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A Study To Assess the Prevalence of Depressive And Anxiety Symptoms Among Higher Secondary Students

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Abstract:
Aim: *To assess the prevalence of depression and anxiety disorders among higher secondary school students using Beck Depression Inventory (BDI-II) and Screen for Child Anxiety Related Disorders (SCARED-C).*
Method: *This was a school based descriptive study in which data was collected through self-administered questionnaire from adolescents studying class XI and XII.*
Tools used: *Beck Depression Inventory (BDI-II) and Screen for Child Anxiety Related Disorders (SCARED-C).*
Material: *171 students studying Class XI and XII were participated with response rate of 78.85%. Males constituted 74.2% (n=95) and females 25.8% (n=33).* ***Results****:26.6% had no depression, 47.7% have mild depression and 25.8% moderate to severe depression. About 89.8% had Panic disorder, 40.9% had General anxiety disorder, separation Anxiety was seen in 60.2%, while Social anxiety disorder and School avoidance accounted for 30.5% and 17.2% respectively. It was observed that Females were more anxious than Males.*
Conclusion*: The prevalence of Depression and anxiety was found to be very high among adolescent school going students.*
Key words*: Adolescents, Anxiety, Depression, Prevalence.*

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I. Introduction

Adolescence is a period of life when childhood affectional bond with one's parents have ruptured and lost due to impact of maturational thrusts that result in eventual independence. Genes, childhood experience, and the environment in which a child reaches adolescence all shape the behaviour [1]. Today every fifth person in India is an adolescent (10-19yrs) and every third person is a youth (10-24yrs). 19.6% (236.5 million) of Indian population are adolescents [2]. Depression, anxiety disorders and alcohol use disorders constitute three of five top causes of years lost to disability (YLD) and all the top five causes are responsible for nearly 50% of YLDs in adolescents 10–19yrs [3]. Depression and anxiety are of major public health importance, in terms of prevalence, suffering, dysfunction, morbidity, and economic burden. Adolescent depression may affect the teen's socialization, family relations and performance at school, often with potential serious long term consequences. Many behavioral problems such as conduct disorder, learning difficulties or substance abuse may reflect the underlying depression. Systematic study of depression among the adolescents in general and particularly in Indians has advanced slowly compared to adults. When self report screening methods are used, ≥ 50% Indian adolescents seem to have serious depressive symptoms. But when we use more restrictive diagnostic criteria for clinical depression, proportion of depressed Indian adolescents is smaller [4]. According to National co morbidity survey – adolescent supplement, about 11% of adolescents have a depressive disorder by the age of 18yrs. Girls are more likely than boys to experience depression. The risk for depression increases as the child becomes older [5].

Anxiety is a normal human emotion. In moderation, anxiety stimulates anticipatory and adaptive response to challenging stressful events. In excess, anxiety destabilizes the individual resulting in dysfunctional state. Anxiety is considered excessive or pathological if it occurs in the absence of challenge or stress OR when it is out of proportion to the challenge or stress in duration of severity resulting in significant distress which causes psychological, social, occupational, biological and other impairment.

The most salient features of anxiety include excessive fearfulness accompanied by muscular tension, avoidant behaviour, somatic complaints without an organic basis, and repeated nightmares. Separation from parents, family, or familiar surroundings, fear of strangers, and various phobias are common forms of anxiety which can impair function [4].Beiser and Attneave, reported that anxiety was the fourth most common mental health problem for youth seen through IHS mental health programs in 1974, nearly equal to the frequency of depression [6]. Simultaneous presence of anxiety and depression symptoms is more common than isolated forms of each condition. More than two thirds of those with major depression also had anxiety disorder. Pure forms of anxiety and depression do exist, but they are exceptions rather than rule. Eight percent of all boys and girls between the ages of 13 and 18 have an anxiety disorder with symptoms commonly presenting around the age of 16yrs [7]. Depression and anxiety are common among the adolescents which are mostly under diagnosed. To know the relevance of depressive and anxiety symptoms among adolescents, a study was conducted in the area of Secunderabad.

