

## Prevalence of Psychological Problems Among Adolescent Students of Selected Private School at Itahari Sub-Metropolis of Eastern Nepal

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### ABSTRACT

**Background:** Adolescence is the second decade of life, the crucial period demanding significant adjustment in physical, psychological and social dimensions. The main aim of this study was to access the psychological problems of adolescents in Itahari sub-metropolis. **Methods:** A cross-sectional study design and consecutive sampling technique was adopted for the study. The study was conducted in selected schools of Itahari Metropolitan city. From the selected schools, students of class 7 to 12 with the age range of 11-19 years were included in the study. Sample size was calculated considering the prevalence of Psychosocial Problem of similar setting. The instrument for data collection was self-administered pediatric checklist for youth, an internationally valid tool, which was divided in three parts. Part I related to socio-demographic information, part II consisted of questions regarding family and school related factors and part III was the standard tool to measure psychosocial problem. **Results:** The prevalence of psychological morbidity on the basis of total difficulties score was found to be 23.9% (11) in male whereas 31.5% (17) was abnormal in female. Among males, 76.1% (35) was found to have normal scores as compared to 68.5% (37) in females although the difference was found to have no statistical significance. **Conclusions:** The adolescent age groups have to face various psychological problems and are likely to be very common. School mental health and social services have the potential to affect the prevalence of these and other psychological disorders by assisting in the assessment, referrals and management of the affected students.

**Keywords:** adolescent; psychological problems; social dimension.

### INTRODUCTION

Psychosocial/psychopathological or mental disorders have increased globally in the recent decades, especially among the children and adolescents. Adolescence is defined as the age, between 10 and 19 years of age. Adolescence is the transitional period in the life that occurs after childhood and before adulthood. In this period there is rapid growth and development of physical and sexual maturation, along with movement toward socio-economic independence and development of identity.<sup>1</sup> Whereas it is right period of physical, nutritional, and sexual transition. Adolescence is also remarkable for the many accompanying psychological changes. Worldwide, 20% of children and adolescents suffer from a disabling mental illness.<sup>2</sup>

During this transition between childhoods to adulthood, adolescents often face a number of crises and dilemmas; lack of adequate care and attention poses the risk of developing various psychosocial problems with long standing impact and major impact on their psychosocial adjustment and academic performance in school.<sup>3</sup> So that early identification of mental health problems may lead

to decreases in long-term disability rates.<sup>4</sup> Lack of prompt identification and proper management of these problems may have detrimental effect in their potential adult life.<sup>5</sup> Adolescents currently account for 1.2 billion of the world's population. Eighty-eight percent of them live in developing countries.<sup>6,7</sup> Mental and behavioral disorders are estimated to account for 12% of the global burden of disease and these disorders of childhood and adolescence are very costly to society in both human and financial terms. Despite the ever-increasing adolescent population of the country, there is an absence of national reporting system of psychological/mental disorder in adolescents. There is a significant need of a national database for the prevalence of psychopathologies in this age group. Furthermore, for the sake of uniformity, comparison, and organized planning, any one scale should be preferred. The main barrier to such a database is the nature of these disorders the screening questionnaires and clinical diagnosis being the two stages for population-based diagnosis. Hence study related to psychological disorder in children is necessity and need.

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**METHODS**

This study adopted was Analytical method of cross sectional study design which was carried out for 3 months at Itahari sub-metropolitan city of Sunsari district. Total enumeration sample was employed in which each students studying in class 7 to 12 in selected schools. The Inclusion criteria were children age between 11 to 19 years and exclusion was children having the serious disorder. The sample size was 100. The study was conducted in selected schools of Itahari. Two schools were selected purposively. From the selected schools, sample size was calculated considering the prevalence of Psychosocial Problem as 30.8% with allowable error 5% and having Z value 1.96 and acceptable absolute difference value 10%.<sup>8</sup> Using the formula  $n = (z^2 p q)/d^2$ .<sup>9</sup>  $= (1.96)^2 \times 30.8 \times 69.2 / 10^2 = 86$ . Additional 15% sample was added to avoid missing information 15% additional sample were added. The optimal sample size of this study was 100.

The instrument for data collection was self-administered questionnaire which was divided in three parts. Part I related to socio-demographic information, part II consisted of questions regarding family and school related factors and part III was the standard tool to measure psychosocial problem (Paediatric Symptom Checklist – Youth Report). The tool was pretested among 35 respondents who met the similar characteristics of study samples and they were not included in the main study. The Pediatric Symptom Checklist (Y-PSC) is a brief screening questionnaire that can be administered to adolescents ages 11 by fixing cut- off point 10 which is Nepali translated and up by health professionals (doctors, registered nurses). Confidentiality had maintained throughout the study. Obtained data was used for research purpose only. Time taken for data collection was 25-30 minutes from each respondent. The questions were clearly read out which is self-administered and explained by the researcher to make it clear and easy for the respondents as well as for the completeness. Collected data was checked, reviewed, organized daily for completeness and accuracy. Data was analyzed in Statistical Package for Social Science (SPSS) version 23. 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**

A total of 100 students were sampled for the study, out of those 46 were males and 54 females. The prevalence of psychological morbidity on the basis of total difficulties score was found to be 23.9%

(11) in male whereas 31.5% (17) were abnormal in female. Among males, 76.1% (35) were found to have normal scores as compared to 68.5% (37) in females although the difference was found to have no statistical significance (Table 1).

