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**Original Research Article**

# Impact of associated factors in adolescent's psychosocial problems in Banepa: a cross-sectional study

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## ABSTRACT

**Background:** Adolescence is the lifespan between childhood and adulthood from ages 10 to 19 years. Psychological problem is a state of emotional and behavioral disorders, including depression, anxiety, aggression, educational difficulties, etc. The study aimed to assess the impact of associated factors on adolescents' psychosocial problems.
**Methods:** Analytical cross-sectional and quantitative method was used. The study population was adolescents in grades 8 and 9. Purposive sampling was used to select the schools and the census technique was used to collect the data from respondents. A structured questionnaire was designed and administered to study participants. Data collected from respondents were analysed and expressed using Epidata 3.1 and SPSS 26.
**Results:** The study shows that the prevalence of psychosocial problems among adolescents was 32.4%. The adolescent age group was greatly dominated by the age group 14-15 years (72.1%) and most of the respondents were female (52%). There was a significant association between the bad relationships with siblings (OR=5.840, 95% CI=1.820-18.735, p value=0.003), neighbors (OR=4.46, 95% CI=1.36-14.60, p value=0.013), classmates (OR=3.630, 95% CI=1.060-12.424, p value=0.040) and fine relationship with teachers (OR=5.091, 95% CI=2.223-11.658, p value<0.001) and those not satisfied with pocket money (OR= 2.833, 95% CI=1.227-6.544, p value=0.015) with the psychosocial problem.
**Conclusions:** The update and revision of mental health policy and increment in the allocation of the health budget are crucial for improving mental health. The school can help by introducing child to parent approach to decrease the prevalence of psychosocial problems through a different awareness program and proper knowledge.

**Keywords:** Adolescents, Banepa, Family, Nepal, Psychosocial problems, School

## INTRODUCTION

Adolescence is the lifespan between childhood and adulthood from ages 10 to 19, which is a precious moment of the human development period. They experience rapid physical, cognitive and psychosocial growth. This factor affects how the way they think, make a decision and interact with the world around them.[1] There are about 1.2 billion adolescents of the world's population, and 88% are from developing countries.[2] In Nepal, 23.62% of the total population are adolescents.[3] Psychosocial problems are the difficulties faced by adolescents during many personal and social functioning events. Adolescents are vulnerable to psychosocial problems because of physical and physiological changes that occur in their bodies during this developmental stage.[4] Psychological problem is a state of emotional and behavioral disorders, including depression, anxiety, aggression, educational difficulties, etc.[5]

Various studies show that psychosocial problems among adolescents range from 13% to 45%.[6-10] About half of all mental disorders start by the age of 14 years and three-quarters before the age of 25.[11,12] Psychosocial problems, such as behavioral, emotional, and educational, are highly prevalent among children and adolescents. They are vulnerable to psychosocial dysfunction when they suffer from physical injuries, psychological trauma, or major

changes in their environments, especially in the absence of a strong support system.[13-16] Detection of psychosocial dysfunction in early adolescence can be fruitful for the individual's quality of life.[17] The government of Nepal was developed a mental health policy in 1997 for the commitment to providing basic mental health services to the entire population. The mental health legislation which ensures the human rights of people with mental illness was drafted in 2006, but its endorsement by the government is still pending. Available data indicates that less than one percent of the total health budget is spent in mental health.[18] The study aimed to assess the impact of associated factors on adolescents' psychosocial problems.

## METHODS

An analytical, quantitative cross-sectional study was carried out in the schools among the adolescents studying grades 8 and 9 of Banepa, Kavre district. The research was carried out from December 2021 to July 2022. Ethical approval was taken from the Public Health Department of Little Buddha College of Health Science, Purbanchal University, Nepal and the respective schools. Verbal and written informed consent were taken from respondent's parents after purpose and objective of the study was clearly explained to principal and respondents of sample schools.

The study included the students of grade 8 and 9 who were between the ages 11-19 years that were present during the data collection and the respondents who wanted to participate voluntarily. Purposive sampling was used for selection of schools in the study area. Then, the census technique was used for collecting data from my respondents. The total sample size was 244.