Depression: Depression is a disorder that is defined by certain emotional, behavioral and thought patterns. Depression is diagnosed by DSM-5 or ICD 10 criteria as follows.

ICD – 10 Criteria	DSM-5 Criteria
Depressed mood. Loss of interest and enjoyment. Reduced energy leading to increased fatigability and diminished activity. Other common symptoms are: Reduced concentration and attention. Reduced self-esteem and self-confidence. Ideas of guilt and unworthiness. Bleak and pessimistic views of the future. Ideas or acts of self-harm or suicide. Disturbed sleep. Diminished appetite.	Depressed mood. Loss of interest and pleasure. Significant change in appetite & weight. Insomnia or hypersomnia. Psychomotor agitation or retardation. Fatigue of loss of energy. Feelings of worthlessness or excessive guilt. Impaired thinking or concentration; indecisiveness. Suicidal thoughts / thoughts of death.

As per ICD-10 classification, Mild depressive episode is defined as presence of at least 4 symptoms, including at least one of the first three symptoms, Moderate depressive episode as presence of 6 or 7 symptoms and Severe depressive episode as presence of at least 8 symptoms. Under DSM -5 criteria Major depression is defined as presence of first two symptoms with a total of at least 5 symptoms from the list. These symptoms must be present on most of the days for at least two weeks. Minor depression is defined as presence of first two symptoms (1 & 2) with total of 2-4 symptoms from the list.

In DSM- I and DSM –II, non psychotic forms of depression were regarded as defense mechanism used to allay underlying feelings of anxiety. According to epidemiologist Jane Murphy and psychiatrist Alexander Leighton "depression was usually seen as psychotic rather than neurotic disorder". In later part of 1960, disparity between depression and anxiety diagnosis has come down, though anxiety was still far more common than depression. During first half of 1970, diagnosis of depression was as common as anxiety and by 1975 diagnosis of depression was 18 million compared to 13 million diagnosis of anxiety. From 1980 onwards to present, the diagnosis of depression has shown upward trend. In 2002 out of 51.7 million OP visits, 21 million were depressive patients compared to 6.2 million of anxiety patients. Depression and anxiety are common problems in adolescence. Most of the times in Indian setup, parents will not seek medical advice for these problems. With this background this study was conducted to determine the prevalence of depression and anxiety symptoms in higher secondary students of government junior college in Secunderabad, Telangana, India.

II. Aim

To assess the prevalence of depression and anxiety symptoms among the higher secondary school students using Beck Depression Inventory (BDI-II) and Screen for Child Anxiety Related Disorders (SCARED-C).

III. Methodology

This was a descriptive study conducted in 2014 among plus two students from a government junior college, in Secunderabad, Telangana, India. A written permission to conduct the study was taken from the principal of the said college. The principal and all the students were assured about the total confidentiality of the data. At the outset, the students and teachers were explained about the purpose of the study. An informed consent was taken from each of the participants before a self-administered questionnaire was handed over to them. Of the total 171 participants, 95 (74.2%) were male and 33 (25.8%) were female with age ranging from 15 to 20yrs. The response rate in this study was 74.9% and 128 students gave fully completed questionnaires with respect to the BDI-II and SCARED-C.

Tools used: Beck's Depression Inventory - II (BDI - II) and Screen for Child Anxiety Related Disorders (SCARED-C)

Beck's Depression Inventory - II (BDI - II): The depressive symptoms and its severity were assessed using BDI – II [13] , a mood – measuring device originally developed by Dr Aron T Beck. The BDI-II is widely used as an indicator of the severity of depression, but not as a diagnostic tool. Questions of the BDI – II assess the typical symptoms of depression such as mood, pessimism, sense of failure, loss of pleasure, guilt, punishment, self-dislike, self- criticalness, suicidal ideas, crying, agitation, loss of interest, not able to make decisions, fatigue, insomnia, irritability, appetite, concentration, fatigue, loss of libido. The multiple choice questionnaire has 21 groups of statements with a score for each statement ranging from 0 to 3 and total score being 63 with minimum score of Zero. All the students were explained about the questionnaires and asked to respond if the symptoms were present in them for last two weeks. A score of 0-13 is considered normal, 14-19 borderline clinical depression or mild depression, 20-28 moderate depression and 29 to 63 is severe depression [Table-1].

