A STUDY ON PREVALENCE OF ANXIETY DISORDERS AMONG HIGHER SECONDARY SCHOOL STUDENTS

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ABSTRACT: Anxiety disorders are very common in secondary school children with little epidemiological data from countries like India. The objective of this study was to assess the prevalence of anxiety disorders in higher secondary school students using Screen for Child Anxiety Related Emotional Disorders (SCARED) questionnaire. Methodology: The study was conducted in July 2014 and 100 students belonging to class 11 and class 12 of a higher secondary school at Tiptur were included in the study. The SCARED questionnaires were used to assess anxiety in these children. Results: In this study, 37% were found to have anxiety disorder (p value <0.001). Of these majority (58%) were females which was significant. Of the 100 children, 64% had PN (panic disorder), 10% had GD (generalized anxiety disorder), 53% had SP (separation anxiety), 15% had SC (social anxiety disorder) and 16% had SH (significant school avoidance). Hence in this study, panic disorder and separation anxiety were found to be highly prevalent. In this study of the children who had anxiety, majority of these children's mothers (79%) and majority of the children's fathers were illiterate (54%). In this study, of the children with anxiety, 76% belonged to nuclear family and majority i.e. 84% belonged to rural area. Conclusion: This study shows the high prevalence of undiagnosed depression and anxiety disorders among adolescents and hence the need for them. Early interventions can provide long-term health and socioeconomic benefits by prevention of the onset of mental health problems and their development into chronic disorders.

KEYWORDS: Anxiety, Panic disorder.

INTRODUCTION: The world is home to 1.2 billion individuals aged 10–19 years. Adolescents aged between 10 to 19 years account for more than one-fifth of the world's population.(1) India has the largest national population of adolescents (243 million), followed by China (207 million), United States (44 million), Indonesia and Pakistan (both 41 million).⁽²⁾ In India, this age group forms 21.4% of the total population. Adolescents are also entitled to enjoy basic human rights- economic, political, social and cultural- but their inability to exercise these rights places the onus on the policy makers and adults to implement separate measures to ensure their rights. Moreover it is necessary to invest in adolescents as the future leaders and guardians of nation's development.(3) Adolescents are generally perceived as a healthy age group, and yet 20% of them, in any given period, experience a mental health problem, most commonly depression or anxiety. In many settings, suicide is among the leading cause of death in young people. (4) Mental well-being is fundamental to good quality of life. Happy and confident adolescents are most likely to grow into happy and confident adults, who in turn contribute to the health and well-being of nations.(3) In India particularly, adolescents are put under pressure to perform well in school examinations. For some students, the experience of academic stress leads to a sense of distress, which is generally manifested in a variety of psychological and behavioral problems. It is relevant to mention that in India, in the year 2011 alone,

2381 children, or more than six children per day, committed suicide because of failure in examinations.⁽⁵⁾ Adolescence is a crucial phase in life and the presence of conditions like depression, anxiety and stress at this stage of life is a matter of concern. Anxiety disorders have implications on a child's school and home functioning with repercussions on the development.⁽⁶⁾ A significant proportion of childhood anxiety disorders have a chronic course, and even last into adulthood.⁽⁷⁾ Prevalence rates for anxiety in a community sample of adolescents vary considerably. Depending on the specifics of methods, stringency of diagnostic criteria, and other particularities of a study, clinical anxiety disorders have been estimated to occur in 5.7% to 28.8% of community adolescents.^(8,9,10) Ohannessian et al found that sub-clinical levels of anxiety in adolescents may have adverse-affects on development. Unfortunately, compared to the empirically-based knowledge about depression, knowledge about adolescent anxiety is less available, perhaps because anxiety, specifically as a research focus, has been largely neglected.⁽¹¹⁾