Standard tools were used for data collection. The tools used for assessing the psychosocial status of adolescents was youth- pediatric symptom checklist (Y-PSC) and other questionnaire prepared based on socio-demographic, socio-economic, family, school environment and individual factors. Self -administrative techniques were used for data collection. The question was printed in the Nepali language and was guided in case they needed any help while filling up the answers to the questions. The Y-PSC was administered to adolescents aged between 11 and 19. Y-PSC is the psychosocial screening checklist consisting of 35 questions. It included questions of cognitive, emotional and behavioral problems. The questions were rated as "never", "sometimes" or "often" and scored as 0, 1 and 2 respectively. The items score was added together, and if the total score exceeded 30 or was equal to 30 then positive. Items left blank were simply ignored and scored as 0 whereas four or more items left blank on that questionnaire were considered invalid.[19]

The collected data were input into the Epidata version 3.1 and processed, modified, and verified. Errors for inconsistency or incompleteness of responses connected to questionnaire questions were verified and corrected before labeling and analysing the data. The entered data were exported to the statistical package for social science (SPSS) for further processing and analysis. A Chi-square test and odd ratio were used to show an association between variables. Privacy, confidentiality and anonymity of each respondent were maintained.

## RESULTS

### *Socio-demographic information*

It was found that more than half (52%) of respondents were female compared to male (48%). The majority (72.1%) of participants were from age groups from 14-15 years followed by age groups 16-17 and 12-13 years, at 20.9% and 7.0%. More than half (57.4%) respondents belonged to Janjati ethnicity followed by 18.4% Brahmin and least were from Dalit 6.1%. More than two-thirds (70.9%) of respondents were Hindu and the least were Christian 4.5%. Nearly two-thirds (60.7%) of participants were from class 9 (Table 1).

**Table 1: Socio-demographic information.**

| Characteristics | Number | Percentage |
|---|---|---|
| **Age group (years)** | | |
| 12-13 | 17 | 7.0 |
| 14-15 | 176 | 72.1 |
| 16-17 | 51 | 20.9 |
| **Sex** | | |
| Female | 127 | 52.0 |
| Male | 117 | 48.0 |
| **Ethnicity** | | |
| Brahmin | 45 | 18.4 |
| Chettri | 44 | 18.0 |
| Janjati | 140 | 57.4 |
| Dalit | 15 | 6.1 |
| **Religion** | | |
| Hindu | 173 | 70.9 |
| Buddhist | 60 | 24.6 |
| Christian | 11 | 4.5 |
| **Educational status** | | |
| Class 8 | 96 | 39.3 |
| Class 9 | 148 | 60.7 |

### *Family and relationship information*

The majority (76.2%) of the participants were from a nuclear family. More than one quarter (35.7%) of the respondent's fathers had secondary level education whereas in mothers' education most of them (31.6%) could only read and write. More than one quarter (27.5%) of respondent's fathers were businessmen, while nearly half (47.1%) of the participant's mothers were housemakers. Almost half (49.6%) had an excellent relationship with their father, whereas more than half (54.5%) of them had excellent relationships with their

mother. The majority (88.9%) had siblings and nearly half (45.2%) and excellent relationships with their siblings. More than one quarter (37.7%) of the respondents spent 2-4 hours with their parents in a day and the majority (80.3%) shared their problems with their family members. Nearly half (44.7%) of participants said their family members had fought sometimes and more than half (51.2%) of participants' families had good relationships with their neighbors. In addition, both around half (45.5%) of participants got academic pressure from their parents and received punishment for doing mistakes (Table 2).

**Table 2: Family and relationship information.**

| Characteristics | Number | Percentage |
|---|---|---|
| **Family type** | | |
| Nuclear | 186 | 76.2 |
| Joint | 58 | 23.8 |
| **Father's education** | | |
| Illiterate | 15 | 6.1 |
| Can read and write | 39 | 16 |
| Primary education | 39 | 16 |
| Secondary level education | 87 | 35.7 |
| Higher secondary level education | 45 | 18.4 |
| Bachelor level and above | 19 | 7.8 |
| **Mother's Education** | | |
| Illiterate | 43 | 17.6 |
| Can read and write | 77 | 31.6 |
| Primary education | 19 | 7.8 |
| Secondary level education | 64 | 26.2 |
| Higher secondary level education | 28 | 11.5 |
| Bachelor level and above | 13 | 5.3 |
| **Father's occupation** | | |
| Agriculture | 24 | 9.8 |
| Business | 67 | 27.5 |
| Services | 41 | 16.8 |
| Daily wages worker | 26 | 10.7 |
| Foreign employment | 33 | 13.5 |
| Others | 53 | 21.7 |
| **Mother's occupation** | | |
| Agriculture | 40 | 16.4 |
| Business | 39 | 16 |
| Services | 24 | 9.8 |
| Daily wages worker | 11 | 4.5 |
| Housewife | 115 | 47.1 |
| Others | 15 | 6.1 |
| **Relationship with father** | | |
| Excellent | 121 | 49.6 |
| Good | 86 | 35.2 |
| Fine | 24 | 9.8 |
| Bad | 13 | 5.3 |
| **Relationship with mother** | | |
| Excellent | 133 | 54.5 |
| Good | 81 | 33.2 |
| Fine | 19 | 7.8 |
| Bad | 11 | 4.5 |
| **Siblings** | | |
| Yes | 217 | 88.9 |
| No | 27 | 11.1 |
| **If yes, relationship with siblings** | | |
| Excellent | 98 | 45.2 |
| Good | 86 | 39.6 |
| Fine | 18 | 8.3 |