Screen for Child Anxiety Related Disorders (SCARED-C):

The anxiety symptoms and its severity were assessed by SCARED-C. The SCARED questionnaire was developed by Birmaher et al in 1997 with 38 self-report items. In 1999, Birmaher reexamined it and published new version with three additional questions (total questionnaire -41).

The SCARED measures five child and adolescent anxiety symptoms dimensions - Panic disorder symptoms, Separation anxiety disorder symptoms, social phobia symptoms, generalized anxiety disorder symptoms and School refusal symptoms. Each statement in the questionnaire has score ranging from 0 to 2. All the Students were explained about the questionnaires and asked to fill in one circle that corresponds to them for last three months [Table 2].

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).

Table 1: Summary of Frequency & Severity of Depressive Symptoms(BDI - II)

S.No.	BDI Symptoms	None N(%)	Mild N(%)	Moderate N(%)	Severe N(%)
1	Sadness	24 (18.8)	77 (60.2)	9 (7)	18 (14.1)
2	Pessimism	48 (37.5)	57 (44.5)	17 (13.3)	6 (4.7)
3	Past Failure	84 (65.6)	21 (16.4)	17 (13.3)	6 (4.7)
4	Loss Of pleasure	40 (31.3)	41 (31.0)	30 (23.4)	17 (13.3)
5	Guilty of feeling	43 (33.6)	46 (35.9)	33 (25.8)	46 (4.7)
6	Punishment Feeling	33 (25.8)	75 (58.6)	12 (9.4)	8 (6.3)
7	Self-Dislike	74 (57.8)	30 (23.4)	14 (10.9)	10 (7.8)
8	self-Criticalness	33 (25.8)	18 (14.1)	35 (27.3)	42 (32.8)
9	Suicidal	71 (55.5)	47 (36.7)	5 (3.9)	5 (3.9)
10	Crying	50 (39.1)	13 (10.2)	21 (16.4)	44 (34.4)
11	Agitation	53 (41.4)	29 (22.7)	19 (14.8)	27 (21.1)
12	Loss of Interest	69 (53.9)	27 (21.1)	16 (12.5)	16 (12.5)
13	Indecisiveness	67 (52.3)	28 (21.9)	15 (11.7)	18 (14.1)
14	Worthlessness	79 (61.7)	22 (17.2)	23 (18.0)	4 (3.1)
15	Loss of Energy	79 (61.7)	30 (23.4)	13 (10.2)	6 (4.7)
16	Changes in Sleeping pattern	44 (34.4)	48 (37.5)	23 (18.0)	13 (10.2)
17	Irritability	75 (58.6)	39 (30.5)	9 (7.0)	5 (3.9)
18	Changes in Appetite	53 (41.4)	36 (28.1)	27 (21.1)	12 (9.4)
19	Concentration Difficulty	49 (38.3)	39 (30.5)	33 (25.8)	7 (5.5)
20	Tiredness	62 (48.4)	34 (26.6)	27 (21.1)	5 (3.9)
21	Loss of Interest in Sex	80 (62.5)	31 (24.2)	14 (10.9)	3 (2.3)

Table 2: Summary of Frequency of Anxiety symptoms (SCARED-C)

