

ORIGINAL RESEARCH ARTICLE

PSYCHOSOCIAL PROBLEMS AMONG SCHOOL GOING ADOLESCENTS IN GHORAH SUB METROPOLITAN CITY OF DANG

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ABSTRACT

Background: A psychosocial problem is a mental illness caused or influenced by life experiences, as well as maladjusted cognitive and behavioral processes. Psychosocial problems i.e. internalizing disorders, externalizing disorders and substance abuse are more prevalent among adolescents because of their rapid physical and physiological changes that occur in their body during this stage. The aim of the study was to identify the magnitude of psychosocial problems among school-going adolescents.

Methods: Present study was a descriptive cross-sectional study conducted in the ward no. 15 of Ghorahi sub metropolitan city of Dang District, Nepal. A total of 325 adolescents were chosen from multi-staged random sampling. Pre-tested self-administered questionnaire was used to collect data. Part I and part II of questionnaire was self-constructed and Part III was adopted from standard tool of Youth Pediatric Symptoms Checklist. Descriptive (percentage, frequency, interquartile range and minimum and maximum values) and inferential analysis (chi-square test) was done through this IBM SPSS software version 20.

Results: The prevalence of psychosocial problems among school going adolescents was 26.8%. Socio-demographic characteristics such as age, ethnicity, occupational status of respondent's father and mother were found to be significantly associated with psychosocial problems. The relation with teacher and academic grade of respondent were found to be highly associated with psychosocial problems.

Conclusions: The study reported an alarming situation of psychosocial problems among adolescent students in Nepal where more than one quarter of participants found having psychosocial problems. The study may suggest the need of proper parenting and maintenance of an appropriate level of teacher-student relationship.

INTRODUCTION

Psychosocial problem is a mental illness caused or influenced by life experience, as well as maladjusted cognitive and behavioral processes. The major psychosocial problems are internalizing disorders, externalizing disorders and substance abuse.¹ Psychosocial problems can also be defined as emotional and behavioral problems.

Adolescence is a period of sexual maturity that transforms a child into biologically mature adult capable of sexual reproduction. It is also a period of psychological and socio-economic development. This phase of life is also known as the stage of storm and stress where some adolescents develop negativism in their behavior which creates problems of adjustment in the family, group and society.²

Adolescence period is mainly affected by home and school environment. School represents an institution that contributes to the overall educational and socialization processes, critical in personality development of an adolescent.³ Globally 20% of adolescents encounter at least one behavioral problem and half of lifetime mental disorders begin before the age of

14 years.^{4,5}

Some adolescents are particularly vulnerable to poor health and developmental outcomes as a result of individual and environmental factors.⁶ Various Studies conducted in different parts of the world shows that prevalence of psychosocial problems among adolescents' ranges from 12% to 45%.^{3,4,7-15} There are very limited studies conducted in similar settings on psychosocial problems in Dang and detecting these in the early adolescence can be fruitful for the quality of life of the individual.⁷ Thus, the main aim of this study was to assess the magnitude of psychosocial problems among school going adolescents.

METHODS

This was a cross-sectional study conducted in the ward no. 15 of Ghorahi sub metropolitan city of Dang District, Nepal. Total 325 adolescents studying 8,9 and 10 aged 10 to 19 were chosen through multi-staged random sampling technique and information was collected between April and June 2019. Out of 19 wards in Ghorahi sub -metropolitan city, ward no 15 of Ghorahi sub- metropolitan city was selected through lottery

method. There were in total 13 private and 2 public schools in ward number 15. Seven out of 13 private schools and one out of 2 public schools were chosen randomly through lottery method. After this, listing was done from selected 8 schools, 7 private and 1 public, to form a sampling frame by omitting ineligible candidates just before 1 week of data collection. Those students who were not between the age of 10 to 19 and those who had proven psychological disorders (as per students' personal record informed by school authority) were excluded while constructing sample frame. Finally, eligible Students from all class/sections of selected schools and grades constituted a sample frame of 2629 participants. Final participants were chosen by applying systematic random sampling where all the sampling unit from the sample frame were given a unique number starting from 1 to 2629. Then the Kth value was identified by dividing 2629 with required sample size i.e. 325. Hence, every 8th sampling unit was identified and visited for data collection. In case any participants who failed to participate in data collection during the first 2 attempts because of his/her absentism, adjacent number of participants was picked from the sampling frame (Figure 1).

