

Prevalence Of Psychopathology Among School Adolescents

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ABSTRACT

Background: It is a transitional rapid growth phase of individual development between childhood and adulthood. Adolescents feel changes in cognitive, emotional, physical, intellectual, attitudinal, social roles, relationships, redeployment, and self-discovery during this phase, which is a stressful experience for them. Although it is the phase of tremendous growth in preparation of adults' roles and skills to sustain pressures and challenges, it is also a transitory phase that can raise the risk of various psychopathology or mental health problems. **Objective:** The present study aims to assess the prevalence of psychopathology among school adolescents. **Methods:** The sample consisted of 200 school-going adolescents through simple random sampling from the different districts of Jharkhand. Both male and female adolescents in the age range of 13 to 17 years were recruited for the study. Both male and female adolescents were studying in 8th to 10th standard and had no history of mental retardation and major physical illness. Socio-demographic and Clinical Datasheet, Informed Consent Form, and Adolescents Psychopathology Scale (APS-SF) were used for data collection. **Results & conclusion:** Overall findings of the present study indicated that moderate level prevalence rate of psychopathology i.e. conduct disorder (5.5%), generalized anxiety disorder (5.5%), major depression (7.5%), eating disturbance (6%), suicide (10%) and interpersonal problems (5%) have been existing among adolescents.

Keywords: Adolescents, Psychopathology, Self-concept, Anxiety, Oppositional defiant disorder.

INTRODUCTION

World Health Organization defines the adolescent period as the age range of 10 to 19 years. It is a transitional rapid growth phase of individual development between childhood and adulthood. Adolescents feel changes in cognitive, emotional, physical, intellectual, attitudinal, social roles, relationships, redeployment, and self-discovery during this phase, which is a stressful experience for them. Although it is the phase of tremendous growth

in preparation of adults' roles and skills to sustain pressures and challenges, it is also a transitory phase that can raise the risk of various psychopathology or mental health problems e.g., conduct disorder, oppositional defiant disorder, major depression, suicidal tendencies, generalized anxiety disorder, post-traumatic stress disorder, and substance abuse disorder. Psychopathology within adolescents defines as "Adaptation failure". It involves deviation from age-appropriate norms, exaggeration or diminishment of normal development

expressions, interference in normal developmental progress, and failure to achieve the ideal level of psychological competence and social functioning. Mental health conditions are particularly vulnerable to social exclusion, discrimination, stigma, educational difficulties, risk-taking behaviors, ill-health, and human rights violations among adolescents.

In India, the overall prevalence of adolescent mental morbidity was 7.3%, with almost equal distribution among both males and females. Common Mental health disorders contributed to 5.4% of the disease burden, and neurotic and stress-related disorders contributed to about 4.2% of the current disease burden reported.^[1] However, as we all know that school plays a vital role in adolescents' development because they spend more time in school than in any other formal institutional structure. They involve directly or indirectly in peer relationships and social interactions to academic attainment and cognitive progress, emotional control and behavioral expectations, and physical and moral development. All these areas are reciprocally affected by mental health.^[13]

In the past, many researchers have done a study on the prevalence rate of psychopathology among school-going adolescents in India. They have found that a 44.1 % high rate of prevalence of depression among higher secondary school students reported that, according to the burden of mental disorders across the states of India (2017), one among every seven people in India had a, ranging from mild to severe level of mental disorder.^[2-3] This cross-sectional study was conducted over 2 months among high school students (15–17 years) in a government-aided school in Coimbatore. Based on a prevalence of 27.2%, of mental health problems among high school children in a study done in Karnataka, considering an absolute precision of 5%, the sample size was estimated to be 305. Erskine et al^[4] suggest that globally, conduct disorder was responsible for 5.75 million years lived with

disability with attention-deficit/hyperactivity disorder responsible for a further 491,500. Collectively, conduct disorder and attention-deficit/hyperactivity disorder accounted for 0.80% of total global years lived with disability and 0.25% of total global disability-adjusted life years. In terms of global disability-adjusted life year, conduct disorder was the 72nd leading contributor and among the 15 leading causes in children aged 5–19 years. Between 1990 and 2010, global disability-adjusted life years attributable to conduct disorder and attention-deficit/hyperactivity disorder remained stable after accounting for population growth and aging.

