Psychosocial Problems among the Adolescent School Students of Dhulikhel Municipality
Shrestha B, Gautam S, Shrestha J, Shrestha S

ABSTRACT

Background
Adolescence is a period when an individual experiences a variety of biological, psychological and social changes. These multiple changes during the developmental period can make the adolescents vulnerable to mental health problems. Therefore early detection of psychosocial problems and addressing the need of the adolescents are crucial for promoting their mental health.

Objective
To assess psychosocial problems and its associated factors among school going adolescents of Dhulikhel, Nepal.

Method
A descriptive cross sectional study was conducted among 513 adolescents studying in grade 8 to 12 of randomly selected schools of Dhulikhel Municipality. Data were collected by using structured questionnaire and Pediatric Symptom Checklist-Youth Report (Y-PSC). Descriptive and inferential analysis was done using Statistical Package for Social Sciences version 20.

Result
Out of 513 adolescent students, a total of 133 (25.9%) of the adolescents were found to have psychosocial problems. There was significant association between psychosocial problems and respondents’ variables like age, grade, parental education status, respondents’ living status, perceived family disputes, perceived marital problems of parents, relationship problem with family, stress of failure in study, punishment faced in home and school, experienced sexual harassment and death of loved ones.

Conclusion
Various family related factors and stressful life events of adolescents are associated with the psychosocial problems. Hence early intervention focusing on awareness and modification of stressful life events is required.
INTRODUCTION

Adolescence is a unique phase of human development.\(^1\) During this period of time, adolescents experience a variety of biological and emotional changes.\(^2,3\) When various forms of problems/dysfunctions and conflicts are faced by adolescents, it will ultimately impair normal development aggravating psychosocial dysfunction.\(^3\) Mental health conditions account for 16% of the global burden of disease and injury among 10-19 years age group (WHO 2020).\(^2\) Ministry of Health and Population of Nepal estimates that about 15-20% of this population (2-3 million) may suffer from some form of mental disorder.\(^4\) Multiple physical, emotional and social changes, including exposure to poverty, abuse, or violence, can make adolescents vulnerable to mental health problems.\(^5\) Unfortunately, many children and adolescents in Nepal are exposed to such factors. The changing family structure due to divorce, separation from joint family to nuclear family, parental neglect and parental substance abuse also put children at a higher risk of psychosocial and mental health problems.\(^4\) Lack of attention to the mental wellbeing of children and adolescents, may lead to mental health consequences that may remain throughout life and reduces the capacity of societies’ socioeconomic productivity.\(^3,5\) Promoting psychological well-being and protecting adolescents from adverse experiences and risk factors that may impact their potential to thrive are critical for their well-being during adolescence and for their physical and mental health in adulthood.\(^6\)

Therefore this study aims to assess psychosocial problems and its associated factors among adolescent school students in Dhulikhel, Nepal.

METHODS

A descriptive cross sectional study was conducted among adolescents studying in grade 8 to 12 of randomly selected schools of Dhulikhel Municipality from January 2019 to February 2019. Sample size was calculated using the formula \(n = \frac{Z^2pq/l^2}{1}\), considering the prevalence of psychosocial problem as 17% from a previous study conducted in central region of Nepal with allowable error 20% and Z value 1.96 at 95% CI. By adding the 10% non response rate, the calculated sample size was 515.\(^7\) Out of 50 schools of Dhulikhel Municipality, three schools were selected by lottery method. From these three schools, adolescent students from grade 8 to 12 were included conveniently in the study. Ethical approval was obtained from Institutional Research Committee of Kathmandu University School of Medical Sciences. Permission was obtained from Municipality Office, and authority of respective school to conduct study. Informed assent was obtained and voluntary participation of the respondents was carried out.