According to the DSM-IV-TR, anxiety disorders can be broken down into the following types: panic disorders, agoraphobia, specific phobia, social phobia, obsessive compulsive disorder, posttraumatic stress disorder, acute distress disorder, generalized anxiety disorder, anxiety disorder due to a general medical condition, substance-induced anxiety, and anxiety disorder not otherwise specified.⁽¹²⁾

Despite their high prevalence, childhood-onset anxiety disorders are under investigated. If left untreated, they can deprive children from family, social and educational interactions. Efficient treatment consists of early recognition and interventions, such as cognitive-behavioral therapy, family intervention, and also drug therapy. Hence the main objective of this study was to assess the prevalence of anxiety disorders in children studying in a higher secondary school using Screen for Child Anxiety Related Disorders (SCARED) questionnaire.

METHODOLOGY: This was a descriptive study conducted on June 2014 among 100 higher secondary school students, from Govt Higher secondary school, Tiptur, Karnataka. A written consent was taken from the Principal prior to conduct of the study. In each class, informed consent from the students was taken after being explained about the purpose of the study and that their responses would be kept confidential. The 100 randomly selected students were given 2 sets of questionnaires, one for assessing anxiety and one, a structured proforma which included age, gender, educational status of the child, father and mother, occupation of the family head and income of the family, type of family and residence, to collect the socio demographic data.

For assessing the prevalence of anxiety, screen for child anxiety related disorders (scared) questionnaire was used. The scale consists of 41 items rated on a 3 point scale (0 - 3). A total score of ≥ 25 indicates the presence of an Anxiety Disorder. Depending on the score of different items on the scale, specific anxiety disorders like Generalized Anxiety Disorder, Social Anxiety Disorder, Panic Disorder, Social Phobia and School Avoidance can be diagnosed.

All the Students were explained about the questionnaires and asked to fill in one circle that corresponds to them for last three months. A total score of more than 25 indicates the presence of an anxiety disorder. A score of 7 for items 1, 6, 9, 12, 15, 18, 19, 22, 24, 27, 30, 34 and 38 indicates Panic disorder or Significant Somatic symptoms (PN). A score of 9 for items 5, 7, 14, 21, 23, 28, 33, 35, and 37 indicates Generalized Anxiety Disorder (GD). A score of 5 for items 4, 8, 13, 16, 20, 25, 29 and 31 indicates Separation Anxiety (SP). A score of 8 for items 3, 10, 26, 32, 39, 40, 41 may indicate Social

Anxiety disorder (SC) and a score of 3 for items 2, 11, 17, 36 indicates Significant School Avoidance (SH).

RESULTS: In this study, 37% were found to have anxiety disorder (p value < 0.001). Of these majority (58%) were females which was significant.

	Gender		Total
	Female	Male	(n=100)
	(n=61)	(n=39)	(11-100)
Anxiety disorder			
 Absent 	26(42%)	37(94.8%)	63(63%)
 Present 	35(58%)	2(5.2%)	37(37%)
PN			
 Absent 	16(26.3%)	20(51.3%)	36(36%)
 Present 	45(73.7%)	19(48.7%)	64(64%)
GD			
 Absent 	54(88.5%)	36(92.3%)	90(90%)
 Present 	7(11.5%)	3(7.7%)	10(10%)
SP			
 Absent 	17(27.8%)	30(77%)	47(47%)
 Present 	44(72.2%)	9(23%)	53(53%)
SC			
 Absent 	47(77%)	38(97.5%)	85(85%)
 Present 	14(23%)	1(2.5%)	15(15%)
SH			
• Absent	51(83.6%)	33(84.6%)	84(84%)
 Present 	10(16.4%)	6(15.4%)	16(16%)
	Table 1		

Of the 100 children, 64% had PN (panic disorder), 10% had GD (generalized anxiety disorder), 53% had SP (separation anxiety), 15% had SC (social anxiety disorder) and 16% had SH (significant school avoidance). Hence in this study, panic disorder and separation anxiety were found to be highly prevalent.