Muzammill, et al.^[5] conducted a cross-sectional study on the prevalence of psychosocial problems among 840 adolescents in Dehradun. They found an overall prevalence of psychosocial problems at 13.2% and problems were more in males as compared to females. Another study by Ahmed, et al^[6] showed a prevalence of 17.9% with predominance among male school-going adolescents. Most of the epidemiological survey on school-going children and adolescents has reported a wide variation (20-33%) in the prevalence of the psychosocial problem. Mangal et al.^[7] studies illustrated the prevalence of psychosocial problems ranging between 10-40%. A total of 1456 students were included in the study and the prevalence of psychological morbidity was 9.75%. Those with psychological morbidity had higher odds of being obese (35.36%), physically inactive (1.78%), having sleep duration inadequacy (5.42%), and poor dietary behavior (7.46%) on multivariate analysis.^[8] This study would look into the matter related to the prevalence rate of psychopathology in school-going adolescents. In India, such kind of study is very handful so it will help the mental health clinicians to have more knowledge regarding this issue and the management of this population.

METHODS

Participants:

The sample consisted of 200 school-going adolescents through simple random sampling from the different districts of Jharkhand. Both male and female adolescents in the age range of 13 to 17 years were recruited for the study. Both male and female adolescents were studying in 8th to 10th standard and had no history of mental retardation and major physical illness.

Measures:

The measures used in the present study included a specially designed socio-demographic and clinical datasheet. To assess the psychopathology Adolescents Psychopathology Scale-Short Form (APS-SF) scale was used. It was developed by William M. Reynolds in 1998. The APS-SF consists of 115 items that comprise 12 Clinical Scales and 2 Validity Scales (Defensiveness and Consistency Response) and is designed as a brief measure that evaluates the presence and severity of domains of psychopathology in adolescents. Six of these are consistent with the Diagnostic and Statistical Manual for Mental Disorders, 4th edition (DSM-IV) symptom specification. Reynolds designed the additional six scales to evaluate clinically relevant psychological and behavioral problems of adolescents. The 12 clinical scales measure 2 broad factors—internalized problems (Generalized Anxiety Disorder, Posttraumatic Stress Disorder, Major Depression, Interpersonal Problems, Self-Concept, Suicide, and Eating Disturbance) and externalized problems (Conduct Disorder, Oppositional Defiant Disorder, Substance Abuse Anger/Violence Proneness, and Academic Problems).

Procedure:

Informed consent was taken from adolescent and their parents after considering the inclusion

and exclusion criteria for the study. After filling out the specially designed socio-demographic data sheet, Adolescents Psychopathology Scale-Short Form was administered to school-going adolescents.

Statistical analysis:

Kolmogorov-Smirnov test was used to test the normality of data. Data was found to be normally distributed and hence parametric statistics were applied. Descriptive statistics were used to calculate percentage profiles of different socio-demographics of the sample populations. To compare categorical variables Chi-square test was used.

RESULTS

Table 1 shows the socio-demographic variables of participants among school-going adolescents. This indicates most of the students were females and studied in class 10th standard. Results also indicate that most of the students come at the age of 15 years and belong to the Hindu religion. Table 2 shows that majority of the male students had moderate clinical symptoms in the domains of conduct disorder, anger/violence proneness, generalized anxiety disorder, major depression, eating disturbance, suicide, self-concept, and interpersonal problems as compared with female students. Table 3 shows that majority of the 10th std. students having moderate clinical symptoms in the domains of conduct disorder, anger/violence proneness, academic problems, generalized anxiety disorder, major depression, eating disturbance, suicide, self-concept, and interpersonal problems as compared with 8th to 9th standard students. Table 4 shows the prevalence rate of psychopathology among school-going adolescents. Which indicates a moderate level of conduct disorder (5.5%), generalized anxiety disorder (5.5%), major depression (7.5%), eating disturbance (6%), suicide (10%), and interpersonal problems (5%) present in the school going adolescents.