Continued.

| Characteristics | Number | Percentage |
|---|---|---|
| Bad | 15 | 6.9 |
| **Spent time with your parents in a day** | | |
| Less than 1 hour | 36 | 14.8 |
| 2-4 hour | 92 | 37.7 |
| 5-6 hour | 44 | 18.0 |
| More than 7 hours | 72 | 29.5 |
| **Share your problems with family members** | | |
| Yes | 196 | 80.3 |
| No | 48 | 19.7 |
| **Family members fight often** | | |
| Daily | 13 | 5.3 |
| Sometimes | 109 | 44.7 |
| Rarely | 67 | 27.5 |
| Never | 55 | 22.5 |
| **Relationship of your family with neighbors** | | |
| Good | 125 | 51.2 |
| Fine | 83 | 34.0 |
| Bad | 13 | 5.3 |
| Don't Know | 23 | 9.4 |
| **Academic pressure from family** | | |
| Yes | 111 | 45.5 |
| No | 133 | 54.5 |
| **Punishment for doing mistakes** | | |
| Yes | 111 | 45.5 |
| No | 133 | 54.5 |

***School environment and individual factors***

Nearly half (46.3%) of respondents had good relation with their teachers. Similarly, less than half (43%) had good relation with their classmates. More than half (57.8%) don't share their problems with their teachers. Almost all (93.9%) said they had best friends, and more than two-thirds (76.4%) shared their problem with their best friends. Less than one quarter (21.3%) had faced violence or bullying in their school and less than 8% faced it daily or sometimes. Almost two-third (63.5%) didn't receive academic pressure from their school. More than two-third 75.8% received pocket money and the majority (85.4%) are satisfied from their pocket money. Nearly half (47.5%) had access to gadgets and internet and more than half (59.7%) used it for less than 3 hours.

According to this study, it was found that more than one quarter (32.4%) were at risk of psychosocial problems whereas 67.6% were at safe (Table 3).

***Analytical study***

Age group 14-15 years were 1.210 times at risk of psychosocial problem compared to age group 16-17 years (CI=0.614-2.386). Female were 1.152 times at risk of psychosocial problem than male (CI=0.673-1.972). Respondents from Dalit/Madhesi were 2.406 times at risk of psychosocial problem than Brahmin (CI=0.717-8.074) followed by Janajati by 1.435 times (CI=0.680-3.029). There was no associated significance between religion, educational level, family type with psychosocial problem.

The participants whose father were illiterate were 1.143 times (CI=0.284-4.595) at risk of psychosocial problem than those whose father had bachelor level of education whereas those whose other mother had education of bachelor and above was 2.214 times (CI=0.617-7.947) at risk of psychosocial dysfunction compared to illiterate mother. There was no associated significance between father's and mother's occupation with psychosocial problem. Those who had bad relationships with their father were 2.286 times (CI=0.715-7.302) and with their mother was 3.360 times (CI=0.965-11.704) risk of psychosocial problem than those who had excellent relationships with their father and mother (Table 4).

