Original Research Paper



Community Medicine

PSYCHOSOCIAL PROBLEMS AMONG ADOLESCENTS: A COMPARISON BETWEEN URBAN AND RURAL HIGH SCHOOL STUDENTS OF DEHRADUN

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ABSTRACT Introduction:- Adolescence is the transitional stage of development between childhood and adulthood. Hall denoted this period as "Storm and Stress" and states "conflict at this developmental stage is normal" leading to psychosocial problems. This study is conducted to compare the psychosocial problems between adolescents in urban and rural area.

Material and methods:- A Cross-sectional study was done in November 2018 in rural and urban schools of Dehradun. Data was collected through a structured questionnaire and analysed using Epi info software.

Results:- A total of 170 students participated in the study out of which 111 were males and 59 females. Psychosocial problems were seen in 11.2% of study participants (11.7% in males and 10.1% in females.

Conclusion and recommendations: - Psychosocial problems were seen on rise among adolescents and needs to be addressed at school level.

KEYWORDS:

INTRODUCTION:

Adolescence is the transitional stage of development between childhood and adulthood, representing the period of time during which a person experiences a variety of biological and emotional changes. Hall denoted this period as "Storm and Stress" and states "conflict at this developmental stage is normal" (1). About 1.2 billion of world's population belong to this age group (2). In India, 21% of the population falls in (253 million) adolescent years (3).

The term psychosocial reflects both the behavioural problems such as conduct disorder ,educational difficulties, substance abuse, hyperactivity etc and the emotional problems like anxiety, depression etc .Now a days because of rapid urbanization, industrialization and nuclear family set up majority of employed parents get less time to look after their children and their emotional needs (4). Substantive factors including gender, age, culture, conflict and economic status, and urbanization accounted for the greatest proportion of variability (5).

Under these situations psychosocial (emotional and behavioural) problems and psychiatric problems are on the rise. Thus this study is conducted to compare the psychosocial problems between adolescents residing in urban and rural areas.

OBJECTIVES

- To study the cognitive, emotional and behavioural problems (psychosocial impairment) among the students in rural and urban areas.
- To compare the various psychosocial problems among the students.

MATERIALS AND METHODS

- Study area: This study was conducted in two schools, one each in rural and urban field practise area of department of Community Medicine, SGRRIM&HS, Dehra Dun.
- Study population: All the high school students studying in the SGRR public school, Patel nagar and the SGRR public school, Mothrowala.
- Study design: A Cross-sectional study.
- Study period: November 2018.
- One school each from rural and urban area was selected by purposive sampling. All the high school students studying in both the schools were included in the study. A total of 170 students were interviewed which comprised the study sample. Only the students

- present in the school at the day of visit and who consent to the study were interviewed. A total of 93 students from urban area and 77 students from rural area were finally interviewed.
- Data collection: A screening tool the youth report of Paediatric Symptom Checklist (Y-PSC) was used to screen the psychosocial impairment among the adolescents. It is a brief screening questionnaire that can be administered to adolescents ages 11 and up by health professionals and researchers. It consists of 35 items that are rated as "Never," "Sometimes," or "Often" present and scored 0, 1, and 2, respectively. The total score is calculated by adding together the score for each of the 35 items. For children and adolescents ages 6 through 16, a cut-off score of 28 or higher indicates psychological impairment. The PSC could be used without explicit permission for educational and professional research
- Data analysis: Collected data was checked and reviewed for completeness and accuracy. Data was analyzed by using Microsoft excel & Epi-info software. Descriptive statistics (i.e frequency, percentage, mean and standard deviation) was used to describe the findings and inferential statistics (chi-square test and odds ratio) were computed to see the association between variables. The result was considered significant at 95% confidence interval with p value ≤0.05

RESULTS

In present study of all the 170 participants there were 111 males (53 in rural and 58 in urban area) and 59 females (24 in rural & 35 in urban areas) participants (Table no. 1).

Table 1. Distribution of study participants according to area and sex.

School	Female Male		number of students
Rural	24	53	77(45.29%)
Urban	35	58	93(54.70%)
Total	59 (34.7%)	111 (65.3%)	170(100%)

Upon comparing the problem antisocial in nature among rural and urban students it was seen significantly higher number of children were involved in fight with other children as compared to urban area. Whereas symptoms like taking unnecessary risk and getting hurt frequently was seen in significantly higher number of students in urban area as compared to rural area. No significant difference was found for symptoms like not listening to rules, teasing others and take things that

do not belong to you among the two group of students. (Table 2)

Table 2: Comparison of Problem antisocial in nature among study participants in urban and rural area.