Table: 1 Socio-demographic details of the Participants

Variable		N	Percentage
Gender	Male	95	47.5%
	Female	105	52.5%
Class	8 th	46	23.0%
	9 th	36	18.0%
	10 th	118	59.0%
Age	13 Years	23	11.5%
	14 Years	32	16.0%
	15 Years	60	30.0%
	16 Years	51	25.5%
	17 Years	34	17.0%
Ethnicity	Hindu	187	93.5%
	Muslim	3	1.5%
	Christian	4	2.0%
	Others	6	3.0%

Table: 2 Comparisons between Genders of participants on Adolescent Psychopathology Scale-Short Form (APS-SF)

Variables		Gender				χ^2	p
		Male		Female			
		N	%	N	%		
Conduct Disorder (CND)	Normal range	77	47.8%	84	52.2%	5.50	0.23
	Subclinical symptom range	9	60.0%	6	40.0%		
	Mild clinical symptom range	3	33.3%	6	66.7%		
	Moderate clinical symptom range	6	54.4%	5	45.5%		
	Severe clinical symptom range	0	0.0%	4	100.0%		
Oppositional Defiant Disorder (OPD)	Normal range	93	47.2%	104	52.8%	3.12	0.21
	Subclinical symptom range	2	100.0%	0	0.0%		
	Mild clinical symptom range	0	0.0%	0	0.0%		
	Moderate clinical symptom range	0	0.0%	1	100.0%		
	Severe clinical symptom range	0	0.0%	0	0.0%		
Substance Abuse Disorder (SUB)	Normal range	89	46.8%	101	53.2%	2.26	0.52
	Subclinical symptom range	2	50.0%	2	50.0%		
	Mild clinical symptom range	2	100.0%	0	0.0%		
	Moderate clinical symptom range	0	0.0%	0	0.0%		
	Severe clinical symptom range	2	50.0%	2	50.0%		
Anger/Violence Proneness (AVP)	Normal range	72	45.0%	88	55.0%	3.83	0.42
	Subclinical symptom range	9	52.9%	8	47.1%		
	Mild clinical symptom range	11	64.7%	6	35.3%		
	Moderate clinical symptom range	3	60.0%	2	40.0%		
	Severe clinical symptom range	0	0.0%	1	100.0%		
Academic Problems (ADP)	Normal range	76	45.8%	90	54.2%	2.91	0.40
	Subclinical symptom range	14	60.9%	9	39.0%		

	Mild clinical symptom range	4	57.1%	3	42.9%		
	Moderate clinical symptom range	1	25.0%	3	75.0%		
	Severe clinical symptom range	0	0.0%	0	0.0%		
Generalized Anxiety Disorder (GAD)	Normal range	65	41.1%	93	58.9%	15.04	0.05**
	Subclinical symptom range	14	82.4%	3	17.6%		
	Mild clinical symptom range	8	66.7%	4	33.3%		
	Moderate clinical symptom range	6	54.5%	5	45.5%		
	Severe clinical symptom range	2	100.0%	0	0.0%		
Posttraumatic Stress Disorder (PTS)	Normal range	56	38.1%	91	61.9%	21.02	0.00***
	Subclinical symptom range	15	75.0%	5	25.0%		
	Mild clinical symptom range	20	74.1%	7	25.9%		
	Moderate clinical symptom range	0	0.0%	0	0.0%		
	Severe clinical symptom range	4	80.0%	1	20.0%		
Major Depression (DEP)	Normal range	55	39.0%	86	61.0%	17.64	0.01***
	Subclinical symptom range	16	55.0%	13	44.8%		
	Mild clinical symptom range	11	78.6%	3	21.4%		
	Moderate clinical symptom range	12	80.0%	3	20.0%		
	Severe clinical symptom range	1	100.0%	0	0.0%		
Eating Disturbance (EAT)	Normal range	57	37.3%	96	62.7%	33.04	0.00***
	Subclinical symptom range	13	61.9%	8	38.1%		
	Mild clinical symptom range	9	100.0%	0	0.0%		
	Moderate clinical symptom range	11	91.7%	1	8.3%		
	Severe clinical symptom range	5	100.0%	0	0.0%		

