Asian Journal of Psychiatry

A clinical study of anxiety disorders in children and adolescents from North Indian children and adolescents clinic

Satyakam Mohapatra *, Vivek Agarwal, Prabhat Sitholey, Amit Arya

Department of Psychiatry, King George's Medical University, U.P. (Formerly C.S.M. Medical University), Lucknow, India

ABSTRACT

Background and objectives: Anxiety disorders are the most common group of psychiatric disorders in children and adolescents. But few studies on specific anxiety disorders in children and adolescents are available in India. Therefore, this study was planned to identify anxiety disorders in children and adolescents in an Indian psychiatry outpatient setting and elicit its phenomenology and co-morbidities.
Methods: 1465 persons were screened using screen for child anxiety related emotional disorders (SCARED) scale. The screen positive patients were assessed and diagnosis of anxiety disorders was established according to DSM-IV-TR. Detailed assessment of the phenomenology of anxiety disorders was done by K-SADS-PL.
Results: 42 (2.86%) patients had different anxiety disorders. Out of which 16 (38.1%) patients had obsessive compulsive disorder, 10 (23.81%) patients with specific phobias, 6 (14.29%) patients with generalized anxiety disorder, 4 (9.52%) patients with social anxiety disorder and 3 (7.14%) patients each with separation anxiety disorder and panic disorder. Co-morbidities were found in 54% of patients with anxiety disorders. Dissociative disorder, specific phobias and social anxiety disorder were the common co-morbidities.
Interpretation and conclusion: Anxiety disorders are less commonly found in clinic settings (2.86%). No case of posttraumatic stress disorder or acute stress reaction was found in this study.

© 2013 Elsevier B.V. All rights reserved.

1. Introduction

Anxiety disorders are the most common group of psychiatric disorders in children and adolescents. Anxiety disorders usually remain undiagnosed in children and adolescents owing to the internalized nature of its symptoms (Tomb and Hunter, 2004). Various epidemiological studies done in children and adolescents in India have reported prevalence of anxiety disorders ranging from 1.3% to 4.2% (Indian Council of Medical Research, 2001; Margoob, 1996; Chadda and Saurabh, 1994; Hackett et al., 1999; Sidana et al., 1998). Anxiety is associated with substantial negative effects on children's social, emotional and academic success (Essau et al., 2000). Longitudinal data of children and adolescents with anxiety disorders indicate that anxiety disorders can be chronic and disabling, and they can increase risk of co-morbid disorders (Pine et al., 1998). Anxiety is considered to be a universal phenomenon existing across cultures, although its contexts and manifestations are influenced by cultural beliefs and practices

(Good and Kleinman, 1985). Identifying and treating children and adolescents with anxiety disorders would reduce the burden of this disorder and may help in better management of the co-morbid conditions in these patients. Studies on obsessive compulsive disorder (Khanna and Srinath, 1988) and post-traumatic disorder (Khan and Margoob, 2006) in children and adolescents are done in India. Another study on social anxiety disorder in adolescents (Mehtalia and Vankar, 2004) also done in India. But no study was available in India assessing all anxiety disorders in children and adolescents. Therefore this study was planned in a psychiatry outpatient setting of a university department of psychiatry in northern India with the aim to identify anxiety disorders in children and adolescents and elicit their phenomenology and co-morbidities.

2. Materials and method

This cross-sectional, clinic based study was carried out at Department of Psychiatry, K. G. Medical University, Lucknow from August 2010 to July 2011. The study was approved by the institutional ethics committee. Inclusion criteria were: (i) patients with age between 6 and 16 years, (ii) diagnosis of non-psychotic psychiatric disorder. Exclusion criteria included patient with a

severe physical disorder or condition requiring priority medical management.

All patients attending child and adolescent psychiatry OPD were screened for selection criteria. IQ assessment of the patients was done by the clinical psychologists by using Raven's progressive matrices (Raven et al., 2003) as a part of routine clinical evaluation. All selected patients were screened by screen for child anxiety related emotional disorders (SCARED) scale (Birmaher et al., 1995). The screen positive patients (patients with score more than 25 on SCARED scale) were assessed and diagnosis of anxiety disorders was established according to diagnostic and statistical manual of mental disorders, fourth edition, text revision (DSM-IV-TR) (American Psychiatric Association, 2000). Detailed assessment of the phenomenology of anxiety disorders was done by Kiddie – Schedule for Affective disorders and Schizophrenia – present and lifetime version (K-SADS-PL) (Kaufman et al., 1997). Both the process of screening by SCARED scale and subsequent evaluation by KSADS-PL were done by the same rater. Diagnosis of co-morbid disorders was made by using diagnostic and statistical manual of mental disorders, fourth edition, text revision (DSM-IV-TR). Impairment due to anxiety disorder was assessed by children's global assessment scale (CGAS) (Shaffer et al., 1983).

