

PSYCHOSOCIAL PROBLEMS AMONG ADOLESCENT STUDENTS OF BHARATPUR,  
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Asst. Prof. Charak Academy Pvt.  
Ltd, Pokhara, Nepal.**ABSTRACT**

Adolescence is the crucial period in human development, demanding significant adjustment to the biological, social, psychological and cognitive changes which makes them vulnerable to mental health problems. Psychosocial problems exhibit as iceberg phenomenon and are hidden public health problems if left untreated, may lead to psychopathology and antisocial behavior which will directly affect the overall development of the individual adolescent and whole country. Thus this study was conducted to identify the psychosocial problems among adolescent students and its association with the selected variables. A descriptive cross sectional research study was conducted among 220 adolescent students studying in grade 8, 9 and 10 in private school of Bharatpur, Chitwan by using stratified proportionate random sampling technique. A structured interview schedule and youth pediatric symptom checklist-17 (YPSC-17) was used to collect the data. Obtained data were entered into IBM SPSS 20 and were analyzed using both descriptive and inferential statistics. The prevalence of psychosocial problems among adolescent students was found to be 23.6% percent. Significant association of psychosocial problems was found with sex ( $p=.001$ ), ethnic group ( $p<.001$ ), religion ( $p<.001$ ), living status ( $p=.026$ ), father's occupational status ( $p<.001$ ) and mother's occupational status ( $p=.045$ ). Based on findings it is concluded that nearly one fourth of the adolescent students have psychosocial problem. Hence, effective health related programmes can be implemented for the prevention, earlier recognition and management of psychosocial problems for the adolescent students.

**KEYWORDS:** Adolescent students, Family environment, Experience of physical violence, Psychosocial problems.

**BACKGROUND OF THE STUDY**

Adolescent's psychosocial problems are a growing public health concern in both developed and developing countries.<sup>[1]</sup> Prevalence of psychosocial problems varies from countries to countries. In the context of Nepal the prevalence is in the range of 11.7%<sup>[2]</sup> to 21.7%.<sup>[3]</sup>

In Nepal, the root causes of psychosocial problems for adolescents are family separation, changes from joint family to nuclear family structure, parental substance abuse, domestic violence, forced labor, caste/ethnic discrimination and lack of access to basic education and medical treatment.<sup>[4]</sup>

The impact of psychosocial problems on adolescents was diverse and included feeling of anxiety and restlessness, loss of confidence, hopelessness and suicidal ideation. These problems can have further ramifications for the adolescents, their families, communities and for the nation as a whole.<sup>[1]</sup>

Early diagnosis by teachers, parents and primary care physicians with prompt referral to the concerned

specialist is vital for controlling them.<sup>[5]</sup> Counseling, parental care and conducive school environment are identified as the proper and effective way of minimizing delinquency among school going adolescents.<sup>[6]</sup>

Psychosocial problems lead to various learning and emotional difficulties in children which then have an impact on their psychological wellbeing. Early identification and treatment can prevent such issues. Within this scope, this study aimed at revealing whether the adolescents have risk of psychosocial problems and its association with different variables such as age, sex, family dispute and experience of violence.

**METHODOLOGY****Research Design**

Descriptive cross sectional design was used to find out the psychosocial problems among adolescent students.

**Research Setting and Population**

This study was conducted in Valmiki Shiksha Sadan, Bharatpur-4, Chitwan. The population of the study was

560 adolescent students studying at grade 8, 9 and 10 between the age group of 13-19 years.

### Sampling

To calculate the sample size, Cochran (1997) formula for definite population was used;

$$n_0 = \frac{Z_{\alpha/2}^2 pq}{d^2} \text{ (Cochran, 1977)}$$

Where  $n_0$  = minimum sample size

$Z_{\alpha/2}$  = deviate corresponding to desired reliability level (5% level of significance i.e., 1.96)

p = Prevalence of psychosocial problem 21.7% (0.217)<sup>[3]</sup>

q = 1-p, hence, q = 1-0.217 = 0.783

d = maximum tolerable error set at +/- 5% or 0.05

Required sample size was by substituting the values in the above formula,

$$n_0 = \frac{(1.96)^2 \times (0.217) \times (0.783)}{(0.05)^2}$$

= 261.092

Required sample size ( $n_0$ ) = 262

Sampling frame population (N) = 560

Adjusting the above sample size for a finite population,

$$n_0 = \frac{(1.96)^2 \times (0.217) \times (0.783)}{(0.05)^2} \text{ (Cochran, 1977)}$$

$$\begin{aligned} \text{Required sample size (n)} &= \frac{262}{1 + \frac{(262-1)}{560}} \\ &= 178.717 \\ &= 179 \end{aligned}$$