The participants with bad relationships with their siblings were significantly associated with psychosocial problems (COR=5.840, CI=1.820-18.735, p=0.003). The children who spent less than 1 hour time were 1.196 times (CI=0.523-2.736) at risk of psychosocial dysfunction than those who spent more than 7 hours with their parents. The children whose family had bad relationship with their neighbours was statistically significant with psychosocial problems (COR=4.46, CI=1.36-14.60, p=0.013). However, there was no associated significance between those whether their family member fought and whether they received academic pressure from their parents with psychosocial problems. The student who had fine relationship with their teachers (COR=5.091, CI=2.223-

11.658, p<0.001) and those who had bad relationships with their classmates (COR=3.630, CI=1.060-12.424, p=0.040) was statistically significance with psychosocial problem.

**Table 3: School environment and individual factors.**

| Characteristics | Number | Percentage |
|---|---|---|
| **Relationship with teachers** | | |
| Excellent | 69 | 28.3 |
| Good | 113 | 46.3 |
| Fine | 48 | 19.7 |
| Bad | 14 | 5.7 |
| **Relationship with class mates** | | |
| Excellent | 97 | 39.8 |
| Good | 105 | 43.0 |
| Fine | 30 | 12.3 |
| Bad | 12 | 4.9 |
| **Share your problems with teachers** | | |
| Yes | 103 | 42.2 |
| No | 141 | 57.8 |
| **Do you have best friend** | | |
| Yes | 229 | 93.9 |
| No | 15 | 6.1 |
| **Share everything with your best-friend** | | |
| Yes | 175 | 76.4 |
| No | 54 | 23.5 |
| **Faced violence / bullying in school** | | |
| Yes | 52 | 21.3 |
| No | 192 | 78.7 |
| **If yes,** | | |
| Daily | 10 | 4.1 |
| Sometimes | 19 | 7.8 |
| Rarely | 23 | 9.4 |
| **School pressure in your academics** | | |
| Yes | 89 | 36.5 |
| No | 155 | 63.5 |
| **Get any pocket money** | | |
| Yes | 185 | 75.8 |
| No | 59 | 24.2 |
| **Satisfied with pocket money** | | |
| Yes | 158 | 85.4 |
| No | 27 | 14.6 |
| **Have access to gadgets/internet** | | |
| Yes | 226 | 92.6 |
| No | 18 | 7.4 |
| **Have scheduled time for using gadgets** | | |
| Yes | 116 | 47.5 |
| No | 110 | 45.1 |
| **Use gadgets and internet *** | | |
| Less than 3 hours | 135 | 59.7 |
| 3-6 hours | 63 | 27.9 |
| 7-9 hours | 18 | 8.0 |
| More than 9 hours | 10 | 4.4 |
| **Psychosocial problem** | | |
| At risk | 79 | 32.4 |
| At safe | 165 | 67.6 |