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Symptoms	Response	Rural	Urban	P	
		(n=77)	(n=93)	Value	
Fight with other	Never	21 (27.3)	47 (50.5)	0.008	
children	Sometimes	46 (59.7)	37 (39.8)		
	Often	10 (13.0)	9 (9.7)		
Take unnecessary risks	Never	14 (18.2)	28 (30.1)	0.001	
	Sometimes	49 (63.6)	33 (35.5)		
	Often	14 (18.2)	32(34.4)		
Get hurt frequently	Never	25 (32.5)	14(15.1)	0.018	
	Sometimes	28 (36.4)	49 (52.7)		
	Often	24 (31.1)	30 (32.3)		
Do not listen to rules	Never	30 (38.9)	25 (26.9)	0.221	
	Sometimes	37 (14.1)	51 (54.8)		
	Often	10 (13.0)	17 (18.3)		
Tease others	Never	18 (23.4)	26 (28.0)	0.792	
	Sometimes	40 (51.9)	45 (48.4)		
	Often	19 (24.7)	22 (23.6)	1	
Take things that do not	Never	31 (40.3)	45 (48.4)	0.568	
belong to you	Sometimes	41 (53.2)	43 (46.2)		
	Often	5 (6.5)	5 (5.4)		
	Fight with other children Take unnecessary risks Get hurt frequently Do not listen to rules Tease others Take things that do not	Fight with other children Fight with other children Fight with other children Fake unnecessary risks Often Fake unnecessary risks Often Face of hurt frequently Often Face others Face others Face others Face others Fake things that do not belong to you Never Sometimes Often Fake things that do not belong to you Sometimes Face of here Sometimes Often Face of here Sometimes Often Face of here Sometimes Face of here Sometimes Often Face of here Sometimes Face of here Sometimes Often Face of here Sometimes	Never	Never 21 (27.3) 47 (50.5)	

Among the different symptoms of personality disorder, symptoms like are irritable or angry, down on yourself, wants to be with parents more than before and seem to be having less fun were seen more among students of rural area as compared to urban area, the difference being statistically significant. No significant difference was seen for other symptoms (Table 3)

Table 3: Comparison of Personality disorders among study participants in urban and rural area.

No Q1					
Q1			(n=77)	(n=93)	Value
	Spends more time	Never	24 (31.2)	26 (28.0)	0.623
	alone	Sometimes	41 (53.2)	56 (60.2)	
		Often	12 (15.6)		
Q2	Day dreams too much	Never		29 (31.2)	0.850
		Sometimes	28 (36.3)		
		Often	22 (28.6)	27 (29.0)	
Q3	Are afraid of new	Never	21 (27.3)	15 (16.1)	0.122
	situations	Sometimes	38 (49.4)	46(49.5)	
		Often	18 (23.3)	32(34.4)	
Q4	Feel sad, Unhappy	never	10 (13.0)	11 (11.8)	0.722
		sometimes	54 (70.1)	70 (75.3)	
		often	13 (16.9)	12 (12.9)	
Q5	Are irritable, angry	never	2 (2.6)	11 (11.8)	0.003
		sometimes	43 (55.8)	63 (67.7)	
		often	32 (41.6)	19 (20.5)	
Q6	Feel hopeless	never	27 (35.1)	25(26.9)	0.440
		sometimes	44 (57.1)	62(66.7)	
		often	6 (7.8)	6(6.4)	
Q7	Less interested in	Never	58 (75.3)	56(60.2)	0.081
	friends	Sometimes	14 (18.2)	23 (24.7)	
		Often	5 (6.5)	14 (15.1)	
Q8	Have trouble sleeping	Never	36 (46.8)	37 (39.8)	0.431
		Sometimes	30 (38.9)	36 (38.7)	
		Often	11 (14.3)	20 (21.5)	
Q9	Down on yourself	Never	25 (32.5)	48(51.6)	0.004
		Sometimes	47 (61.0)	33(35.5)	
		Often	5 (6.5)	12(12.9)	
Q10	Worry a lot	Never	6 (7.8)	10 (10.8)	0.342
		Sometimes	40 (51.9)	38 (40.9)	
		Often	31 (40.3)	45 (48.3)	
Q11	Wants to be with	Never	18 (23.4)	41 (44.1)	0.007
	parents more than	Sometimes	32 (41.6)	35 (37.6)	
	before	Often	27 (35.0)	17 (18.3)	
Q12	Feel that you are bad	Never	34 (44.2)	34(36.6)	0.603
	•	Sometimes	35 (45.5)	48(51.6)	
		Often	8 (10.3)		