To reduce non response error, additional 30% was taken  
Non response error = 30% of sample size = 30% of 179 = 53.7 = 54

Then, total sample size required = 179 + 54 = 233 ~ 235

Estimated proportionate percentage for each grade =  $(235/560) \times 100 = 41.96\%$

Required number of students = students studying in grade 8 + grade 9 + grade 10 = (41.96% of 221) + (41.96% of 183) + (41.96% of 156) = 93 + 77 + 65 = 235

Therefore, estimated total sample size = 235

Stratified proportionate random sampling technique was adopted for the selection of the adolescent students.

### Instrumentation

A structured interview schedule was developed by the researcher herself to assess the socio-demographic variables and other associated factors by reviewing the related literature and consulting with the research advisor. Youth Pediatric Symptom Checklist-17 (YPSC-17) (Gardener and Kelleber, 1988)<sup>[7]</sup> was used to assess the psychosocial problems among adolescent students.

Youth pediatric symptom checklist-17 was designed to screen a child's overall psychosocial functioning. It consisted of total 17 items with 3 point likert scale which

includes never-0, sometimes-1 and often-2. It has 3 subscale; attention subscale 22 consists of 5 items, internalizing subscale consists of 5 items and externalizing subscale consists of 7 items. The score ranges from 0-34. The total score is calculated by adding together the score for each of the 17 items. YPSC-17 score of 15 or higher suggests the presence of psychosocial problems.

Regarding subscale; attention subscale positive score  $\geq 7$  indicates higher risk for possible problems with attention, internalizing subscale positive score  $\geq 5$  indicates higher risk for possible problems with anxiety and depression and externalizing subscale positive score  $\geq 7$  indicates higher risk for possible problems with disruptive behavior like conduct disorder. The content validity of the instrument was established by extensive literature review and consultation with research advisor and subject experts. The research instrument was translated into Nepali version and again back translation was done into English version to retain the same meaning with the help of Nepali and English language experts.

Pretesting of instrument was done in 10% (21 students) of total sample at Gramodaya English School, Bharatpur-5, for the feasibility of the tool. Instrument was revised and finalized on the basis of pretest and feedback. Reliability of YPSC-17, Cronbach's  $\alpha$  for the overall PSC-17 was 0.89, and for the internalizing, attention, and externalizing subscales as were 0.79, 0.83, and 0.83 respectively.<sup>[7]</sup>

### Data Collection Procedure

Prior to the commencement of the study, proposal approval and ethical clearance was obtained from CMC-IRC. Data was collected after getting ethical clearance from CMC-IRC and approval letter from School of Nursing, Chitwan Medical College. Researcher obtained the formal permission from administration of Valmiki Shikshya Sadan, Bharatpur-4, Chitwan prior to the study.

First of all, respondent were identified by using the random table method. Informed consent form for parents was given to the students and only those students who brought the informed consent form with the signature of their parents were taken as a respondent of the study. The purpose of the study was explained to all respondents. Assent was taken from each respondent before data collection.

Data was collected during leisure periods as far as possible so as not to hamper the student's regular classes. Researcher arranged the structured interview schedule in a separate classroom environment in coordination with administration of the school. Each respondent was taken 10-15 minutes to complete the interview and researcher herself filled the questionnaire.

Researcher herself collected the data from 11<sup>th</sup> August, 2019 to 6<sup>th</sup> September, 2019 in each day excluding public holidays by using structured interview schedule during the regular school hours as per the convenience of students. All collected data was checked, reviewed and organized for the completeness, consistency and accuracy.