S.No.	SCARED item	0 N(%)	1 N(%)	2 N(%)
1	When I feel frightened, it is hard to breathe	43 (33.6)	57(44.5)	28 (21.9)
2	I get headaches when I am at school.	50 (39.1)	67(52.3)	11 (8.6)
3	I don't like to be with people I don't know well	49 (38.3)	48(37.5)	31 (24.2)
4	I get scared if I sleep away from home.	46 (35.9)	46 (35.9)	36 (28.1)
5	I worry about other people liking me.	44 (34.4)	49 (38.3)	35 (27.3)
6	When I get frightened, I feel like passing out.	20 (15.6)	48 (37.5)	60 (46.9)
7	I am nervous.	37 (28.9)	51 (39.8)	39 (30.5)
8	I follow my mother or father wherever they go.	33 (25.8)	64 (50.0)	31 (24.2)
9	People tell me that I look nervous.	63 (49.2)	53 (41.4)	12 (9.4)
10	I feel nervous with people I don't know well.	24 (18.8)	62 (48.4)	42 (32.8)
11	I get stomach aches at school.	76 (59.4)	43 (33.6)	9 (7.0)
12	When I get frightened, I feel like I am going crazy.	36 (28.1)	55 (43.0)	37 (28.9)
13	I worry about sleeping alone	59 (46.1)	31 (24.2)	38 (29.7)
14	I worry about being as good as other kids.	43 (33.6)	58 (45.3)	27 (21.1)
15	When I get frightened, I feel like things are not real.	33 (25.8)	77 (60.2)	18 (14.1)
16	I have nightmares about something bad happening to my parents.	59 (46.1)	50 (39.1)	19 (14.8)
17	I worry about going to school.	73 (57.0)	46 (35.9)	9 (7.0)
18	When I get frightened, my heart beats fast.	14 (10.9)	29 (22.7)	85 (66.4)
19	I get shaky.	28 (21.9)	75 (58.6)	25 (19.5)
20	I have nightmares about something bad happening to me.	54(42.2)	61(47.7)	13 (10.2)
21	I worry about things working out for me.	37(28.9)	67(52.3)	24(18.8)
22	When I get frightened, I sweat a lot.	28 (21.9)	58(45.6)	41(32.0)
23	I am a worrier.	27 (21.1)	56 (43.8)	45 (35.2)
24	I get really frightened for no reason at all.	67 (52.3)	45 (35.2)	16 (12.5)
25	I am afraid to be alone in the house.	60 (46.9)	39 (30.5)	29 (22.7)
26	It is hard for me to talk with people I don't know well.	29 (22.7)	61 (47.7)	38 (29.7)
27	When I get frightened, I feel like I am choking.	33 (25.8)	72 (56.3)	23 (18.0)
28	People tell me that I worry too much.	48 (37.5)	66 (51.6)	14 (10.9)
29	I don't like to be away from my family.	45 (35.2)	18 (14.1)	65 (50.8)
30	I am afraid of having anxiety (or panic) attacks.	31 (24.2)	68 (53.1)	29 (22.7)
31	I worry that something bad might happen to my parents.	57 (44.5)	48 (37.5)	23 (18.0)
32	I feel shy with people I don't know well.	34 (26.6)	53 (41.4)	41 (32.0)
33	I worry about what is going to happen in the future.	23 (18.0)	46 (35.9)	59 (46.1)
34	When I get frightened, I feel like throwing up.	42 (32.8)	65 (50.8)	21 (16.4)
35	I worry about how well I do things.	24 (18.8)	73 (57.0)	31 (24.2)
36	I am scared to go to school.	85 (66.4)	30 (23.4)	13 (10.2)
37	I worry about things that have already happened.	53 (41.4)	59 (46.1)	16 (12.5)
38	When I get frightened, I feel dizzy.	49 (38.3)	60 (46.9)	19 (14.8)
39	I feel nervous when I am with other children or adults and I have to do something while they watch me	22 (17.2)	57 (44.5)	49 (38.3)
40	I feel nervous when I am going to parties, dances, or any place where there will be people that I don't know well.	28 (21.9)	57 (44.5)	43 (33.6)
41	I am shy.	41 (32.0)	72 (56.3)	15 (11.7)

0 - Not True or Hardly Ever True; 1-Somewhat True or Sometimes True; 2- Very True or Often True

IV. Results

A total 171 students participated in the study out of which 128 (74.9%) students filled the questionnaires completely. The socio economic categories like gender, educational status, region, mother's education, socio-economic status, place of residence and type of family were analyzed. The association of these categories with depression and anxiety among the students is studied. All the socio demographic variables were compared with BDI-II and SCARED-C tools.

