analyses

The collected data of all patients was statistically analyzed, using Statistical Package for Social Sciences (SPSS, Inc., Chicago, Illinois) version 10.0.

Data analysis included means and standard deviations for continuous variables. Frequency analysis for categorical variables was used to determine the prevalence of psychiatric morbidity.

RESULTS

A total of 128 students, consisting of 73 male and 55 females (57% and 43% respectively) were included for the study, Table 1 summarizes the sample characteristics. The mean age of the group was 13.02±0.58 years. The 24 students were only child in their family, 53 (41.4 %) students were younger sibs, 41 (32%) students were eldest in family and only 10 (7.8%) were middle child of family.

Table 1: Sample distribution and result of the study (n = 128).

Parameters	Mean±SD		
Age	13.02±0.58		
GHQ Score	1.35±0.6	1.35±0.67	
Gender	n = 128	%	
Male	73	57.0	
Female	55	43.0	
Number of sibs			
0	24	18.8	
1	78	60.9	
2	19	14.8	
3	7	5.5	
Sibling seniority			
No sibs	24	18.8	
Eldest	41	32.0	
Youngest	53	41.4	
Middle	10	7.8	
GHQ cutoff			
GHQ below cut off	90	70.3	
GHQ above cut off	38	29.7	
Diagnosis			
No diagnosis	107	83.6	
Generalized anxiety	6	4.7	
Depression	6	4.7	
Separation anxiety	3	2.3	
OCD	4	3.1	
Panic	2	1.6	

After screening with GHQ-12, 38 students (23 males and 15 females) scored above the cut-off marks. These children were interviewed individually by consultant psychiatrist. Twenty-one children were diagnosed with psychiatric diagnosis as per ICD DSR criteria that consisted 16.41% of the prevalence of psychiatric morbidity. Remaining 17 students had sub-threshold anxiety or depressive symptoms and some vague unspecific symptoms of conduct problems, ADHD, etc. Gender wise prevalence of psychiatric morbidity was found to be 10.95% and 23.63 % respectively for males and female students. The specific psychiatric diagnoses included 6 cases of generalized anxiety disorder, 6 case of depression, one cases with elimination disorder (nocturnal enuresis), 3 case of separation anxiety, 4 cases of OCD, and 2 cases of panic disorder.

DISCUSSION

Purpose of this present study was to see the prevalence of overall psychiatric morbidity among school going child and adolescent's population. This was a small study in process to plan for larger prevalence study of psychiatric morbidity of city Agra. We reviewed many other epidemiological studies and in and whether being elder in family or being younger in family impose some vulnerability to develop anxiety. We found 16.41% of the prevalence of psychiatric morbidity among school students of class 8 and 9. Present finding of prevalence rate was in accordance to many earlier studies as reported range were 14-20%, 17.7% in Ethiopia, 15% in Bangladesh, 16.8 in Faridpur, India. 3,11-13

We found a female dominated prevalence of psychiatric morbidity i.e. 23.63% to boy's morbidity was only 10.95%, it was comparable to the study conducted by Balgir et al, showing gender distribution among boys was 17.50% and among girls was 24.12%. Studies shows that female gender is a strong predictor of lifetime risk of psychiatric morbidity that too more specific to mood disorder including depressive disorder and anxiety disorders. ^{14,15} Specific diagnosis in the present study is found to be mostly anxiety disorders namely generalized anxiety, panic, OCD and panic disorders.

The main strength of this study is direct assessment of children by consultant psychiatrist after screening by GHQ. The limitations of the study include the use of GHQ-12 as a self-report measure that ensured the convenience of quick data collection. We should have developed culture specific screening tools for students to screen psychiatric disorders in India. The study was conducted in an urban English medium school; hence these findings cannot be generalized to rural or Hindi medium schools.

CONCLUSION

We found 16.41%-point prevalence of psychiatric morbidity among school students.

ACKNOWLEDGEMENTS

Authors thank all the children, their family and teachers for consenting participating in the study. Authors also thank the schools and Department of Pediatrics, Sarojini Naidu Medical College, Agra, India and Department of Psychiatry, F H Medical College, Tundla, Agra, India for their constant support and guidance in conducting this study.

Funding: No funding sources Conflict of interest: None declared Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Nayak M, Lavania S. Psychiatric morbidity among school students. Int J Contemp Pediatr 2018;5:2048-51.