Note*-Multiple choice

**Table 4: Analytical study 1.**

| Variables | Psychosocial problem | | OR (95% CI) | P value |
|---|---|---|---|---|
| | At safe (%) | At risk (%) | | |
| **Age group (years)** | | | | |
| 12-13 | 12 (70.6) | 5 (29.4) | 1.000 (0.300-3.336) | 1.000 |
| 14-15 | 117 (66.5) | 59 (33.5) | 1.210 (0.614-2.386) | 0.582 |
| 16-17 | 36 (70.6) | 15(29.4) | Ref | |
| **Sex** | | | | |
| Female | 84 (66.1) | 43 (33.9) | 1.152 (0.673-1.972) | 0.607 |
| Male | 81 (69.2) | 36 (30.8) | Ref | |
| **Ethnicity** | | | | |
| Brahmin | 33 (73.3) | 12 (26.7) | Ref | |
| Chhetri | 32 (72.7) | 12 (27.3) | 1.031 (0.404-2.630) | 0.949 |
| Janajati | 92 (65.7) | 48 (34.3) | 1.435 (0.680-3.029) | 0.344 |
| Dalit/Madhesi | 8 (53.3) | 7 (46.7) | 2.406 (0.717-8.074) | 0.155 |
| **Religion** | | | | |
| Hindu | 116 (67.1) | 57 (32.9) | Ref | 0.200 |
| Buddhist | 44 (73.3) | 16 (26.7) | 0.740 (0.385-1.423) | 0.367 |
| Christian | 5 (45.5) | 6 (54.5) | 2.442 (0.715-8.342) | 0.154 |
| **Education level** | | | | |
| Class 8 | 69 (71.9) | 27 (28.1) | Ref | |
| Class 9 | 96 (64.9) | 52 (35.1) | 1.384 (0.792-2.420) | 0.254 |
| **Family type** | | | | |
| Nuclear | 128 (68.8) | 58 (31.2) | Ref | |
| Joint | 37 (63.8) | 21 (36.2) | 1.253 (0.675-2.326) | 0.476 |
| **Father's education** | | | | |
| Illiterate | 9 (60) | 6 (40) | 1.143 (0.284-4.595) | 0.851 |
| Can read and write | 29 (74.4) | 10 (25.6) | 0.591 (0.182-1.918) | 0.381 |
| Primary education | 27 (69.2) | 12 (30.8) | 0.762 (0.240-2.415) | 0.644 |
| Secondary education | 58 (66.7) | 29 (33.3) | 0.857 (0.305-2.409) | 0.770 |
| Higher secondary | 30 (66.7) | 15 (33.3) | 0.857 (0.280-2.625) | 0.787 |
| Bachelor and above | 12 (63.2) | 7 (36.8) | Ref | |
| **Mother's education** | | | | |
| Illiterate | 31 (72.1) | 12 (27.9) | Ref | |
| Can read and write | 50 (64.9) | 27 (35.1) | 1.395 (0.618-3.149) | 0.423 |
| Primary education | 14 (73.7) | 5 (26.3) | 0.923 (0.273-3.123) | 0.897 |
| Secondary education | 45 (70.3) | 19 (29.7) | 1.091 (0.464-2.566) | 0.842 |
| Higher secondary education | 18 (64.3) | 10 (35.7) | 1.435 (0.517-3.982) | 0.488 |
| Bachelor and above | 7 (53.8) | 6 (46.2) | 2.214 (0.617-7.947) | 0.223 |
| **Father's occupation** | | | | |
| Agriculture | 18 (75) | 6 (25) | Ref | |
| Business | 44 (65.7) | 23 (34.3) | 1.568 (0.547-4.493) | 0.402 |
| Services | 26 (63.4) | 16 (36.6) | 1.731 (0.564-5.312) | 0.338 |
| Daily wages worker | 19 (73.1) | 7 (26.9) | 1.105 (0.311-3.923) | 0.877 |
| Foreign employment | 26 (78.8) | 7 (21.2) | 0.808 (0.233-2.805) | 0.737 |
| Others | 32 (60.4) | 21 (39.6) | 1.969 (0.672-5.771) | 0.217 |
| **Mother's occupation** | | | | |
| Agriculture | 28 (70) | 12 (30) | Ref | |
| Business | 29 (74.4) | 10 (25.6) | 0.805 (0.300-2.159) | 0.666 |
| Services | 15 (62.5) | 9 (37.5) | 1.400 (0.481-4.073) | 0.537 |
| Daily wages worker | 6 (54.5) | 5 (45.5) | 1.944 (0.496-7.621) | 0.340 |
| Housemaker | 77 (67.0) | 38 (33) | 1.152 (0.528-2.512) | 0.723 |
| Others | 10 (66.7) | 5 (33.3) | 1.167 (0.328-4.149) | 0.812 |
| **Relationship with father** | | | | |
| Excellent | 88 (72.7) | 33 (27.3) | Ref | |
| Good | 54 (62.8) | 32 (37.2) | 1.580 (0.874-2.858) | 0.130 |
| Fine | 16 (66.7) | 8 (33.3) | 1.333 (0.522-3.407) | 0.548 |

Continued.

| Variables | Psychosocial problem | | OR (95% CI) | P value |
|---|---|---|---|---|
| | At safe (%) | At risk (%) | | |
| Bad | 7 (53.8) | 6 (46.2) | 2.286 (0.715-7.302) | 0.163 |
| **Relationship with mother** | | | | |
| Excellent | 98 (73.7) | 35 (26.3) | Ref | |
| Good | 50 (61.7) | 31 (38.3) | 1.736 (0.961-3.136) | 0.106 |
| Fine | 12 (63.2) | 7 (36.8) | 1.782 (0.640-4.957) | 0.068 |
| Bad | 5 (45.5) | 6 (54.5) | 3.360 (0.965-11.704) | 0.269 |