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Q13	Seem to be having less	Never	25 (32.5)	35 (37.6)	0.000
	fun	Sometimes	46 (59.7)	24 (25.8)	
		Often	6 (7.8)	34 (36.6)	
Q14	Act younger than	Never	51(66.2)	10(10.8)	0.242
	children your age	Sometimes	6(7.8)	68(73.1)	
		Often	20(26.0)	15(16.1)	
Q15	Do not show feelings	Never	21(27.3)	20(21.5)	0.142
		Sometimes	40 (51.9)	41(44.1)	
		Often	16 (20.8)	32(34.4)	
Q16	Do not understand	Never	22 (28.6)	40 (43.0)	0.061
	other people's feelings	Sometimes	41 (53.2)	45 (48.4)	
		Often	14 (18.2)	8 (8.6)	
Q17	Blame others for your	Never	40 (51.9)	42(45.2)	0.548
	troubles	Sometimes	33 (42.9)	43 (46.2)	
		Often	4 (5.2)	8(8.6)	
Q18	Refuse to share	Never	37(48.1)	35(37.6)	0.351
		Sometimes	37 (48.1)	52(55.9)	
		Often	3 (3.8)	6(6.5)	

Comparison of psychosomatic complains among the two groups of students showed that the significantly higher number of students in rural area felt often that they act as if driven by a motor as compared to those of urban area. For the other symptoms no significant difference was found among the students.(Table 4)

Table 4: Comparison of Psychosomatic complaints among study participants in urban and rural area.

S. No	Symptoms	Response	Rural (n=77)	Urban (n=93)	
Q1	Complains of aches	Never	10 (13.0)	15 (16.1)	0.393
	and pain	Sometimes	65 (84.4)	72 (77.4)	
		Often	2 (2.6)	6 (6.5)	
Q2	Tires easily, less	Never	18 (23.4)	19 (20.4)	0.525
	energy	Sometimes	48 (62.3)	65 (69.9)	
		Often	11 (14.3)	9 (9.7)	
Q3	Unable to sit still	Never	23 (29.9)	24(25.8)	0.652
		Sometimes	37 (48.0)	43(46.2)	
		Often	17 (22.1)	26(28.0)	
Q4	Acts as if driven by	Never	32 (41.6)	29 (31.2)	0.023
	a motor	Sometimes	32 (41.6)	57 (61.3)	
		Often	13 (16.8)	7 (7.5)	
Q5	Visit the doctor	Never	57 (74.0)	71 (76.3)	0.705
	with doctor finding	Sometimes	18 (23.4)	18 (19.4)	
	nothing wrong	Often	2 (2.6)	4(4.3)	

Educational difficulties like having trouble concentrating and dropping school grades was found to be Significantly more among the students in urban area as compared to students in rural area. No significant difference was seen for other educational difficulties among the students (Table 5).

Table 5: Comparison of Educational difficulties among study participants in urban and rural area.

S. No	Symptoms	Response	Rural (n=77)	Urban (n=93)	P Value
Q1	Have trouble with	Never	24 (31.2)	31 (33.3)	0.945
	teacher	Sometimes	45 (58.4)	52 (55.9)	
		Often	8 (10.4)	10 (10.8)	
Q2	Less interested in	Never	35 (45.5)	43 (46.2)	0.210
	school	Sometimes	39 (50.6)	40 (43.0)	
		Often	3 (3.9)	10 (10.8)	
Q3	Distract easily	Never	10 (13.0)	9(9.7)	0.599
		Sometimes	35 (45.5)	49(52.7)	
		Often	32 (41.5)	35(37.6)	
Q4	Have trouble	Never	12 (15.6)	8 (8.6)	0.005
	concentrating	Sometimes	51 (66.2)	47 (50.5)	
		Often	14 (18.2)	38 (40.9)	
Q5	Absent from	Never	35 (45.5)	37 (39.8)	0.716
	school	Sometimes	41 (53.2)	54(58.1)	
		Often	01 (1.3)	02(2.1)	
Q6	School grades	Never	12 (15.6)	12(12.9)	0.022
	dropping	Sometimes	48 (62.3)	42(45.2)	
		Often	17 (22.1)	39(41.9)	

Odds of being unhealthy was seen lower among students in rural area and female sex whereas the odds were higher in joint family as compared to their counterparts, although none of these were found to be statistically significant. (Table 6).