Suicide (SUI)	Normal range	60	42.3%	82	57.7%	11.53	0.02*
	Subclinical symptom range	8	40.0%	12	60.0%		
	Mild clinical symptom range	4	57.1%	3	42.9%		
	Moderate clinical symptom range	14	70.0%	6	30.0%		
	Severe clinical symptom range	9	81.8%	2	18.2%		
Self-Concept (SCP)	Normal range	53	43.4%	69	56.6%	15.33	0.0**
	Subclinical symptom range	20	45.5%	24	54.5%		
	Mild clinical symptom range	7	38.9%	11	61.1%		
	Moderate clinical symptom range	8	88.9%	1	11.1%		
	Severe clinical symptom range	7	100.0%	0	0.0%		
Interpersonal Problems (IPP)	Normal range	61	40.7%	89	59.3%	13.09	0.01**
	Subclinical symptom range	14	73.7%	5	26.3%		
	Mild clinical symptom range	11	57.9%	8	42.1%		
	Moderate clinical symptom range	8	80.0%	2	20.0%		
	Severe clinical symptom range	1	50.0%	1	50.0%		

Significant level * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table: 3 Comparisons between Classes of participants on the Adolescent Psychopathology Scale-Short Form (APS-SF)

Variables		Class						χ^2	p-value
		8 th		9		10			
		N	%	N	%	N	%		
Conduct Disorder (CND)	Normal range	38	23.6%	32	19.9%	91	56.5%	5.76	0.67
	Subclinical symptom range	3	20.0%	1	6.7%	11	73.3%		
	Mild clinical symptom range	3	33.3%	1	11.1%	5	55.6%		
	Moderate clinical symptom range	2	18.2%	2	18.2%	7	63.6%		
	Severe clinical symptom range	0	0.0%	0	0.0%	4	100.0%		
Oppositional Defiant Disorder (OPD)	Normal range	45	22.8%	36	18.3%	116	58.9%	1.72	0.78
	Subclinical symptom range	1	50.0%	0	0.0%	1	50.0%		
	Mild clinical symptom range	0	0.0%	0	0.0%	0	0.0%		
	Moderate clinical symptom range	0	0.0%	0	0.0%	1	100.0%		
	Severe clinical symptom range	0	0.0%	0	0.0%	0	0.0%		
Substance Abuse Disorder (SUB)	Normal range	46	24.2%	34	17.9%	110	57.9%	5.76	0.45
	Subclinical symptom range	0	0.0%	0	0.0%	4	100.0%		
	Mild clinical symptom range	0	0.0%	1	50.0%	1	50.0%		
	Moderate clinical symptom range	0	0.0%	0	0.0%	0	0.0%		
	Severe clinical symptom range	46	23.0%	36	18.0%	118	59.0%		
Anger/Violence Proneness (AVP)	Normal range	35	21.9%	32	20.0%	93	58.1%	4.15	0.84
	Subclinical symptom range	6	35.3%	1	5.9%	10	58.8%		
	Mild clinical symptom range	4	23.5%	2	11.8%	11	64.7%		
	Moderate clinical symptom range	1	20.0%	1	20.0%	3	60.0%		
	Severe clinical symptom range	0	0.0%	0	0.0%	1	100.0%		
Academic Problems (ADP)	Normal range	37	22.3%	35	21.1%	94	56.6%	8.47	0.20
	Subclinical symptom range	7	30.4%	1	4.3%	15	65.2%		
	Mild clinical symptom range	2	28.6%	0	0.0%	5	71.4%		
	Moderate clinical symptom range	0	0.0%	0	0.0%	4	100.0%		
	Severe clinical symptom range	0	0.0%	0	0.0%	0	0.0%		
Generalized Anxiety Disorder (GAD)	Normal range	35	22.2%	33	20.9%	90	57.0%	6.19	0.62
	Subclinical symptom range	4	23.5%	2	11.8%	11	64.7%		
	Mild clinical symptom range	4	33.3%	0	0.0%	8	66.7%		
	Moderate clinical symptom range	3	27.3%	1	9.1%	7	63.6%		
	Severe clinical symptom range	0	0.0%	0	0.0%	2	100.0%		
Posttraumatic Stress Disorder (PTS)	Normal range	33	22.4%	26	17.7%	88	59.9%	5.46	0.48
	Subclinical symptom range	7	35.0%	4	20.0%	9	45.0%		
	Mild clinical symptom range	6	22.2%	5	18.5%	16	59.3%		