The questionnaire included socio-demographic information, family and school related information of the students in first part and in second part, a structured pediatric symptom checklist-youth version (Y-PSC) was used to assess psychosocial problem.\(^6,7\) Pediatric Symptom Checklist (PSC) is a brief screening questionnaire that helps to recognize psychosocial problems in children. PSC is available in two versions: parent screening version and youth self-report version. In this study, youth self report version of PSC (Y-PSC) was used. The Y-PSC form consists of 35 items, and each item is rated as “Never” (Scored 0), “Sometimes” (Scored 1), or “Often” (scored 2). The total score was calculated by adding together the score for each of the 35 items, with a possible range of scores from 0 to 70. Cut-off score is ≥ 30 indicating presence of psychosocial dysfunction.\(^5\) This PSC could be used without explicit permission for educational and professional research.

Obtained data was coded and analysis was done using Statistical Package for Social Sciences (SPSS) version 20. Frequency and percentage for descriptive statistics and Pearson’s chi square and Fisher’s exact test were applied to find out the association between psychosocial problems and sociodemographic variables at 95% confidence interval. \(p\)-value less than 0.05 was considered to be significant.

RESULTS

Out of the total calculated sample 515, two respondents were excluded for incomplete response. Among 513 respondents, majority (73.3%) of the respondents were of age 15 to 19 years. More than half (52.6%) of the respondents were female. Nearly half (48.5%) of the respondents were studying in higher secondary level. More than three fourth (79.1%) of the respondents were Hindu (Table 1).

| Variables                        | Frequency (%) |
|----------------------------------|---------------|
| **Age**                          |               |
| 10-14 yrs                        | 137 (26.7)    |
| 15-19 yrs                        | 376 (73.3)    |
| **Sex**                          |               |
| Female                           | 270 (52.6)    |
| Male                             | 243 (47.4)    |
| **Educational level**            |               |
| Lower Secondary level            | 138 (26.9)    |
| Secondary level                  | 126 (24.6)    |
| Higher secondary level           | 249 (48.5)    |
| **Religion**                     |               |
| Buddhist                         | 66 (12.9)     |
| Christian                        | 39 (7.6)      |
| Hindu                            | 406 (79.1)    |
| Muslim                           | 2 (0.4)       |

Table 1. Socio-demographic characteristics of respondents (n=513)
The overall proportion of psychosocial problems among adolescents was found to be 133 (25.9%) (fig. 1).

The psychosocial problems among adolescents was significantly higher (p=0.017) among higher age group (15-19 years) than among the lower age group (10-14 years). Similarly higher secondary level students had significantly higher (p=0.007) proportion of psychosocial dysfunction than that of other grades.

Those adolescent students whose parents were illiterate, who were living with single parents, who had perceived family disputes, parental marital problems, relationship problem with family had significantly higher (p < 0.001) proportion of psychosocial problems. Likewise the respondents who took frequent stress of failure in study, those who were often punished in home and school, who had faced sexual harassment and death of loved ones, have significant association (p < 0.001) with psychosocial problems. Besides that no significant association (p > 0.05) was seen with psychosocial problems and respondents’ variables like gender, religion, occupation of father and mother and type of the family (Table 2).

Table 2. Association between psychosocial problems and sociodemographic characteristics of respondents (n=513)

| Variables                        | Psychosocial problems | p value |
|----------------------------------|-----------------------|---------|
|                                 | Yes (f/%) | No (f/%) |         |
| **Age in years**                 |           |         |         |
| 10-14                            | 25(18.2)  | 112(81.8) | 0.017*  |
| 15-19                            | 108(28.7) | 268(71.3) |         |
| **Sex**                          |           |         |         |
| Female                           | 72(26.7)  | 198(73.3) | 0.687*  |
| Male                             | 61(25.1)  | 182(74.9) |         |
| **Grade**                        |           |         |         |
| Lower secondary level            | 30(21.7)  | 108(78.3) | 0.007*  |
| Secondary level                  | 57(22.9)  | 192(77.1) |         |
| Higher secondary level           | 46(36.5)  | 80(63.5)  |         |
| **Religion**                     |           |         |         |
| Hindu                            | 100(24.6) | 306(75.4) | 0.13*   |
| Buddhist                         | 17(25.8)  | 49(74.2)  |         |
| Others                           | 16(39.0)  | 25(61.0)  |         |
| **Father education**             |           |         |         |
| Illiterate                       | 19(51.4)  | 18(48.6)  | <0.001* |

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DISCUSSION

The present study shows that 25.9% of adolescent students were found to have of psychosocial problems. This finding was found to be higher compared to the study conducted in Pokhara (21.7%) and in central regions of Nepal, Hetauda (17.03%) and Lalitpur (12.9%).\textsuperscript{3,8,9} This variation could be probably due to differences in characteristics of the sample and geographical area.