In this study of the children who had anxiety, majority of these children's mothers (79%) were illiterate, 10 % in primary school, 7% studied upto middle school, 2% upto plus 2 and high school each. Majority of the children's fathers were illiterate (54%), 11% studied upto primary school, 11% studied upto middle school, 15% studied upto high school, 2% upto plus 2 and 7% were professionals. In this study, of the children with anxiety, 76% belonged to nuclear family and majority i.e. 84% belonged to rural area. In this study, of the children with anxiety, 88% belonged to upper lower socioeconomic status, 7% belonged to lower socioeconomic status and 5% belonged to upper middle status.

DISCUSSION: An anxiety disorder is a serious mental illness. For people with anxiety disorders, worry and fear are constant and overwhelming, and can be crippling. People suffering from an anxiety disorder are subject to intense, prolonged feelings of fright and distress for no obvious reason. The condition turns their life into a continuous journey of unease and fear and can interfere with their relationships with family, friends and colleagues. (13) Until the 1980s, it was believed that fears and preoccupations during childhood were transient and benign. It is known today that they can represent frequent pathological disorders, causing distress and interfering with several daily activities. The early detection of anxiety disorders may avoid negative effects such as excessive school absence and consequent dropout, overuse of pediatric services to treat somatic symptoms associated with anxiety, and possibly, the occurrence of psychiatric disorders in adulthood.

In this study, 37% were found to have anxiety disorder. This nears to studies by Brady et al and Kessler et al⁽¹⁴⁾ who reported rates of anxiety disorder in children to be around 25%. Majority were females which was significant. The result of the present study is in line with the study by Susan et al⁽¹⁵⁾ which states that girls had higher rate of Anxiety disorders than boys.

In this study, panic disorder and separation anxiety were found to be highly prevalent. Unlike this study, Masi et al⁽¹⁶⁾ and similar studies reported only 10.4% of the subjects to have panic disorder. E J Costello et al in their large epidemiological and longitudinal study of childhood psychiatric disorders suggested lower prevalence rates for GAD i.e. 0.3% for 9-12 year olds and 0.7% for 13-16 year olds.⁽¹⁷⁾ Shear et al showed lifetime prevalence estimate of childhood separation anxiety disorder as 4.1%.⁽¹⁸⁾ In clinical settings, rates of childhood social phobia have been found to range from 29–40%, making it one of the more commonly seen child anxiety disorders.⁽¹⁹⁾ The variation in the rates of reporting can be explained on the basis of differences in age ranges of the sample and varying methods of assessment

In this study of the children who had anxiety, majority of these children's mothers were illiterate and majority of the children's fathers were also illiterate. In this study, of the children with anxiety, majority belonged to nuclear family and majority belonged to rural area. Canino et al found that anxiety does not appear to be consistently related to family size. This finding could be a representative of the general population where most families today are nuclear. They also found that anxiety not to be consistently related to parent's education level.

CONCLUSION: The utility of the present study lies in pointing out that there is quite a high prevalence of undiagnosed mental disorders, among the adolescent students, even among those from relatively affluent family backgrounds. Pediatricians and other health professionals working with adolescents and the educational institutions need to be aware of and responsive to the presence of these negative mental health states among the students so that early amelioration may be offered to the adolescents.

There is a need for special focus on the adolescent population and their mental health. Educational institutions need to identify the prevalence of negative mental health states among the students, and especially those at high risk. These issues are even more relevant in India, where the proportion of children and adolescents in the population is high and the resources are scarce. India is currently going through a demographic transition, and intervention today is likely to result in a decreased burden in future.

Our nation has to consider large scale studies in order to know the incidence of these two debilitating and harmful disorders. Understanding the prevalence of anxiety and depression and the possible factors associated with these high levels would help in the designing and provision of schoolbased or community-based counseling and treatment options exclusively for the adolescents. This would go a long way in ensuring that the adolescent students are able to emerge as healthy adult citizens of the nation.

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