	Moderate clinical symptom range	0	0.0%	0	0.0%	0	0.0%		
	Severe clinical symptom range	0	0.0%	0	0.0%	5	100.0%		
Major Depression (DEP)	Normal range	3 1	22.0%	28	19.9%	82	58.2%	6.94	0.54
	Subclinical symptom range	7	24.1%	5	17.2%	17	58.6%		
	Mild clinical symptom range	5	35.7%	1	7.1%	8	57.1%		
	Moderate clinical symptom range	2	13.3%	2	13.3%	11	73.3%		
	Severe clinical symptom range	1	100.0%	0	0.0%	0	0.0%		
Eating Disturbance (EAT)	Normal range	3 3	21.6%	27	17.6%	93	60.8%	8.08	0.42
	Subclinical symptom range	3	14.3%	5	23.8%	13	60.8%		
	Mild clinical symptom range	3	33.3%	3	33.3%	3	33.3%		
	Moderate clinical symptom range	5	41.7%	1	8.3%	6	50.0%		
	Severe clinical symptom range	2	40.0%	0	0.0%	3	60.0%		
Suicide (SUI)	Normal range	3 3	23.2%	28	19.7%	81	57.0%	5.70	0.68
	Subclinical symptom range	3	15.0%	5	25.0%	12	60.0%		
	Mild clinical symptom range	3	42.9%	0	0.0%	4	57.1%		
	Moderate clinical symptom range	4	20.0%	2	10.0%	14	70.0%		
	Severe clinical symptom range	3	27.03%	1	9.1%	7	63.6%		
Self-Concept(SCP)	Normal range	3 0	24.6%	25	20.5%	67	54.9%	18.90	0.01**
	Subclinical symptom range	3	6.8%	6	13.6%	35	79.5%		
	Mild clinical symptom range	7	38.9%	2	11.1%	9	50.0%		
	Moderate clinical symptom range	2	22.2%	1	11.1%	6	66.7%		
	Severe clinical symptom range	4	57.1%	2	28.6%	1	14.3%		
Interpersonal Problems (IPP)	Normal range	3 4	22.7%	30	20.0%	86	57.3%	4.09	0.84
	Subclinical symptom range	6	31.6%	3	15.8%	10	52.6%		
	Mild clinical symptom range	4	21.1%	2	10.5%	13	68.4%		
	Moderate clinical symptom range	2	20.0%	1	10.0%	7	70.0%		
	Severe clinical symptom range	0	0.0%	0	0.0%	2	100.0%		

Significant level **p<01.