There was significant association between psychosocial problems and age of respondents (p=0.017) which was consistent with the similar studies conducted in Nepal and India.\textsuperscript{3,8-11} One of the important reason for this could be because of the increase in social roles and responsibilities with increasing age and probably due to fear of failing to meet those responsibilities and expectations from those age groups. The study showed that higher proportion of adolescents studying in higher secondary level tend to have psychosocial problem which was significant (p=0.007) and consistent with the finding of the study conducted in Pune, India.\textsuperscript{10} Probable reason for this can be better explained by the fact that as the grade of the students increases, there is advancement in the education system which increases educational difficulty level contributing to increased psychosocial dysfunction. Similarly this study revealed that adolescents whose parents were illiterate (p < 0.05) were more prone to psychosocial problems compared to those whose parents were literate. This finding is similar with the finding of the study conducted in Nepal.\textsuperscript{3} This possibly could be due to positive effect of parental education like awareness regarding possible problems of children, proper guidance and counseling.\textsuperscript{3}

According to this study, respondents who are living with single parents were more likely to develop psychosocial problem compared to those living with both parents and other family members which was significant (p < 0.001) finding and is similar to the study done in central region of Nepal.\textsuperscript{3}

Similarly there is statistically significant association between perceived family disputes, perceived parental marital problems, relationship problem with family members with psychosocial problem (p value < 0.001) This indicates that respondents whose family often have family disputes, parental marital problems and relationship problems are more prone to develop psychosocial problems. This is similar to the findings of similar study done on Nepal and India. Family disputes and relationship problems decreases the attention of parents toward the needs of their children and ultimately decreases positive interaction among parents and their adolescents, which negatively impacts adolescent development, including poor academic performance.\textsuperscript{3,11} Likewise the respondents who are punished in home and school have significant association with psychosocial problems (p < 0.001) which is similar with the findings of study conducted in Nepal which shows significant association between physical harm and psychosocial problems.\textsuperscript{13}

This study showed that those respondents who had stress of failure in study have significant association with psychosocial problems (p < 0.0001). The similar study done in Uganda show that study burden is associated with the psychosocial problems (p=0.02)\textsuperscript{14}

Significant association was found between psychosocial problems and stressful events like facing of sexual harassment and death of loved ones (p < 0.001). This finding is similar with the study conducted by Gyawali in Nepal which showed the relationship between the types of mental health effects and its level on the respondents due to the sexual harassment.\textsuperscript{15} Similar finding was observed in the study conducted by Raza et al. which showed significant impact of parental death on the psychosocial functioning of adolescents.\textsuperscript{16}

However this study showed that there was no significant association of gender, religion, parental occupation, type of the family which was similar with the finding of the study conducted in Nepal.\textsuperscript{9}

Since this study included only the adolescents from the three schools it may not represent the whole population of Nepal. Moreover, this study used only the psychosocial screening checklist to identify the presence of psychosocial dysfunction among the adolescents. In addition to this psychosocial screening tool, clinical assessment can add stronger evidence of psychosocial dysfunction among adolescents group.

CONCLUSION

This study revealed that one fourth of the adolescents had psychosocial problems. Family related factors and stressful life events are the associated factors of psychosocial problems of adolescents. Public awareness program regarding adolescents’ psychosocial problems, its early diagnosis, treatment and prevention should be emphasized to promote mental health of adolescents. The primary focus towards adolescents’ friendly environment with the involvement of family and schools is of great importance to minimize the risk of developing psychosocial dysfunction among adolescents. Moreover, focus towards regular psychosocial counseling and teaching life skills such as problem solving approaches and adopting coping strategies for adolescents can play vital role in psychosocial development.
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