**Table 5: Analytical study 2.**

| Variables | Psychosocial problem | | OR (95% CI) | P value |
|---|---|---|---|---|
| | At safe (%) | At risk (%) | | |
| **Relationship with siblings** | | | | |
| Excellent | 73 (74.5) | 25 (25.5) | Ref | |
| Good | 54 (62.8) | 32 (37.2) | 1.730 (0.921-3.250) | 0.088 |
| Fine | 12 (66.7) | 6 (33.3) | 1.460 (0.496-4.300) | 0.492 |
| Bad | 5 (33.3) | 10 (66.7) | 5.840 (1.820-18.735) | 0.003* |
| **Time spent with family** | | | | |
| Less than 1 hour | 22 (61.1) | 14 (38.9) | 1.196 (0.523-2.736) | 0.671 |
| 2-4 hour | 63 (68.5) | 29 (31.5) | 0.865 (0.450-1.666) | 0.665 |
| 5-6 hour | 33 (75) | 11 (25) | 0.627 (0.271-1.448) | 0.274 |
| More than 7 hours | 47 (65.3) | 25 (34.7) | Ref | |
| **Relationship with neighbours** | | | | |
| Good | 92 (73.6) | 33 (26.4) | Ref | |
| Fine | 55 (66.3) | 28 (33.7) | 1.419 (0.77-2.59) | 0.256 |
| Bad | 5 (38.5) | 8 (61.5) | 4.46 (1.36-14.60) | 0.013* |
| Don’t know | 13 (56.5) | 10 (43.5) | 2.145 (0.85-5.35) | 0.102 |
| **Family fights** | | | | |
| Daily | 8 (61.5) | 5 (38.5) | 1.184 (0.340-4.125) | 0.791 |
| Sometimes | 72 (66.1) | 37 (33.9) | 0.974 (0.429-1.927) | 0.939 |
| Rarely | 49 (73.1) | 18 (26.9) | 0.696 (0.321-1.511) | 0.359 |
| Never | 36 (65.5) | 19 (34.5) | Ref | |
| **Academic pressure from family** | | | | |
| Yes | 77 (69.4) | 34 (30.6) | Ref | |
| No | 88 (66.2) | 45 (33.8) | 1.158 (0.675-1.988) | 0.594 |
| **Relationship with teacher** | | | | |
| Excellent | 56 (81.2) | 13 (18.8) | Ref | |
| Good | 79 (69.9) | 34 (30.1) | 1.854 (0.898-3.828) | 0.095 |
| Fine | 22 (45.8) | 26 (54.2) | 5.091 (2.223-11.658) | <0.001* |
| Bad | 8 (57.1) | 6 (42.9) | 3.231 (0.955-10.926) | 0.059 |
| **Relationship with classmates** | | | | |
| Excellent | 70 (72.2) | 27 (27.8) | Ref | |
| Good | 74 (70.5) | 31 (29.5) | 1.086 (0.590-2.000) | 0.791 |
| Fine | 16 (53.3) | 14 (46.7) | 2.269 (0.976-5.274) | 0.057 |
| Bad | 5 (41.7) | 7(58.3) | 3.630 (1.060-12.424) | 0.040* |
| **Academic pressure from school** | | | | |
| Yes | 58 (65.2) | 31 (34.8) | 1.191 (0.685-2.072) | 0.535 |
| No | 107 (69) | 48 (31) | Ref | |
| **Violence/bullying in school** | | | | |
| Yes | 34 (65.4) | 18 (34.6) | 1.137 (0.595-2.171) | 0.697 |
| No | 131 (38.2) | 61 (31.8) | Ref | |
| **Pocket money** | | | | |
| Satisfied | 119 (75.3) | 39 (24.7) | Ref | |
| No satisfied | 14 (51.9) | 13 (48.1) | 2.833 (1.227-6.544) | 0.015* |
| **Access to gadgets/internet** | | | | |
| Yes | 153 (57.7) | 73 (32.3) | Ref | |
| No | 12 (66.7) | 6 (33.3) | 1.048 (0.378-2.903) | 0.928 |

Continued.

| Variables | Psychosocial problem | | OR (95% CI) | P value |
|---|---|---|---|---|
| | At safe (%) | At risk (%) | | |
| **Use of gadget/internet** | | | | |
| Less than 3 hours | 94 (69.6) | 41 (30.4) | Ref | |
| 3-6 hours | 42 (66.7) | 21 (33.3) | 1.146 (0.605-2.173) | 0.676 |
| 7-9 hours | 12 (66.7) | 6 (33.3) | 1.146 (0.403-3.264) | 0.789 |
| More than 9 hours | 5 (50) | 5 (50) | 2.293 (0.629-8.352) | 0.208 |

*P value less than 0.05 are significant.