The response of total 128 adolescents from government junior college were included for the analysis (excluding 43 students who had submitted incomplete information). Of these 95 (74.2%) were male and 33 (25.8%) female [Figure 1]. The students ranged in age from 15 – 20yrs with greater representation by 17yrs (41.4%) and proportion of adolescents aged 20yrs were completely low 3 (2.3%) [Figure 2]. About 60.2% were studying in class XII and 39.8% were in class XI. Analysis of literacy among the mothers of students found that 66.4% were illiterate (n=85), 12.5% (n=16) did primary schooling, 6.3% (n= 8) completed middle school, 14.1% (n=18) completed high school and one (n=1) parent has professional back ground. 78.1% (n=100) students came from upper lower socio economic class, followed by 16.4%(n-21) of lower middle income group, 3.1% (n=4) of upper middle group and 2.3% (n= 3) lower socioeconomic group. Adolescents from rural area constituted 64.1% (n=82) and 35.9% (n=46) were from urban area [Figure 3]. The majority of students, 88.3% (n=113) lived in nuclear families, 5.5% (n=7) in extended families and 6.3% (n=8) lived in joint families. The results of analysis of the association of depression with sociodemographic variables depicted in table 3.[Table3]

Table 3 : Association of Depression with Socio-demographic categories

Socio demographic	Variable	N	Mean	Std. Deviation	P value
Gender	Male	95	18.51	9.734	0.23
	Female	33	20.85	8.882	
Educational Status	Class XI	51	20.98	9.971	0.07
	Class XII	77	17.87	9.102	
Religion	Hindu	109	19.30	9.600	0.86
	Muslim	11	17.82	9.293	
	Christian	8	18.25	10.138	
	Total	128	19.11	9.542	
Mother's education	Illiterate	85	19.93	9.339	0.64
	Primary School	16	16.50	9.571	
	Middle school	8	19.63	8.717	
	High School	18	17.61	11.110	
	Graduate / PG	1	14.00	.	
	Total	128	19.11	9.542	
Socio-economic status	Upper Middle	4	22.25	11.730	0.51
	Lower Middle	21	16.90	9.235	
	Upper Lower	100	19.57	9.523	
	Lower	3	15.00	11.269	
	Total	128	19.11	9.542	
Place of Residence	Rural	82	18.51	9.320	0.35
	Urban	46	20.17	9.940	
Type of Family	Nuclear	113	19.00	9.289	0.57
	Extended	7	17.29	6.184	
	Joint	8	22.25	14.964	
	Total	128	19.11	9.542	

The prevalence of anxiety disorders[table4], and the association of panic [table 5], general anxiety[table 6], separation anxiety[table7], and social anxiety disorders with socio demographic categories were depicted.