Table 4: Prevalence rate of Psychopathology among School going Adolescents

Variables	Absent (%)	Present			Total
		Mild	Moderate	Severe	
Conduct Disorder (CND)	176 (88%)	9 (4.5%)	11 (5.5%)	4 (2%)	200 (100%)
Oppositional Defiant Disorder (OPD)	199 (99.5%)	0 (0%)	1 (0.5%)	0 (0%)	200 (100%)
Substance Abuse Disorder (SUB)	194 (97%)	2 (1%)	0 (0%)	4 (2%)	200 (100%)
Anger/Violence Proneness (AVP)	177 (88.5%)	17 (8.5%)	5 (2.5%)	1(0.5%)	200 (100%)
Academic Problems (ADP)	189 (94.5%)	7 (3.5%)	4 (2%)	0 (0%)	200 (100%)

Generalized Anxiety Disorder (GAD)	175 (87.5%)	12 (6%)	11 (5.5%)	2 (1%)	200 (100%)
Posttraumatic Stress Disorder (PTS)	168 (84%)	27(13.5%)	0 (0%)	5 (2.5%)	200 (100%)
Major Depression (DEP)	170 (85%)	14(7%)	15 (7.5%)	1 (0.5%)	200 (100%)
Eating Disturbance(EAT)	174 (87%)	9 (4.5%)	12 (6%)	5 (2.5%)	200 (100%)
Suicide (SUI)	162 (81%)	7 (3.5%)	20 (10%)	11(5.5%)	200 (100%)
Self-Concept (SCP)	166 (83%)	18(41.5%)	9 (4.5%)	7 (3.5%)	200 (100%)
Interpersonal Problems (IPP)	169 (84.5%)	19 (9.5%)	10 (5%)	2 (1%)	200 (100%)

DISCUSSION

In the past research related to the child, psychopathology has been customarily treated like a stepchild. Despite the clinical emphasis on the childhood roots of an adult psychopath and it has been studied more intensively in adults. This study was carried out with 200 schools going adolescents from different districts of Jharkhand. The sample was selected through simple random sampling. Both male and female adolescents in the age range of 13 to 17 years were recruited for the study. Both male and female adolescents were studying in 8th to 10th standard and had no history of mental retardation and major physical illness. In the present study, it was seen that the majority of them (52.5%) students were female as well as most of them studied in class 10th standard and belongs to the Hindu religion (59.0% & 93.5%) respectively. This study also revealed that most adolescents came under 16th years of age. In the past study done by many researchers found that prevalence to be 13.4% in the age group 0-16 years ^[9], the study revealed the prevalence rate to be 12.5% in 0-16 years community-based sample from Bangalore (ICMR, 2001). Furthermore, mild to moderate level of prevalence rate of psychopathology i.e. generalized anxiety disorder, posttraumatic stress disorder, major depression, eating disturbance, suicide, self-concept & international problems were found higher in males as compared with females. The finding of the present study incorporated the other studies

where males had higher psychiatric morbidity as compared to girls.^[10-11] This study found that more self-concept developed in adolescents who were studying in 10th standard as compared to 8th & 9th standard. No significant difference was found in the others domain of the Adolescent Psychopathology Scale-Short Form (APS-SF). There is a wide variation in the prevalence rate of child and adolescent psychiatric disorders. This could be due to various reasons. The most important among these is the definition of a 'case'. Various studies carried out in India and abroad used different criteria to define a 'case'.