The participants who received academic pressure from their school were 1.191 times (CI=0.685-2.072) and faced violence/bullying in their school were 1.137 times (CI=0.595-2.171) at risk of psychosocial problems. The respondents who were not satisfied with their pocket money was statistically significant with a psychosocial problem (COR=2.833, CI=1.227-6.544, p=0.015) whereas there was no association of access to gadget/internet and uses of it with a psychosocial problem (Table 5).

## DISCUSSION

From the study, it was seen that the prevalence of psychosocial problems among adolescents was found to be 32.4%. Similar study published in 2018 revealed that 12.9 percent of adolescents had psychosocial problems.[6] The study conducted in Pokhara showed 21.7 % of adolescent psychosocial problems and likewise, the study conducted on central region of Nepal published in 2016 showed 17.03%.[17,20] Another study conducted in Dehradun, India showed a prevalence of 40.5% whereas a cross-sectional study in Muzaffarnagar, India, revealed that the overall prevalence of psychosocial problems among adolescent was found to be 41.43%.[21,22]

There was no association found between age group, sex, ethnicity and educational status of participants with psychosocial problems. This finding was similar to the study conducted by Banstola (2017) which showed no association with psychosocial problem however the study showed an association between religion and psychosocial problem but in our study it was not associated (p=0.027, COR=0.515, CI=0.285-0.933).[20] Likewise, a study conducted by Bista et al showed no association between gender and educational status with psychosocial problem as found in this study however the study showed age group was associated and Indian and American studies also revealed same findings of age group being associated as mentioned by Bista et al in his study but our study doesn't show such association.[17] Another study conducted by Timalsina et al showed age group and psychosocial were statistically significant.[4]

Current study doesn't show any statistical significance of family type and mother education with psychosocial problems however, this significance was strongly shown by the study conducted by Bista et al (COR=3.71, CI=1.47, 9.32) and (COR=2.93, CI=1.96, 4.37) and Banstola (2017) (p=0.004, COR=2.127, CI=1.272-3.558) and (p=0.027, COR=1.964, CI=1.070-3.604).[17,20] A study conducted by Bista et al showed father education (COR=1.75, CI=1.0, 2.94) was significant with psychosocial problem however our study shows no significant of father education with psychosocial problem and in the same way our study reflect no any association between mothers and father's occupation along with mother and father's education which was reported by similar study conducted by Timalsina et al.[4]

According to this study, there was no association between relationship of students with their family and time spend with them however there was associated significant between relationship with siblings (COR=5.840, CI=1.820-18.735, p=0.003), relationship of family with neighbours (COR=4.46, CI=1.36-14.60, p=0.013), relationship of student with teacher (COR=5.091, CI=2.223-11.658, p<0.001) and classmates (COR=3.630, CI=1.060-12.424, p=0.040) with psychosocial problems. Another study showed that relationships with siblings that mentioned love, affection, irritation and fight were statistically significant with psychosocial problems.[23]

Our study reflects no association between types of punishment, bullying/violence in school with psychosocial problems. Similarly, there was no statistically significant difference between academic pressure from school and psychosocial problems in our study, whereas a similar study reflects statistical significance.[20]

Our study reports no association between family fights and psychosocial problems risk to student however a similar study showed significant association between family dispute and parents fight with psychosocial problems.[17,23]

The study found that those who were unsatisfied with their pocket money were statistically significant with psychosocial problem (COR=2.833, CI=1.227-6.544, p=0.015). Another study also showed same association between pocket money the student gets (COR=2.15, CI=1.41, 3.27) and psychosocial problems.[17]

The study's limitation was desirability and recalled bias since the questionnaire was self-administered and couldn't include the student of grade 10 because of their upcoming SEE examination.

## CONCLUSION

The prevalence of psychosocial problems among adolescents was found to be 32.4%. There was statistical significance between relationships with siblings, relationships of a family with neighbours, relationships with teachers and classmates and pocket money with psychosocial problems. Similarly, there was no association between family education, occupation, relationship with father, mother, time spent with them, family fights, types of punishment received by students, and psychosocial problems. There was no association of academic pressure from school, violence/bullying and access and use of gadgets and the internet with psychosocial problems. Schools should provide more awareness of psychosocial dysfunctions to children through different media and parents should be aware through child to parents' approach.

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