

ASSESSMENT OF ANXIETY SCORE AND PREVALENCE OF ANXIETY AMONG ADOLESCENT GIRLS

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Received : 02/06/2023
Received in revised form : 06/07/2023
Accepted : 20/07/2023

Keywords:

Anxiety, Adolescent, HADS Scale.

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DOI: 10.47009/jamp.2023.5.4.168

Source of Support: Nil,

Conflict of Interest: None declared

Int J Acad Med Pharm
2023; 5 (4); 835-838



Abstract

Background: Anxiety is a mental illness that affects a significant percentage of the world's adolescents at this time. It is possible for it to result in serious mental and physical disability in some cases. This age group is particularly susceptible to the development of anxiety due to the presence of a number of elements that are distinctive to adolescents as a population. Providers and the rest of the medical team have a responsibility to be vigilant in recognising the subtle indicators of anxiety in adolescents and to initiate treatment for this disease as soon as possible. When left untreated, anxiety can have negative effects on a person's life later on. **Materials and Methods:** A cross-sectional study was conducted and after approval of Institutional Ethics Committee. The study was primarily aimed to assess anxiety score and prevalence of anxiety among students of ANITS College, integral part of Anil Neerukonda Educational Society (ANES), located in Visakhapatnam. A total of 100 study subjects were included in this study after fulfilling the selection criteria. Self administered questionnaire consisted of mainly five sections: (1) Demographic characteristics; (2) Clinical manifestations; (3) HADS for Anxiety and depression. **Results and Conclusion:** Mean age was 18.73 years. Females were 87%. Most common clinical manifestations were Oily skin (47%), Acne (43%). According to HADS, anxiety and depression were present in 13% and 10% study subjects respectively.

INTRODUCTION

One in six people are aged 10-19 years. Adolescence is a unique and formative time. Physical, emotional and social changes, including exposure to poverty, abuse, or violence, can make adolescents vulnerable to mental health problems. Protecting adolescents from adversity, promoting socio-emotional learning and psychological well-being, and ensuring access to mental health care are critical for their health and well-being during adolescence and adulthood.^[1] Globally, it is estimated that 1 in 7 (14%) 10-19 year-olds experience mental health conditions², yet these remain largely unrecognized and untreated. Adolescents with mental health conditions are particularly vulnerable to social exclusion, discrimination, stigma (affecting readiness to seek help), educational difficulties, risk-taking behaviours, physical ill-health and human rights violations.^[1]

Anxiety disorders (which may involve panic or excessive worry) are the most prevalent in this age group and are more common among older than

among younger adolescents. It is estimated that 3.6% of 10-14 year-olds and 4.6% of 15-19 year-olds experience an anxiety disorder. Depression is estimated to occur among 1.1% of adolescents aged 10-14 years, and 2.8% of 15-19-year-olds. Depression and anxiety share some of the same symptoms, including rapid and unexpected changes in mood.^[1,2] Anxiety and depressive disorders can profoundly affect school attendance and schoolwork. Social withdrawal can exacerbate isolation and loneliness. Depression can lead to suicide. The present study was conducted to know the prevalence of anxiety and depression among adolescent students.

MATERIALS AND METHODS

This cross sectional study was conducted from November 2022 to December 2022 at ANITS College, integral part of Anil Neerukonda Educational Society (ANES), located in the district of Visakhapatnam, in the south-eastern state of Andhra Pradesh, in India. Convenient sampling was done and 100 Adolescent students were included.

Consent was obtained from the students face-to-face by a research team member prior to data collection. The students were informed that their participation was voluntary and given the option to withdraw from the study at any time without any impact on their academic achievement. Adolescents aged between 17 to 19 years studying in ANITS college were included. Those who didn't gave the consent were excluded. Data collection was done between November and December 2022. The questionnaire consisted of three parts; the first part contained questions for socio-demographic profile. The second part consists of clinical manifestations. The third part consisted of English version of HADS scale for measuring anxiety and depression. The HADS is a 14-question instrument that measures anxiety and depression with seven questions for each; each question is scored between zero (no impairment) and three (severe impairment). Data entry was done using M.S. Excel and statistically analysed using Statistical package for social sciences (SPSS Version 16) for M.S Windows.

RESULTS

In the present study, mean age was 18.73 +/-1.41 years. Males were 13% and females were 87%. Most common presenting symptom was Oily skin (47%), and acne (43%) followed by balding (26%), recent weight gain (26%), skin discoloration (23%),

oligomenorrhoea (16%), hirsutism (10%) and heavy bleeding (7%).

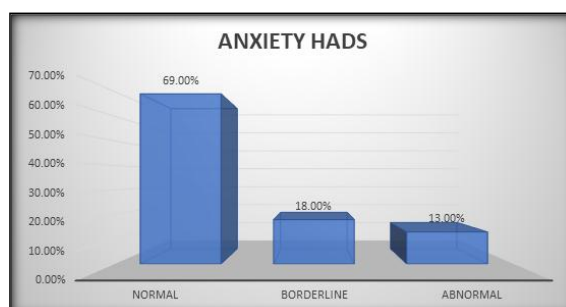


Figure 1: Distribution of patients based upon the Anxiety HADS

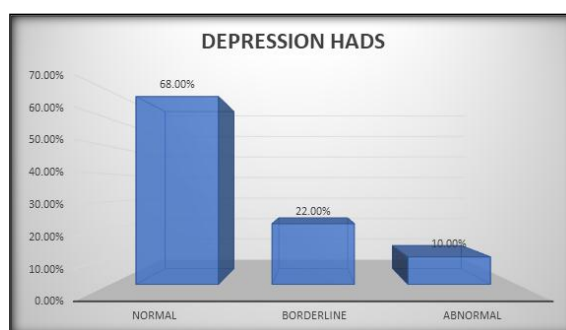


Figure 2: Distribution of patients based upon the Depression HADS

Table 1: Anxiety HADS based on gender distribution (p= 0.001)