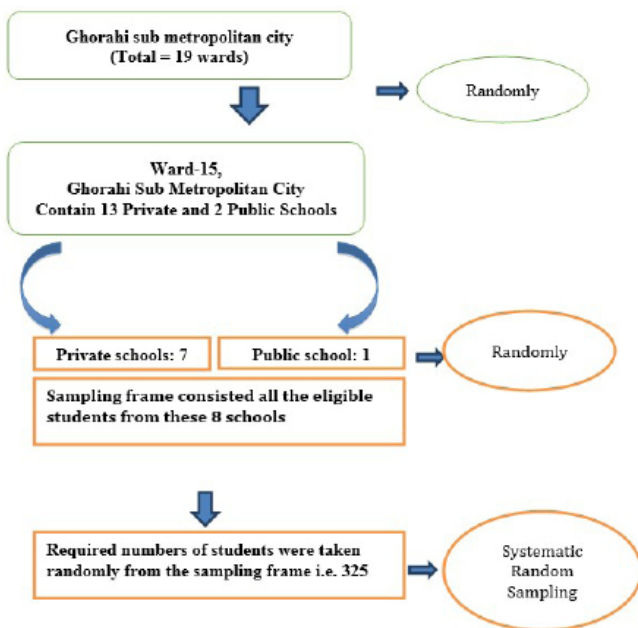


Figure 1: Sampling technique

Sample size was calculated using finite population correction formula as given below:

$$n_0 = z^2pq/d^2 \text{ and } n = n_0 / 1 + n_0 - 1/N \text{ (for finite population)}$$

According to Sharma¹⁵ p was taken as 40.5% and allowable error (d) was be 0.05. The total population (N) for the study is taken as 2628. Hence,

$$z = 1.96; p = 0.405; q(1-p) = 0.595; d = 0.05$$

$$\text{Now, } n_0 = 1.96^2 \times 0.405 \times 0.595 / 0.05^2$$

$$= 370.2$$

Further calculating for finite population:

$$n = n_0 / 1 + n_0 - 1/N$$

$$n = 370.29$$

$$1 + 370.29 - 1 / 2629$$

$$= 324.682 \text{ Hence, required sample size was rounded to 325}$$

There were three sections of the research tool where first two sections were self-constructed questionnaire (Part I comprised socio-demographic information and part II comprised school related information) and part III was adopted from standard tool of "Pediatric Symptoms Checklist- Youth Report". The checklist was of three-point Likert scale with "never", "some-time" and "often" options.

The entire collected data was checked for error and fixed before analysis. Data entry and analysis was done using IBM SPSS 20 version. Descriptive (percentage and frequency) and inferential analysis (chi-square test) was done through this software.

Following terminologies were operationalized in the study in following ways:

Adolescents: Students of grade 8, 9 and 10 within age 10 - 19 years old.

Academic grade: It included the academic grade of students, which were classified as 8, 9 and 10.

Just literate: Those who can just read and write but they have not got formal schooling comes under this category.

Janajati: This group of population consists of Hill/Mountain Janjati i.e. Kewat, Mallah, Lohar, Nuniya, Kahar, Lodha, Rajbhar, Bing, Mali Kamar, Dhuniya, Yadav, Teli, Koiri, Kurmi, Sonar, Baniya, Kalwar, Thakur/Hazam, Kanu, Sudhi, Kumhar, Haluwai, Badhai, Barai, Bhediyar/ Gaderi and Hill Dalit i.e. Kami, Damai/Dholi, Sarki, Badi, Gaine, Unidentified Dalits.

Other Ethnicity: This group consists Muslim and Marwari, Bangali, Jain, Punjabi/Sikh, etc.

Achievement in last exam: It defines participants' results of last exam, which was categorized as pass, or fail.

Satisfaction with achievement: It defines student's own perception about his/her achievement in last examination. It was categorized as: satisfactory or unsatisfactory.

Relation with teachers: It was categorized as satisfactory or unsatisfactory. Satisfactory is defined as good communication and behavior with teachers while unsatisfactory means not having good communication and behavior with teachers.