### Data Analysis Procedure

All collected data were coded, organized and entered into IBM Statistical Package for Social Sciences (SPSS) 20.0 version. Data were analyzed by using descriptive statistics i.e. frequency, percentage, mean, median, interquartile range and standard deviation to describe the respondents' socio-demographic variables, factors associated with psychosocial problems and to assess the prevalence of psychosocial problems. In the inferential statistics, chi-square test, fisher's exact test, odds ratio and confidence interval were used to find out the association between psychosocial problems and selected variables. The level of significance was considered at 5% with  $p < .05$  and 95% confidence interval. The findings of the study are presented in different tables and interpreted accordingly.

## RESULTS

**Table 1: Socio-demographic Characteristics of the Respondents.**

n=220

Variables	Number	Percentage
<b>Age (in years)</b>		
Early adolescents	151	68.6
Middle adolescents	69	31.4
$M_d=14$ , $IQR=Q_3-Q_1=15-13$ , $Min=13$ , $Max=16$		
<b>Sex</b>		
Male	107	48.6
Female	113	51.4
<b>Ethnic group</b>		
Dalit	2	0.9
Janajati	29	13.2
Brahmin	156	70.9
Chhetri	33	15.0
<b>Religion</b>		
Hindu	201	91.4
Buddhist	17	7.7
Christian	2	0.9
<b>Grade</b>		
Grade 8	84	38.2
Grade 9	75	34.1
Grade 10	61	27.7

$M_d$ - Median age,  $IQR$ - Interquartile Range,  $Min$ - Minimum,  $Max$ - Maximum

Table 1 shows that out of 220, majority of the respondents (68.6%) were in early adolescents (11-14 years) and remaining 31.4% were in middle adolescents (15 to 17 years). The median age of the respondents' was 14. Regarding sex, more than half of the respondents

(51.4%) were female. Likewise, majority of the respondents (70.9%) were Brahmin, followed by 15.0% Chhetri, 13.2% Janajati and least 0.9% were Dalit. And in religion most of the respondents (91.4%) follow Hindu religion, 7.7% Buddhist and remaining 0.9% Christian religion. Regarding class, 38.2% of the respondents study in grade 8, 34.1 % in class 9 and 27.7% in grade 10.

**Table 2: Family related Characteristics of the Respondents.**

n=220

Variables	Number	Percentage
<b>Type of family</b>		
Single family	149	67.7
Joint family	71	32.3
<b>Living status</b>		
With both parents	157	71.4
With grandparents	19	8.6
With relatives	20	9.1
At hostel	24	10.9
<b>Fathers' educational level (n=218)</b>		
Basic education	28	12.84
Secondary education	128	58.72
Bachelor and Above	62	28.44
<b>Fathers' occupation (n=218)</b>		
Agriculture	5	2.29
Service holder	89	40.83
Business	65	29.82
Abroad	59	27.06
<b>Mothers' educational level</b>		
Basic education	31	14.1
Secondary education	142	64.5
Bachelor and Above	47	21.4
<b>Mothers' occupation</b>		
House maker	132	60.0
Service holder	40	18.2
Business	22	10.0
Abroad	26	11.8

Table 2 depicts that majority of the respondents (67.7%) were from single family and 71.4% answered they live with their both parents. More than half of the respondents' father (58.7%) had secondary educational status and less than half of the respondents (40.83%) were service holder by occupation. Similarly, 64.5% of the respondents' mother had secondary education and more than half of the respondents' mother (60.0%) was house maker.

**Table 3: Mean Scores of Different Domain of Psychosocial Problems.**

n=220

Domain	No. of Items	Maximum Possible Score	Obtained Score Range	Mean $\pm$ SD	Mean Percentage
Attention problems	5	10	0-9	3.48 $\pm$ 1.742	34.80
Internalizing problems	5	10	0-9	3.62 $\pm$ 1.858	36.20
Externalizing problems	7	14	0-10	3.53 $\pm$ 2.155	25.21
<b>Total</b>	<b>17</b>	<b>34</b>	<b>2-23</b>	<b>10.61<math>\pm</math>4.690</b>	<b>31.21</b>

Table 3 illustrates that the total numbers of items were 17 with maximum score of 34. It consisted of 3 subscale-attention problem, internalizing problem and externalizing problem with score of 10, 10 and 14 respectively. The total mean score obtained was 10.61 $\pm$ 4.690 with the mean percentage 31.21. Comparatively, mean percentage was higher in internalizing problems being 36.2%.