3. Results

A total of 1465 persons were screened. Out of which 42 (2.86%) patients had different anxiety disorders. Mean age of patients with anxiety disorders was 12.5 ± 2.34 years. Majority 26 (62%) patients were in adolescent (13–16 years) age group. 35(84%) had the onset of symptoms before 13years of age. Mean age of onset of anxiety disorder was 10.4 ± 1.05 years. Mean age of recognition of symptoms by caregiver was 11.2 ± 1.15 years. Majority of patients were female patients 26 (62%). Majority of patients belong to urban area 29 (69.08%). 23 (55%) patient's parents were 10th class pass or above educated. 26 (62%) of patient's parents were employed. Majority of patient's monthly family income is above 6000 rupees per month 25(60%). Thirty-seven (88.46%) patients were students. Mean IQ of subjects was 95.24 ± 1.69. 6 (14.29%) patients had family history of psychiatric disorders. Out of which 4 (66.67%) patients had family history of obsessive compulsive disorder and 2 (33.33%) each patients had family history of generalized anxiety disorder and bipolar affective disorders.

Most common first care providers were faith healer (a type of care provider who used to treat/cure illness or disability by recourse to divine power, without the use of medicines) (33.26%), followed by local practitioner (a type of care provider who was either qualified in other discipline of medical sciences like ayurvedic, homeopathic or unani medicine or nonqualified village/local health care providers/quacks) (26.58%) and general medical practitioner (a type of care provider who was a qualified allopathic medical practitioner) (24.57%), while first contact with psychiatrist (type of care provider who was having postgraduate in discipline of psychiatry) was made by 15.59% of patients. Majority (53.76%) of patients were referred to the study center by previous care providers, followed by family members of patient with psychiatric disorder in neighborhood (19.52%) and self-referral (26.72%).

Among 42 patients with anxiety disorders obsessive compulsive disorder was the most common anxiety disorder 16 (38.95%) followed by specific phobias 10 (23.81%), generalized anxiety disorder 6 (14.29%), social anxiety disorder 4 (9.52%) and 3 (7.14%) patients each with separation anxiety disorder and panic disorder (Tables 1 and 2).

Co-morbidities were found in 22 (53%) of patients with anxiety disorders. Among them majority 14 (64%) patients had one

Table 1
Number[a] of subjects with anxiety disorders.

Anxiety disorders	N (42)
Obsessive compulsive disorder	16 (38.95%)
Specific phobias	10 (23.81%)
Generalized anxiety disorder	6 (14.29%)
Social anxiety disorder	4 (9.52%)
Separation anxiety disorder	3 (7.14%)
Panic disorder	3 (7.14%)

[a] Not mutually exclusive.

Table 2
Phenomenology[a] of different anxiety disorders.

Anxiety symptoms	N	%
Obsessive compulsive disorder (N = 16)		
Compulsions	16	100%
Washing and cleaning	14	87.5%
Checking	9	56.25%
Repeating rituals	8	50%
Obsessions	14	87.5%
Contaminations	14	87.5%
Aggressive thoughts	11	68.75%
Religious thoughts	9	56.25%
Specific phobias (N = 10)		
Fear of darkness	4	40%
Fear of blood	3	30%
Fear of insects	2	20%
Fear of animals	1	10%
Avoidance of the situation	10	100%
Physiological symptoms of anxiety on exposure to the situation	10	100%
Generalized anxiety disorder (N = 6)		
Inability to control worry	5	83.33%
Excessive need for reassurance	4	66.67%
Physiological symptoms of anxiety	3	50%
Social anxiety disorder (N = 4)		
Fear of reading aloud in front of class	4	100%
Writing on the blackboard while others watching	4	100%
Answering questions in class in front of others	4	100%
Physiological symptoms of anxiety to the feared social situation	3	75%
Separation anxiety disorder (N = 3)		
Excessive distress upon separation	3	100%
Excessive distress in anticipation of separation	3	100%
Physical symptoms (headache, stomachache) on school separation days	2	66.67%
Nightmares (something bad happening to parents)	2	66.67%
Panic disorder (N = 3)		
Palpitation	3	100%
Fear of dying	3	100%
Fear of having another attack	3	100%

[a] Not mutually exclusive.

co-morbid psychiatric illness and 8 (37%) patients had more than one co-morbid psychiatric illness. Dissociative disorder 8 (36.36%) is the most common co-morbid psychiatric illness followed by specific phobias 5 (22.73%), social anxiety disorder 4 (18.18%), 1 (2.38%) each with separation anxiety disorder, panic attacks, ADHD, depression and nocturnal enuresis. Among the anxiety disorders obsessive compulsive disorder had maximum co-morbid psychiatric illness 8 (37%) followed by specific phobias 6 (27%) and generalized anxiety disorder (14%).

Most of the subjects had moderate difficulty in functioning (Mean C-GAS score −49 ± 6.21). Impairment due to anxiety disorders was more in obsessive compulsive disorder (Mean C-GAS score −46 ± 6.21) while it was less in panic disorder (Mean C-GAS score −54).