The overall finding of the present study indicated that moderate level of prevalence rate of psychopathology i.e. conduct disorder (5.5%), generalized anxiety disorder (5.5%), major depression (7.5%), eating disturbance (6%), suicide (10%) and interpersonal problems (5%) have been existing in the school going adolescents. However, similar findings have been found in the previous study which was conducted with different disorders, most of the children were having specific isolated phobia (19.6%), and other nonorganic sleep disorders like sleep talking, bruxism, etc (12.0%) and tension headache (11.5%). Deivasinagamini^[12] found prevalent psychiatric disorders to be conduct disorder (14.3%), enuresis (14.3%), mental retardation (2.9%) and hyperkinetic disorder (1.7%). So, from the above-mentioned findings, it can be said that there is urgency for integrating mental health into general health

care, effective mass media coverage, networking between mental health professionals and other health professionals, community-based health services, and involvement of professionals from the education sector, would be essential.

CONCLUSION

Because of the above discussion, the finding of the present study concluded that a moderate level prevalence rate of psychopathology i.e. conduct disorder (5.5%), generalized anxiety disorder (5.5%), major depression (7.5%), eating disturbance (6%), suicide (10%) and interpersonal problems (5%) have presented in the school going adolescents and have implications for clinical training, practice and policy initiatives.

REFERENCES

1. Gururaj G, Varghese M, Benegal V, Rao GN, Pathak K, Singh L.K, Kokane A. National Mental Health Survey of India, 2015-16: prevalence, patterns, and outcomes. Bengaluru: National Institute of Mental Health and Neuro Sciences, NIMHANS Publication 2016;361-372.
2. Lodha RS, Patel S, Maata S, Negi P, Sahu N, Pal DK, MurariLK. Prevalence of depression amongst higher secondary school adolescents in Bhopal Madhya Pradesh. *Natl. j. community med.* 2016;7:856-858.
3. Sagar R, Dandona R, Gururaj G, Dhaliwal RS, Singh A, Ferrari A, Dandona L. The burden of mental disorders across the states of India: the Global Burden of Disease Study 1990–2017. *Lancet Psychiatry* 2020; 7; 148-161.
4. Erskine HE, Ferrari AJ, Polanczyk GV, Moffitt, TE, Murray CJ, Vos T, Scott JG. The global burden of conduct disorder and attention-deficit/hyperactivity disorder in 2010. *J. Child Psychol. Psychiatry* 2014; 55; 328-336.
5. Muzammil K, Kishore S, Semwal J. Prevalence of psychosocial problems among adolescents in district Dehradun, Uttarakhand. *Indian J. Public Health* 2009; 53: 18-21.
6. Ahmad A, Khalique N, Khan Z, Amir A. Prevalence of psychosocial problems among school-going male adolescents. *Indian J Community Med* 2007; 32: 219-221.
7. Mangal A, Thakur A, Nimavat KA, Dabar D, Yadav SB. Screening for common mental health problems and their determinants among school-going adolescent girls in Gujarat, India. *Fam. Med. Prim. Care Rev.* 2020; 9:264–270.
8. Faizi N, Salman S M, Ahmad A, Ahmad AS, Maroof M, Khalique N. Implications of psychological morbidity on physical health and behavior of adolescents in Aligarh, India. *J. Pediatr. Rev.* 2018; 6:59-64.
9. Giel R, De Arango MV, Climent CE, Harding TW, Ibrahim HHA, Ladrigo-Ignacio L, Younis VOA. Childhood mental disorders in primary health care: results of observations in four developing countries. *Pediatrics* 1981;68: 677-683.
10. Gau SS, Chong MY, Chen TH, Cheng AT. A 3-year panel study of mental disorders among adolescents in Taiwan. *American Journal of Psychiatry* 2005; 162(7):1344-1350.
11. Anita Gaur DR, Vohra AK, Subash S, Khurana H. Prevalence of psychiatric morbidity among 6 to 14-year-old children. *Indian J Community Medicine* 2007; 28:7–9.
12. Deivasigamani T. Psychiatric morbidity in primary school children-an

- epidemiological study. *Indian J. Psychiatry* 1990; 32:235-240.
13. Fazel, M, Hoagwood, K, Stephan S, Ford T. Mental health interventions in schools in high-income countries. *Lancet Psychiatry* 2014; 1: 377-387.