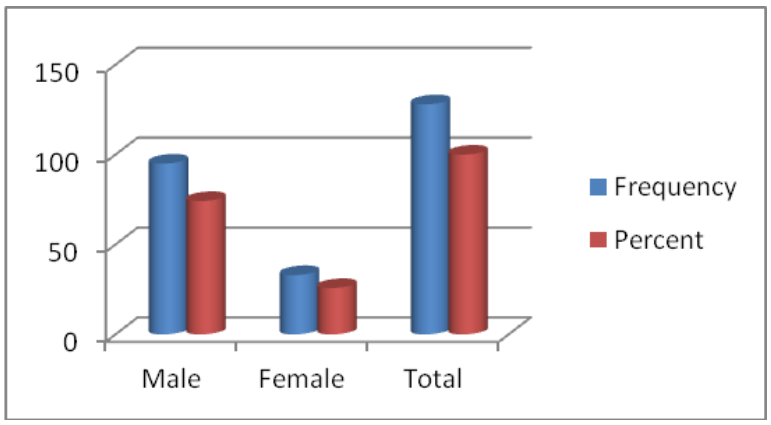

Figure 1 : Gender Distribution

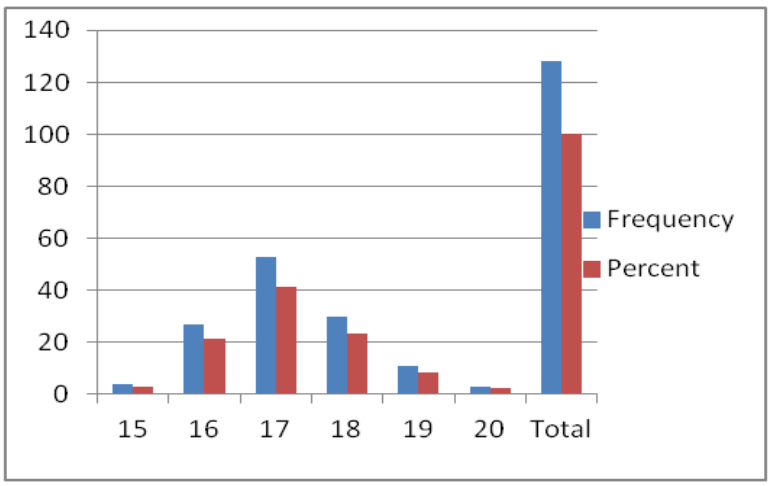

Figure 2 : Age Distribution of Students

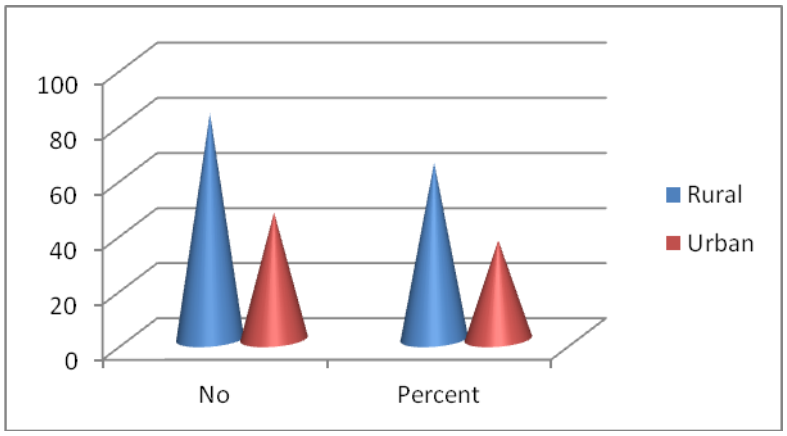

Figure 3 : Age Distribution of Students

Table 4 : Prevalence of Anxiety disorders

SCARED disorder	Boys N (%)	Girls N (%)	Total N (%)
Panic disorder	82 (87.2)	32 (97.0)	114 (89.8)
Generalized anxiety disorder	34 (35.8)	18 (56.3)	52 (40.9)
Separation Anxiety	50 (52.6)	27 (81.8)	77 (60.2)
Social Anxiety disorder	19(20.0)	20(60.6)	39(30.50)
School Avoidance	16(16.8)	6(18.2)	22(17.2)

Table 5 : Association of Panic Disorder or Significant Somatic Symptoms with socio demographic categories.

Socio demographic	**Variable**	**N**	**Mean**	**Std. Deviation**	**P Value**
Gender	Male	94	11.61	3.628	0.00[*]
	Female	33	14.94	4.841	
Educational Status	Class XI	51	13.02	4.806	0.27
	Class XII	76	12.11	3.769	
Religion	Hindu	108	12.58	3.963	0.00[*]
	Muslim	11	9.09	4.949	
	Christian	8	15.63	4.033	
	Total	127	12.47	4.222	
Mother's education	Illiterate	85	13.19	4.078	0.11
	Primary School	15	10.87	4.257	
	Middle school	8	11.50	5.425	
	High School	18	10.89	3.864	
	Graduate / PG	1	12.00	.	
	Total	127	12.47	4.222	
Socio-economic Status	Upper Middle	4	12.50	3.512	0.69
	Lower Middle	21	11.71	5.321	
	Upper Lower	100	12.58	4.018	
	Lower	2	15.00	4.243	
	Total	127	12.47	4.222	
Place of Residence	Rural	82	12.71	4.305	0.40
	Urban	45	12.04	4.079	
Type of Family	Nuclear	112	12.62	4.292	0.48
	Extended	7	12.14	3.338	
	Joint	8	10.75	3.919	
	Total	127	12.47	4.222	

Table 6 : Association of Generalized Anxiety Disorder with socio demographic categories