Table 4 shows that nearly one fourth of the respondents (23.6%) had psychosocial problem and remaining (76.4%) had no psychosocial problem.

**Table 4: Prevalence of Psychosocial Problems of the Respondents.**

n=220

Characteristics	Number	Percentage
Present ( $\geq 15$ )	52	23.6
Absent ( $< 15$ )	168	76.4

**Table 5: Association of Prevalence of Psychosocial Problems in the Respondents with Socio-demographic Characteristics.**

n=220

Variables	Psychosocial Problems		$\chi^2$	p-value
	Yes, No. (%)	No, No. (%)		
<b>Age</b>				
Early adolescents	33(21.9)	118(78.1)	.847	.357
Middle adolescents	19(27.5)	50(72.5)		
<b>Sex</b>				
Male	15(14.0)	92(86.0)	10.676	<b>.001</b>
Female	37(32.7)	76(67.3)		
<b>Ethnic Group</b>				
Brahmin	34(21.8)	122(78.2)	19.383	<b>&lt;.001</b>
Chhetri	2(6.1)	31(93.9)		
Others*	16(51.6)	15(48.4)		
<b>Religion</b>				
Hindu	40(19.9)	161(80.1)	-	<b>&lt;.001<sup>e</sup></b>
Non-Hindu	12(63.2)	7(36.8)		
<b>Grade</b>				
Grade 8	14(16.7)	70(83.3)	4.287	.117
Grade 9	19(25.3)	56(74.7)		
Grade 10	19(31.1)	42(68.9)		

Significance level at .05, <sup>e</sup>= Fisher's exact test, \*Others-Janajati & Dalit

Table 5 indicates that there was statistically significant association of prevalence of psychosocial problem with respondents' sex ( $p=.001$ ), ethnic group ( $p<.001$ ) and religion ( $p<.001$ ).

**Table 6: Association of Prevalence of Psychosocial Problems in the Respondents with Family related Characteristics.**

n=220

Variables	Psychosocial Problems		$\chi^2$	p-value
	Yes No. (%)	No, No. (%)		
<b>Type of family</b>				
Single family	36(24.2)	113(75.8)	.070	.791
Joint family	16(22.5)	55(77.5)		
<b>Living status</b>				
With parents	36(20.5)	140(79.5)	4.936	<b>.026</b>
With others*	16(36.4)	28(63.6)		
<b>Father's educational status (n=218)</b>				
Basic education	9(32.1)	19(67.9)	1.596	.450
Secondary education	27(21.1)	101(78.9)		
Bachelor and Above	15(24.2)	47(75.8)		
<b>Father's occupation (n=218)</b>				
Self-employed	10(14.3)	60(85.7)	16.556	<b>&lt;.001</b>
Service holder	16(18.0)	73(82.0)		
Abroad	25(42.4)	34(57.6)		
<b>Mother's educational status</b>				
Basic education	6(19.4)	25(80.6)	1.300	.522
Secondary education	37(26.1)	105(73.9)		
Bachelor and Above	9(19.1)	38(80.9)		
<b>Mother's occupation</b>				
Working mother	27(30.7)	61(69.3)	4.034	<b>.045</b>
Nonworking mother	25(18.9)	107(81.1)		

Significance level at .05, With others\*-Relatives and Hostel

Table 6 illustrates that there was statistically significant association of prevalence of psychosocial problems with respondents' living status ( $p=.026$ ). Similarly, there was statistically significant association of prevalence of psychosocial problems with respondents' father and mother occupational status with  $p$ -value  $<.001$  and  $.045$  respectively.

## DISCUSSION

The study findings revealed that nearly one fourth of the respondents (23.6%) had psychosocial problems. This finding is in line with a number of studies conducted by Banstola (2017)<sup>[3]</sup>, Bista et al. (2016)<sup>[8]</sup> which revealed that the prevalence of psychosocial problem was 21.7% and 17.03% respectively. Likewise, the study conducted by Timilsina et al. (2018)<sup>[9]</sup> and Bhosalel et al. (2015)<sup>[5]</sup> showed the prevalence of 12.9% and 15.2% respectively which is lower than the result found by this study. The variation could be due to differences in geographical distribution, characteristics of the respondents, and methodological approach.

