## 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 $\leq 0.05$


## 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

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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.

| $\begin{array}{\|l\|} \hline \mathbf{S .} \\ \text { No } \end{array}$ | Symptoms | Response | $\begin{aligned} & \text { Rural } \\ & (\mathrm{n}=77) \end{aligned}$ | $\begin{aligned} & \text { Urban } \\ & (\mathrm{n}=93) \end{aligned}$ | $\begin{array}{\|l\|} \hline \mathbf{P} \\ \text { Value } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | Fight with other children | Never | 21 (27.3) | 47 (50.5) | 0.008 |
|  |  | Sometimes | 46 (59.7) | 37 (39.8) |  |
|  |  | Often | 10 (13.0) | 9 (9.7) |  |
| Q2 | Take unnecessary risks | Never | 14 (18.2) | 28 (30.1) | 0.001 |
|  |  | Sometimes | 49 (63.6) | 33 (35.5) |  |
|  |  | Often | 14 (18.2) | $32(34.4)$ |  |
| Q3 | 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) |  |
| Q4 | 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) |  |
| Q5 | 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) |  |
| Q6 | Take things that do not belong to you | Never | 31 (40.3) | 45 (48.4) | 0.568 |
|  |  | Sometimes | 41 (53.2) | 43 (46.2) |  |
|  |  | Often | 5 (6.5) | 5 (5.4) |  |

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.

| $\mathbf{S} .$ No | Symptoms | Response | $\begin{aligned} & \text { Rural } \\ & (\mathrm{n}=77) \end{aligned}$ | $\begin{aligned} & \text { Urban } \\ & (\mathrm{n}=93) \end{aligned}$ | $\begin{aligned} & \mathbf{P} \\ & \mathbf{V} \text { Value } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | Spends more time alone | Never | 24 (31.2) | 26 (28.0) | 0.623 |
|  |  | Sometimes | 41 (53.2) | 56 (60.2) |  |
|  |  | Often | 12 (15.6) | 11 (11.8) |  |
| Q2 | Day dreams too much | Never | 27 (35.1) | 29 (31.2) | 0.850 |
|  |  | Sometimes | 28 (36.3) | 37 (39.8) |  |
|  |  | Often | 22 (28.6) | 27 (29.0) |  |
| Q3 | Are afraid of new situations | Never | 21 (27.3) | 15 (16.1) | 0.122 |
|  |  | 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 friends | Never | 58 (75.3) | 56(60.2) | 0.081 |
|  |  | 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 parents more than before | Never | 18 (23.4) | 41 (44.1) | 0.007 |
|  |  | Sometimes | 32 (41.6) | 35 (37.6) |  |
|  |  | 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) | 11(11.8) |  |
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| Q13 | Seem to be having less fun | Never | 25 (32.5) | 35 (37.6) | 0.000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sometimes | 46 (59.7) | 24 (25.8) |  |
|  |  | Often | 6 (7.8) | 34 (36.6) |  |
| Q14 | Act younger than children your age | Never | 51(66.2) | 10(10.8) | 0.242 |
|  |  | 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 other people's feelings | Never | 22 (28.6) | 40 (43.0) | 0.061 |
|  |  | Sometimes | 41 (53.2) | 45 (48.4) |  |
|  |  | Often | 14 (18.2) | 8 (8.6) |  |
| Q17 | Blame others for your troubles | Never | 40 (51.9) | 42(45.2) | 0.548 |
|  |  | 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.

| $\begin{array}{\|l} \mathbf{S} . \\ \mathbf{N o} \end{array}$ | Symptoms | Response | $\begin{aligned} & \text { Rural } \\ & (\mathrm{n}=77) \end{aligned}$ | $\begin{array}{\|l} \text { Urban } \\ (\mathrm{n}=93) \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | Complains of aches and pain | Never | 10 (13.0) | 15 (16.1) | 0.393 |
|  |  | Sometimes | 65 (84.4) | 72 (77.4) |  |
|  |  | Often | 2 (2.6) | 6 (6.5) |  |
| Q2 | Tires easily, less energy | Never | 18 (23.4) | 19 (20.4) | 0.525 |
|  |  | 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 a motor | Never | 32 (41.6) | 29 (31.2) | 0.023 |
|  |  | Sometimes | 32 (41.6) | 57 (61.3) |  |
|  |  | Often | 13 (16.8) | 7 (7.5) |  |
| Q5 | Visit the doctor with doctor finding nothing wrong | Never | 57 (74.0) | 71 (76.3) | 0.705 |
|  |  | Sometimes | 18 (23.4) | 18 (19.4) |  |
|  |  | 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.

| $\begin{aligned} & \text { S. } \\ & \text { No } \end{aligned}$ | Symptoms | Response | $\begin{aligned} & \text { Rural } \\ & (\mathrm{n}=77) \end{aligned}$ | $\begin{aligned} & \text { Urban } \\ & (\mathrm{n}=93) \end{aligned}$ | $\left\lvert\, \begin{array}{\|l\|} \hline \mathbf{P} \\ \text { Value } \end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | Have trouble with teacher | Never | 24 (31.2) | 31 (33.3) | 0.945 |
|  |  | Sometimes | 45 (58.4) | 52 (55.9) |  |
|  |  | Often | 8 (10.4) | 10 (10.8) |  |
| Q2 | Less interested in school | Never | 35 (45.5) | 43 (46.2) | 0.210 |
|  |  | 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 concentrating | Never | 12 (15.6) | 8 (8.6) | 0.005 |
|  |  | Sometimes | 51 (66.2) | 47 (50.5) |  |
|  |  | Often | 14 (18.2) | 38 (40.9) |  |
| Q5 | Absent from school | Never | 35 (45.5) | 37 (39.8) | 0.716 |
|  |  | Sometimes | 41 (53.2) | 54(58.1) |  |
|  |  | Often | 01 (1.3) | 02(2.1) |  |
| Q6 | School grades dropping | Never | 12 (15.6) | 12(12.9) | 0.022 |
|  |  | 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 <br> $\mathbf{n}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | Unhealthy | Healthy | CI) |  |

## 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 ( $>8$ members)/ 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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