Socio demographic	**Variable**	**N**	**Mean**	**Std. Deviation**	**P Value**
Gender	Male	95	8.21	2.732	0.01 [*]
	Female	32	9.75	2.782	
Educational status	Class XI	50	8.48	2.794	0.70
	Class XII	77	8.68	2.844	
Religion	Hindu	108	8.40	2.897	0.10
	Muslim	11	9.18	2.040	
	Christian	8	10.50	1.773	
	Total	127	8.60	2.815	
Mothers education	Illiterate	84	8.74	2.703	0.50
	Primary School	16	8.50	2.160	
	Middle school	8	9.50	2.330	

	High School	18	7.78	3.889	
	Graduate / PG	1	6.00	.	
	Total	127	8.60	2.815	
Socioeconomic status	Upper Middle	4	8.50	2.380	0.88
	Lower Middle	20	8.30	3.435	
	Upper Lower	100	8.63	2.722	
	Lower	3	9.67	3.055	
	Total	127	8.60	2.815	
Place of residence	Rural	81	8.63	2.754	0.87
	Urban	46	8.54	2.949	
Type of family	Nuclear	112	8.55	2.815	0.14
	Extended	7	10.43	2.760	
	Joint	8	7.63	2.446	
	Total	127	8.60	2.815	

[*] Statistically Significant

Table 7 : Association of Separation Anxiety Disorder with Socio-demographic categories

Socio demographic	Variable	N	Mean	Std. Deviation	P Value
Gender	Male	95	6.04	2.968	0.00[*]
	Female	33	8.82	3.206	
Educational Status	Class XI	51	6.76	3.691	0.99
	Class XII	77	6.75	2.957	
Religion	Hindu	109	6.59	3.289	0.08
	Muslim	11	6.64	2.767	
	Christian	8	9.25	2.605	
	Total	128	6.76	3.255	
Mother's Education	Illiterate	85	6.69	3.237	0.89
	Primary School	16	6.75	3.435	
	Middle school	8	7.63	2.446	
	High School	18	6.56	3.714	
	Graduate / PG	1	9.00	.	
	Total	128	6.76	3.255	
Socio-economic status	Upper Middle	4	5.00	2.449	0.60
	Lower Middle	21	6.90	4.073	
	Upper Lower	100	6.75	3.060	
	Lower	3	8.33	4.933	
	Total	128	6.76	3.255	
Place of Residence	Rural	82	6.71	3.317	0.82
	Urban	46	6.85	3.176	
Type of family	Nuclear	113	6.91	3.256	0.04[*]
	Extended	7	3.71	1.704	
	Joint	8	7.25	3.196	
	Total	128	6.76	3.255	

[*] Statistically Significant.

Table 8 : Association of Social Anxiety Disorder with Socio-demographic categories

Socio demographic	Variable	N	Mean	Std. Deviation	P Value
Gender	Male	95	6.61	2.569	0.00[*]
	Female	33	9.09	2.185	
Educational Status	Class XI	51	7.37	2.375	0.68
	Class XII	77	7.17	2.904	
Religion	Hindu	109	7.19	2.580	0.06
	Muslim	11	6.36	3.355	
	Christian	8	9.25	2.712	
	Total	128	7.25	2.697	
Mother's Education	Illiterate	85	7.45	2.575	0.37
	Primary School	16	7.50	3.033	
	Middle school	8	5.50	3.703	
	High School	18	6.89	2.447	
	Graduate / PG	1	7.00	.	
	Total	128	7.25	2.697	
Socio-economic status	Upper Middle	4	5.00	2.449	0.40
	Lower Middle	21	7.19	2.112	
	Upper Lower	100	7.34	2.826	
	Lower	3	7.67	1.528	
	Total	128	7.25	2.697	
Place of Residence	Rural	82	7.73	2.780	0.01[*]
	Urban	46	6.39	2.333	
Type of family	Nuclear	113	7.33	2.760	0.19
	Extended	7	7.86	1.864	
	Joint	8	5.63	1.923	
	Total	128	7.25	2.697	

[*] Statistically Significant.