In this study, psychosocial problems were significantly associated with sex of the adolescent students where female (32.7%) had more psychosocial problems than male (14.0%). In contrast to this finding, the study conducted by Banstola (2017)<sup>[3]</sup> and Bista et al. (2016)<sup>[8]</sup> revealed that there was no significant association between psychosocial problems and sex. The discrepancy in findings might be due to variation in the size, study setting and characteristics of the respondents.

The findings of the study showed that there was significant association of psychosocial problems with respondents' ethnicity. Janajati and Dalit, who belonged to others category had more psychosocial (51.6%) problems than those who belonged to other ethnic group. This might be due their parents are less educated and unaware about the mental health and wellbeing. The study has also found the significant association of psychosocial problem with adolescents' religion, where non-Hindu had more psychosocial problems than those who follow Hindu religion. In contrast to this finding, the study conducted by Banstola (2017)<sup>[3]</sup> and Bista et al. (2016)<sup>[8]</sup> revealed that Hindus had more psychosocial problem than those who were non-Hindus. This might be due to the cultural freedom present in other religions.

This study also found that psychosocial problems were not significantly associated with the age of the respondents, which was similar to the study conducted by Siraj et al. (2019)<sup>[10]</sup> which revealed that there is no significant association between age and psychosocial problems. Likewise, other studies conducted by Timilsina et al. (2018)<sup>[9]</sup> and Bista et al. (2016)<sup>[8]</sup> contradicts the study result which revealed that age was significantly associated with psychosocial problems. So, the role of age on psychosocial problems could further be assessed with large-scale research.

This study revealed that psychosocial problems were not significantly associated with grade. This result is in coherence to the study conducted by Timilsina et al.

(2018)<sup>[9]</sup> which showed that class was not significantly associated with psychosocial problems. In contrast to this finding, the findings of the study conducted by Bhosale et al. (2015)<sup>[5]</sup> revealed that class was statistically associated with the occurrence of psychosocial problems. This discrepancy in the finding of the study might be due to the different background, knowledge and coping ability of the individual student.

The findings of the study revealed that psychosocial problems were not statistically significant with the type of family. However, the study found that the adolescents living in single family had more psychosocial problems than those living in joint family. This finding is consistent with the study conducted by Banstola (2017)<sup>[3]</sup> which revealed that adolescent who live in nuclear family had more psychosocial problems than those who in joint family. This might be due to less parental attention, time, focus and guidance towards adolescents in the single family.

In this study, there was statistically significant association of psychosocial problems with respondents' living status ( $p=.026$ ). This finding is consistent with the study conducted by Banstola (2017)<sup>[3]</sup> which revealed that adolescent who live with others had more psychosocial problems than those who live with their parents. This might be due to the adolescents are missing the good home environment and their parent's love and care.

This study also revealed that psychosocial problems were not significantly associated with parents' educational level. Moreover, psychosocial problems were significantly associated with respondents' father ( $p<.001$ ) and mother ( $p=.045$ ) occupational status respectively. The respondents' whose father went to abroad (42.4%) and who had working mother (30.7%) had higher percentage of psychosocial problems. In contrast to this finding, the study conducted by Timalisina et al. (2018)<sup>[9]</sup> revealed that psychosocial problems were not significantly associated with parents' occupational status. Another study conducted by Koirala et al. (2016)<sup>[2]</sup> also oppose the present study findings which concluded that maternal employment status is not the exclusive reason behind the development of psychosocial problems among school children. This might be due to the lack of love, care and guidance that the adolescents might miss from their parents.

## CONCLUSION

Based on the findings, it is concluded that nearly one fourth of the respondents had psychosocial problems. The factors associated with psychosocial problems were sex, ethnic group, religion, father's occupation, mother's occupation and living status of respondents. Therefore, health care policy should create awareness program among parents, teachers and adolescents on psychosocial problems and develop the strategies for health promotion, maintenance and disease prevention among

adolescents. Adolescent friendly family structures and environments need to be advocated by concerned authority and stakeholder.

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