Psychosocial problems: Psychosocial problem is a mental illness caused or influenced by life experience, as well as maladjusted cognitive and behavioral processes. Psychosocial problems were identified using Youth Pediatric Symptoms Checklist (YPSC). The Y-PSC form consists of 35 items, rated as “Never,” “Sometimes,” or “Often present,” and scored 0, 1, and 2, respectively. Item scores were summed so that the total score is calculated by adding together the score for each of the 35 items, with a possible range of scores from 0 to 70. If one to three items were left blank, they were not counted (score = 0). If four or more items were left blank, the questionnaire was considered invalid. For this study, respondents with score ≥ 30 in the overall score of 70 in the Youth-Pediatrics Checklist (Y-PSC) were considered as having psychosocial problem.⁸

The tool was translated to Nepali version by taking the help of bilingual experts. Reverse translation of the instruments was done. For ensuring content validity, these instruments were further evaluated by consulting subject expert, professional psychiatrist and psychologist. Pretesting was done among 10% of sample i.e. 33 students of similar setting by using Nepalese version of the questionnaire. It was done in order to establish the conceptual/linguistic and functional equivalence before the administration of the instruments to the actual sample of the study. Those students were similar in characteristics with actual samples of this study. Reliability coefficient of the Y-PSC was 0.808.

Ethical clearance was obtained from the Institutional Review Committee of Chitwan Medical College (CMC-IRC). Verbal and informed written consent was obtained from the participants before data collection.

Verbal assent was taken from the guardian of participant who were below 18 years of age through the telephonic conversations. Privacy and confidentiality were assured and insured throughout the study.

RESULTS

Most of the respondents (53.5%) fell under the age of 15-19. Among 325 respondents, there were 172 males and 153 females. Most of the respondents (65.8%) were Brahmin/Chhetri, 28.9% were Janajatis and 5.2% fell under other category. Majority of the respondents (95.1%) were Hindus, 4.9% of respondents were from other religions i.e. Christian, Buddha and Muslim. Most of the respondents (63.4%) were from nuclear family type, while 36.6% were from joint family. A total of 75.7% of respondent's father and 66.2% of mothers had secondary education. The main occupational status of respondent's father was found to be business (44.6%), 23.1% were engaged in government job, 22.5% were engaged in foreign job, while 9.8% were engaged in private sector. The marital status of majority of respondents' parents was married (96%) (Table 1).

Among the total of 325 participants, 26.8% were having psychosocial problems (Table 2).

Table 1: Socio-demographic characteristics of the study samples (n=325)

Variable	Frequency (%)
Sex	
Male	172(52.9)
Female	153(47.1)
Age group (in years)	
10-14	151(46.5)
15-19	174(53.5)
Ethnicity	
Brahmin/Chhetri	214(65.8)
Janajati	94(28.9)
Others	17(5.3)
Religion	
Hindu	309(95.1)
Non-Hindu	16(4.9)
Family type	
Nuclear	206(63.4)
Joint	119(36.6)
Educational Status of respondent's father	
Illiterate	9(2.8)
Just literate	41(12.6)
Primary	29(8.9)
Secondary	246(75.7)
Educational status of respondent's mother	
Illiterate	18(5.5)
Just literate	65(20)
Primary	27(8.3)
Secondary	215(66.2)
Occupational status of respondent's father	
Government job	75(23.1)
Private	32(9.8)
Foreign job	73(22.5)
Business	145(44.6)
Occupational status of respondent's mother	
Government job	37(11.4)
Private	27(8.3)
Foreign job	15(4.6)
Business	82(25.2)
Housewife	164(50.5)
Marital status of parents	
Married	312(96)
Widowed	8(2.5)
Separated	3(0.9)
Divorced	2(0.6)

Table 2: Psychosocial problems among school going adolescents in Ghorahi sub metropolitan city, Dang (n=325)

Variables	Frequency (%)
Psychosocial problems	
Yes	87(26.8%)
No	238(73.2%)

Table 3 shows that significant influencing variables i.e. age ($p=0.018$), ethnicity ($p=0.003$), father's occupational status ($p=0.002$) were found to be significantly associated with psychosocial problems.

Table 3: Association between independent variables and psychosocial problems among school going adolescents (n= 325)