**Table 1. Psychological analysis according to condition state of person. (n=100)**

Present condition	Frequency	Percent
Psychologically Normal	72	72
Psychologically Im-paired	28	28

Among the different categories of psychological morbidity, the prevalence of conduct problems was found to be 75.5% (40) according to age of early adolescents having age group of 12-14 years and 24.5% were abnormal in the same category in the problematic range, followed by 55.31% (26) in normal condition in late adolescents and 44.68% (21) in abnormal condition of same group (Table 2).

**Table 2. Association of Psychological according to Age. (n=100)**

	Normal	Impaired	$\chi^2$	p-value
Age				
Early adolescents (12-14)	40(75.50)	13(24.50)	0.55	0.55
Late adolescents (15-6)	26(55.31)	21(44.69))		

The peer problems, pro-social behavior, and hyperactivity problems were found to be abnormal. The present condition on psychologically normal frequency was 72 having percentage of 72% where as psychologically impaired was 28 having 28%, (Table 3).

**Table 3. Association of Psychological according to gender. (n=100)**

Gender	Normal	Impaired	$\chi^2$	p-value
Male	35(76.10)	11(23.90)	0.76	0.7
Female	37(68.50)	17(31.50)		

**DISCUSSION**

The overall prevalence of psychological morbidity was found to be 34% in the present study. Bansal and Barman found the prevalence of any psychological abnormality to be 20.12% using Childhood Psychopathology Measurement Scale for screening and International Classification of Diseases-10 (ICD-10) for confirmation,<sup>10</sup> in the study they found that there was significant association between the age of the child and the psychosocial problems. Whereas Pathak et al.<sup>11</sup> found it to be 29.5% using Youth Self Report (YSR). Dhoundiyal and Venkatesh found the prevalence to be 30.8% among girls of 12–18 years using SDQ with health-related quality of life inventory,<sup>12</sup> whereas Pillai et al. found it to be 1.81% using Development and Well-Being

Assessment Questionnaire.<sup>13</sup> Thus, a wide variance has been seen in the studies reported because of the difference in diagnostic tools and types of psychological disorders considered in different researches as due to various reasons.

A research conducted by Bhola et. al<sup>14</sup> among 1087 pre-university students in Bangalore, India using the self-reported Strengths and Difficulties Questionnaire (SDQ) found abnormal total difficulties among 10.1% adolescents, with 9% at risk for emotional symptoms, 13% for conduct problems, 12.6% for hyperactivity/inattention and 9.4% for peer problems. This finding is similar in many aspects with present finding; however, present finding found higher prevalence of total difficulties among adolescents is could be due to over sensitivity of adolescents in some domains. Another study conducted by Syed EU et al<sup>14</sup> conducted a cross sectional study on Prevalence of emotional and behavioural problems among primary school children in Karachi, Pakistan - multi informant survey among 1488 parents and teachers using Strengths and Difficulties Questionnaire (SDQ). Where the parents rated 34.4% of children as falling under the "abnormal" category, slightly higher estimates 35.8% were reported by the teachers. The findings suggest a striking difference between the informants' ratings as well as gender wise difference in prevalence of common child mental health problems. The findings by Arman S et al.<sup>15</sup> revealed that total 26% of youth had psychiatric problems. By determining the subscale score, it revealed that conduct disorder (34.7%) was the most common problem in youth followed by peer-relationship problems (25.4%), emotional problems (24.5%), hyperactivity (23%) and impairment of pro-social behavior (5.7%). A study conducted in five developing countries supports the current study as they found that significant proportion of adolescents had conduct problems (Atilola, B.). Likewise, 20.8 % of children in Brazil, 11.7-13.7 % of school age children in Sri Lanka, 34-36 % of children in Pakistan, and 30 % of children in India suffer conduct or behavioural problems. Study of Wille N et al<sup>16</sup> on impairment of children/adolescents by mental health problems showed similar finding.

The self-reported data showed gender-difference and severe impairment were associated with mental health status. The finding of Naomi Priest et al<sup>17</sup> is also fairly compatible with the present finding, it was revealed the significant differences in family and neighbourhood characteristics, including parental income, maternal education, maternal parenting quality and neighbourhood safety, were found significantly associated with mental health of children. After controlling for family and neighbourhood characteristics, significant differences in parent-reported SDQ total difficulties were found for Indigenous children. However in

present study, the ethnicity was not found significant determinants but ecological belt of residence was found significantly associated with all mental health domains in bi-variate as well as multivariate analysis.

A study conducted by Singh k et al<sup>18</sup> keeps similarity with this study. They noted that early adolescents were found with high pro-social behaviours whereas late adolescents were with high difficulty scores. Females were higher than males having pro-social behaviours. Adolescents residing in rural areas differed from urban areas in both pro-social behaviours anxiety. Government school going adolescents differed from private school going adolescents on pro-social behaviour, stress and anxiety. The abnormality in the present study according gender is, the female is having more abnormality than male i.e. 31.5%, which is more as compared to the study done by Pathak et al.