V. Discussion

Depression and anxiety are common disorders seen in adolescents that impair the ability of individuals if not recognized and treated promptly. In the literature adolescent depression was classified as (1). Depressive mood (2).Depressive syndromes (3).Clinical depression. The prevalence of depression increases with age and is usually associated with co morbid conditions like anxiety disorders. In the present study, 26.6% (n=34) of adolescents had no depressive symptoms, while 47.7% (n=61) had mild depressive symptoms and 25.8% (n=33) students experienced moderate to severe depressive symptoms. This prevalence is very high compared to Maharaj et al study which showed 25.5% ±2.3% prevalence. In Joseph's study 79.2%s were depressed. There is no significant statistical association between different socioeconomic variables like gender, educational status, religion, mother's education, family status, place of residence & type of family and depression symptoms [Table -3]. But in Maharaj, et al study, females experienced more depression compared to males. But males experienced more depression than females in a study by Joseph. With regard to anxiety, our study results showed very high prevalence levels of anxiety in the participants and female have high prevalence of anxiety than males. In a study by Walsh and Deb, boys have higher anxiety scores compared to girls. The prevalence of panic disorder symptoms is very high 89.8% (n=114) in the study population with 97% (n=32) of females showing panic disorder compared to 82% (n=82) of males [Table -5].Females (14.94) manifest more panic disorders symptoms than males (11.61) and Muslim students (9.09) are less anxious compared to Christian (15.63) and Hindu (12.58) students. There is significant statistical difference of the anxiety levels in others parameters like educational status, mother's education, family status, place of residence & type of family [Table -5]

The prevalence of symptoms of generalized anxiety disorder in the participants is 40.9% (n= 52), more in females 56.3% (n-18) than in males 35.8% (n=34) [Table -6]. For Generalized anxiety disorder, females (9.75) are more affected than male (8.21) adolescents with no statistical difference in other parameters like educational status, religion, mother's education, family status, place of residence & type of family.

The prevalence of symptoms of separation anxiety is 60.2% (n=77) in students with 81.8% (n=27) in boys and 52.6% (n= 50) in girls [Table -7].Separation anxiety is seen more in females (8.82) compared to males (6.04 and students from joint family (7.25) are more affected with Separation anxiety followed by students from nuclear family (6.91) and extended family (3.71). There is no significant statistical difference of the anxiety levels in other parameters educational status, religion, mother's education, family status, place of residence.

The prevalence of symptoms of social anxiety disorder is 30.5% (n=39) in the study group with 60.6% (n=20) of females and 20.0% (n=19) of males affected [Table-8].With regard to Social anxiety disorder, females (9.09) suffer from more Social anxiety compared males (6.61) and adolescents from urban area (6.39) are having less Social anxiety than their counter parts from rural area (7.73). Other parameters like educational status, religion, mother's education, family status, and family type showed no statistical difference in Social anxiety disorder.

The prevalence of symptoms of school avoidance in the participants is 17.2% (n=22). Females 18.2% (n=6) are having high prevalence of school avoidance compared to males 16.8% (n=16) [Table-4].The mother's education has its influence on School avoidance. Students whose mother is having primary (1.69) and high (1.83) schooling are less affected with school avoidance compared to others who are illiterate (2.06), middle schooling (3.50). Other parameters like gender, educational status, religion, family status, place of residence and type of family showed no statistical difference in significant school avoidance. Our study is not without limitations. The sample size is small. This is a questionnaire-based study which assessed the presence of depressive and anxiety symptoms and their severity. Individual clinical interviews with each participant would lead to a clinical diagnosis. The investigators were not blind to the study subjects. The study findings cannot be generalized to other student populations.

VI. Conclusion

Depression and anxiety are common among the adolescents with prevalence rates of 11% and 8% respectively. Many times, depression is associated with anxiety, though depressive and anxiety disorders can exist separately. The prevalence of anxiety symptoms is high in our study population. Also, the symptoms of anxiety disorders are more prevalent in females compared to males. Further studies are needed to know the exact prevalence of depressive and anxiety disorders in adolescents considering the above mentioned limitations.

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