			Sex		Total
			Male	Female	
Anxiety HADS	Normal	n	5	64	69
		%	38.5%	73.6%	69.0%
	Borderline	n	2	16	18
		%	15.4%	18.4%	18.0%
	Abnormal	n	6	7	13
		%	46.2%	8.0%	13.0%
Total		n	13	87	100
		%	100.0%	100.0%	100.0%

Table 2: Depression HADS based on gender distribution (p= 0.76)

			Sex		Total
			Male	Female	
Depression HADS	Normal	n	8	60	68
		%	61.5%	69.0%	68.0%
	Borderline	n	3	19	22
		%	23.1%	21.8%	22.0%
	Abnormal	n	2	8	10
		%	15.4%	9.2%	10.0%
Total		n	13	87	100
		%	100.0%	100.0%	100.0%

DISCUSSION

Anxiety disorders are common and early emerging conditions associated with considerable developmental, psychosocial, and psychopathological complications. Although early anxiety syndromes may remit spontaneously, the vast majority of adolescents that have developed a threshold anxiety disorder will be affected by the

same condition or other mental disorders. The identification of early vulnerability and risk factors for anxiety disorders is of crucial importance to facilitate research into the development of targeted prevention or early interventions programs. Although several variables have been identified as potential risk factors for anxiety disorders, such as parental psychopathology, behaviorally inhibited temperament, or early life adversity, more work is needed to identify the most powerful predictors, and

to understand their complex biological and psychological mechanisms and interactions in promoting the onset of anxiety disorders, and further, the adverse long-term course, to identify those variables that might provide the best guidance for early intervention.^[16] Experiencing depression and anxiety during adolescence, as a critical time of transition and envelopment, may have serious multifaceted consequences, some of which may be endured into adulthood.^[4] The complex interrelationships of adolescents' anxiety and depression with suicidality, substance-related and addictive disorders, pathological gambling and other disorders have consistently been an important concern in the literature.^[5-7] Depression and anxiety in adolescence are multifactorial mental health conditions.^[8-10]

In this study, Prevalence of anxiety was 31% and prevalence of depression was 32%. Among females (n= 87), anxiety was present in 24.4% and depression was present in 40%. Female sex consistently emerges as a risk factor for the development of anxiety disorders. Females are about twice as likely as males to develop each of the anxiety disorders.^[11-13]

Based on diagnostic interview data from National Comorbidity Survey Adolescent Supplement (NCS-A), shows lifetime prevalence of any anxiety disorder among U.S. adolescents aged 13-18. An estimated 31.9% of adolescents had any anxiety disorder. Of adolescents with any anxiety disorder, an estimated 8.3% had severe impairment. DSM-IV criteria were used to determine impairment. The prevalence of any anxiety disorder among adolescents was higher for females (38.0%) than for males (26.1%). The prevalence of any anxiety disorder was similar across age groups.^[14]

Abbo C15 conducted a study to determine the prevalence of DSM-IV anxiety disorders, as well as comorbidity patterns and predictors in children and adolescents aged 3 to 19 years. The prevalence of anxiety disorders was 26.6%, with rates higher in females (29.7%) than in males (23.1%). Students aged between 14–19 were significantly more likely to have PTSD. Anxiety disorders were more prevalent among respondents with other psychiatric disorders; in respondents with two or more comorbid psychiatric disorders the prevalence of anxiety disorders was 62.1%. Significant socio-demographic associations of anxiety disorders were found for female gender.

Alazzam MM16 conducted a study to estimate the prevalence of anxiety and depression among high school adolescent females and to determine the contributing factors associated with depression and anxiety. Severe levels of depression and anxiety were reported by 25.7% and 21% of high school adolescent females, respectively. Education challenges and having a history of health problems contributed to having higher levels of depression and anxiety among the high school adolescent females.

Barker MM.^[17] conducted a systematic review and meta-analysis to estimate the prevalence and/or incidence of anxiety and depression in children, adolescents, and young adults with life-limiting conditions. A total of 14866 nonduplicate articles were screened, of which 37 were included in the review. Of these, 19 studies reported anxiety prevalence, and 36 studies reported depression prevalence. The mean (range) age of participants was 15.4 (6-25) years. The metaanalysis of anxiety prevalence (n=4547 participants) generated a pooled prevalence estimate of 19.1%. The depression meta-analysis (n=5934 participants) found a pooled prevalence estimate of 14.3%

CONCLUSION

Prevalence of anxiety was 31% and prevalence of depression was 32%. Among females (n= 87), anxiety was present in 24.4% and depression was present in 40%. Statistical significance was seen between gender and anxiety score. Interventions must be developed to target the particular stressors to reduce the burden on students. The students should be taught various management techniques to improve their ability to cope with the demanding professional course. Various programs should be implemented to reduce the depression and anxiety right from the 1st year itself. Workshops on skill development, time management, and career counseling should be arranged. Early screening and interventions were warranted.

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