## **CONCLUSIONS**

The adolescent face various psychological problems and is likely to be very common. Despite there is need of a dearth of studies conducted in this crucial age group in Sunsari district of Nepal. There is a need of more school-based studies for psychological assessment to find out the exact scene of psychological problem. School mental health and social services have the potential to affect the prevalence of these and other psychological disorders by assisting in the assessment, referrals and management of the affected students. Teaching life skills such as problem solving, critical thinking, communication, interpersonal relations, empathy, and methods to cope with emotions and crises is essential for all the students. It is pertinent to detect and manage these disorders in time among this age group or else they are likely to carry these morbidities into their adulthood. The environment in which some adolescents live, learn and grow can undermine their physical, psychosocial and emotional development, for example, where adolescents lack parental guidance and support, face food shortages, or are surrounded by violence, exploitation and abuse.

## **Limitations of the study**

This study had certain limitations as well. It was based on a self-administered pro forma and as no used a multi informant method of assessment.

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**REFERENCES**

1. Ahmad A, Khalique N, Khan Z, Amir, A. Prevalence of psychosocial problems among school going male adolescents. *Indian Journal of Community Medicine.* 2007; 32(3), 219.
2. Al-Gamal E., Hamdan-Mansour, A. M., Matrouk, R., & Nawaiseh, M. A. (2013). The psychosocial impact of child labour in Jordan: a national study. *International Journal of Psychology,* 48(6), 1156-1164. Doi: 10.1080/00207594.2013.780657
3. Chhabra G. S, Sodhi M. K. Impact of Family Conflict on the Psychosocial Behavior in Male Adolescents. *Journal of Nepal Pediatric Society.* 2012;32(2). doi:http://dx.doi.org/10.3126/jnps.
4. Hacker K. A, Myagmarjav E, Harris V, Suglia S. F, Weidner D, Link D. Mental health screening in pediatric practice: factors related to positive screens and the contribution of parental/personal concern. *Pediatrics,* 2006; 118 (5), 1896-1906.
5. Hamdan-Mansour A. M, Al-Gamal E, Sultan M. K, Matrouk R, Al Nawaiseh, M. Health status of working children in Jordan: Comparison between working and nonworking children at schools and industrial sites. *Open Journal of Nursing,* 2013; 3(01), 55..
6. Haynes N. M. Addressing students' social and emotional needs: the role of mental health teams in schools. *Journal of health & social policy,* 2002; 16 (1-2), 109-123.
7. Joshi S. K, Shrestha S, Shrestha R, Vaidya S. Health status of child laborers in Nepal. *International Journal of Occupational Safety and Health.* 2012; 2(1), 31-38.
8. Bansal PD, Barman R. Psychopathology of school going children in the age group of 10-15 years. *Int J Appl Basic Med Res* 2011; 1:43-7.
9. Pacheco J. T. B, Irigaray T. Q, Nunes M. L. T, Argimon I. I. D. L. Childhood maltreatment and psychological adjustment: a systematic review. *Psicologia: Reflexão e Crítica.* 2014; 27 (4), 815-824.
10. Pathak R, Sharma R. C, Parvan U. C, Gupta B. P, Ojha R. K, Goel N. K. Behavioral and emotional problems in school going adolescents. *The Australasian medical journal,* 2011;4(1), 15.
11. Pathak R, Sharma RC, Parvan UC, Gupta BP, Ojha RK, Goel N. Behavioral and emotional problems in school going adolescents. *Australas Med J* 2011; 4:15-21.
12. Bansal PD, Barman R. Psychopathology of school going children in the age group of 10- 15 years. *Int J Appl Basic Med Res* 2011; 1:43-7.
13. Pillai A, Patel V, Cardozo P, Goodman R, Weiss HA, Andrew G. Non-traditional lifestyles and prevalence of mental disorders in adolescents in Goa, India. *The British Journal of Psychiatry.* 2008 Jan;192(1):45-51.
14. Pathak R, Sharma RC, Parvan UC, Gupta BP, Ojha RK, Goel N. Behavioral and emotional problems in school going adolescents. *Australas Med J* 2011; 4:15-21.
15. Arman S, Keypour M, Maracy M R, Attari A. Epidemiological Study of Youth Mental Health Using Strengths and Difficulties Questionnaire (SDQ). *Iran Red Crescent Med J.* 2012; 14(6): 371-375.
16. Wille N, Bettge S, Ravens S. Risk and protective factors for children's and adolescent's mental health: results. *Eur Child Adolesc Psychiatry.* 2008; 17(1):133-147
17. Syed EU et.al. Prevalence of emotional and behavioral problems among primary school children in Karachi, Pakistan--multi informant survey. - PubMed - NCBI. [online] Ncbi.nlm.nih.gov.2017;6
18. Singh K, Junnarkar M, Sharma S. Anxiety, stress, depression, and psychosocial functioning of Indian adolescents. *Indian Br J.* 2017;2:12-17.

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