Variables	Psychosocial problem		χ^2 p-value
	Yes (%)	No (%)	
Age group (in years)			
10-14	31(20.5%)	120(79.5%)	0.018***
15-19	56 (32.2%)	118(67.8%)	
Sex			
Male	48(27.9%)	124(72.1%)	0.623
Female	39(25.5%)	114(74.5%)	
Ethnicity			
Brahmin/Chettri	46(21.5%)	168(78.5%)	0.003***
Non-Brahmin/Chettri*	41(36.9%)	70(63.1%)	
Religion			
Hindu	84(27.2%)	225(72.8%)	0.457
Non-Hindu	3(18.8%)	13(81.3%)	
Family type			
Nuclear	57(27.7%)	149(72.3%)	0.629
Joint	30(25.2%)	89(74.8%)	
Fathers education			
Illiterate & Just literate	8(16.0%)	42(84.0%)	0.146
Primary	7(24.1%)	22(75.9%)	
Secondary and above	72(29.3%)	174(70.7%)	
Mothers education			
Illiterate & Just literate	20(24.1%)	63(75.9%)	0.626
Primary	5(18.5%)	22(81.5%)	
Secondary and above	62(28.8%)	153(71.2%)	
Fathers occupation			
Services	27(25.2%)	80(74.8%)	0.002***
Foreign employment	31(42.5%)	42(57.5%)	
Business	29(20.0%)	116(80.0%)	
Mothers occupation			
Agriculture/housewife	45(27.4%)	119(72.6%)	0.957
Services	17(26.6%)	47(73.4%)	
Others**	25(25.8%)	72(74.2%)	

* Non brahmin/chettri represents Janajati, Dalit, others,

** Others represents foreign employment, Labor, Business.

*** denotes significant at 0.05

On bivariate analysis, relation with teacher) was found to be highly statistically associated with psychosocial problems ($p<0.001$), similarly academic grade was also found significantly associated ($p=0.013$). Whereas, achievement in last examination, and satisfaction with exam results were not found

statistically associated with psychosocial problems (Table 4).

Table 4: Association between psychosocial problems and school related factors among school going adolescents (n = 325)

Variables	Psychosocial problem		χ^2 p-value
	Yes (%)	No (%)	
Grade			
Eight	11(16.4%)	56(83.6%)	0.013**
Nine	20(22.0%)	71(78.0%)	
Ten	56(33.5%)	111(66.5%)	
Last exam achievement			
Pass	73(25.8%)	210(74.2%)	0.303
Fail	14(33.3%)	28(66.7%)	
Satisfaction with exam result			
Satisfied	65(27.3%)	173(72.7%)	0.715
Dissatisfied	22(25.3%)	65(74.7%)	
Relation with teachers			
Satisfied	69(23.3%)	227(76.7%)	<0.001**
Dissatisfied	18(62.1%)	8(11(37.9%))	

** denotes significant at 0.05

DISCUSSION

In the present study, the magnitude of psychosocial problems was found to be 26.8%. Present finding is closer to the findings of study conducted in Pokhara by Banstola et. al¹⁷ which revealed that 21.7% of adolescent had psychosocial problems. This finding is also close to the findings of the study conducted in Chandigarh by Pathak et. al¹⁴, which found that 30.4% of the adolescents have some type of psychosocial problems. However, the present finding is lower than findings of the study conducted by Shiferaw et. al.¹³ in Dessie town, Ethiopia, where 57.9% adolescents were reported having psychosocial problems and also low as compared to the study done in Uttar Pradesh by Jain et. al¹¹, which revealed that the prevalence of overall psychosocial problems was found to be 41.43%. This might be due to variation in study site and methodological approach.

The study found the significant association between age and occurrence of psychosocial problems. This finding is in line with the study done in Hetauda by Bista et al.³ The present study revealed that there is no association of religion, types of family, respondent's father and mother's educational status with psychosocial problems. This finding is supported by study done by Timalisina et. al in Kathmandu.¹⁵

However, this study yielded that there is significant association of father's and mother's occupational status of respondents with psychosocial problems. Contradictory finding was revealed by a study done by Timalisina et. al in Kathmandu which showed no association as per occupational status of respondent's father and mother.¹⁵

The role of academic grade on psychosocial problems was also

assessed as a part of this study, which showed significant association of student's academic grade with psychosocial problem. Contradictory finding was revealed by study done by Timalisina et. al¹⁵ in Kathmandu and Bista et. al³ in Hetauda. The present study has found the significant association between relation with teacher and occurrence of psychosocial problems.

As this study was conducted on schools of only one ward so this may not be generalized to whole district, which may be major limitation of the study.

CONCLUSION

Present study reported an alarming situation of psychosocial problems among adolescent students in Nepal. Slightly more

than one quarter of adolescents have some kind of psychosocial problems. The study revealed that age, father's and mother's occupational status, academic grade and relation with teacher were significantly associated with the occurrence of psychosocial problems, which may suggest that there may be various familial and academic institution related factors as a cause of psychosocial problems. Hence, there is need of proper parenting and maintenance of an appropriate level of teacher-student relationship for good psychosocial wellbeing among adolescents.

CONFLICT OF INTEREST: None

FINANCIAL DISCLOSURE: None

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