Table 6. Association of Psychosocial health with different factors

		Psychosocial Health		Odds Ratio	
		Unhealthy	Healthy	(95% CI)	
School	Rural (n= 77)	08 (10.3%)	69 (89.7%)	0.86 (0.32 - 2.27)	
	Urban (n= 93)	11 (11.8%)	82 (88.2%)	1.00	
Gender	Female (n= 59)	06 (10.1%)	53 (89.9%)	0.85(0.31 - 2.37)	
	Male (n = 111)	13 (11.7%)	98 (88.3%)	1.00	
Family	Joint	08 (15.1%)	45 (84.9%)	1.71 (0.65 – 4.54)	
Type	Nuclear	11 (9.4%)	106 (90.6%)	1.00	

DISCUSSION

In present study of all the 170 participants there were 111 males (53 in rural and 58 in urban area) and 59 females (24 in rural & 35 in urban areas) participants. Muzammill K.et.al (2009) conducted a crosssectional study on prevalence of psychosocial problems among 840 adolescents in Dehradun (6). The result showed the overall prevalence of psychosocial problems as 13.2% and problems were more in males as compared to females. Another study by Ahmed A et al (2007) showed prevalence of 17.9% with predominance among male adolescents (4). Similar studies by Bhosale et al (15) reported 15.2%, and two international studies in Nepal (13) (14) indicated prevalence of 12.9% and 17.03% respectively. These results were in coherence with the results of present study where psychosocial problem was found to be 12.5% and males were more unhealthy as compared to females. This was in contrast to prevalence of 40.5% as reported by Sharma A et.al.(2014) (7) in their study. This may be due to fact that ours is a school based study based among high school adolescents with use of varying screening tool and methodology. Higher prevalence of 30.95% was also reported by Roy AKS et al (10) and Pathak et al (12) in their study and other similar study in Nepal(11).

In the present study it was found that educational difficulties like having trouble concentrating and school grades dropping were found to be statistically higher among urban students as compared to rural students. Similar results were found in the study conducted by Anees ahmed et.al. among male adolescents and educational difficulties was seen the most common problem followed by substance abuse and conduct disorders.(4)

Among the total 170 students, psychosocial health of 19 students was found to be unhealthy. In the present study it was seen that seen that higher no. of (15.1%) unhealthy psychosocial health among students living in joint family, similarly a study conducted by Chhabra and Sodhi, (2012) and Roy AKS (2018) reported higher prevalence of psychosocial problems in adolescents of large extended families (>8members)/ joint families and in lower socioeconomic status. (8) (10). Adolescents living in joint family were twice more likely to have psychosocial problem. There might be the less parental attention, time, focus and guidance towards the adolescents in the joint family system (11).

In present study psychosocial problems were found higher among males which was in coherence with findings of Roy AKS (2018) (10) and in contrast with findings by Madasu Et al (2019) where females have higher level of anxiety disorders (9).

CONCLUSION

The overall prevalence of psychosocial problems in the study subjects was found to be 11.2%.

The association between the psychosocial health and gender between the high school students is significant. In males the prevalence of psychosocial problems was 11.7%.

Although there is no significant association between family type and psychosocial health of the students but there is higher percentage of unhealthy psychosocial health among students living in joint family. Educational difficulties like having trouble concentrating and school grades dropping were found to be statistically significant. Problems antisocial in nature like Fight with other children, take unnecessary risks & get hurt frequently were found statistically significant among rural and urban high school students. Personality disorders like excessive irritability, increased desire to be with parents more than before, feeling of having less fun were found statistically significant.

Psychosomatic complaints like act as if driven by a motor was found statistically significant.

RECOMMENDATIONS

Psychosocial problems are emerging health concerns in adolescent age group. Interventions should be carried out especially in schools to target these problems, which focuses on overall mental, physical and social development of today's adolescents into responsible adults tomorrow

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