

Mental Health Status of Secondary Level School Students of Gorkha District

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ABSTRACT

Introduction: Mental health problem among the adolescent is one of the major global challenges. Adolescence is a transition phase ranging from 10 to 19 years. Most of these problems are manifested at this stage of life. Adolescents are more vulnerable to mental health problems as they face biological, physical, social and cultural transition simultaneously.

Objective: The study objective of this study is to assess mental health status among secondary level school adolescents.

Methods: This study is a cross-sectional study conducted among 317 secondary level school students of Gorkha, Nepal. Structured self-administered questionnaire and General Health Questionnaire-28 (GHQ-28) were used. Data was entered in Epi-data and analyzed in SPSS 11.5

Results: In this study, 24.9% of the respondents were found to have mental health problems. The mean age of respondent was 16.47 ± 1.32 years. In the study female respondents and adolescents from community school were more likely to develop mental health problems.

Conclusions: Mental Health problem among secondary level school going adolescents was in alarming situation. Thus, to improve this problem among adolescents a comprehensive effort needs to be initiated.

Keywords: Adolescent; mental health problem; secondary level school.

INTRODUCTION

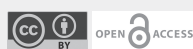
Adolescents is a phase between the ages of 10-19 years.¹ This is transitional process involving progression from the immaturity and social dependency into adult life.² There may be many challenges in this period and it demands adjustment of many fronds.³

A focus on adolescent mental health is crucial for successful attainment of Sustainable Development Goals. Thus, its Target 3.4 and Target 3.5 emphasizes on mental health.⁴ One person in four may develop one or more of these disorders during their lifetime.⁵ It is reported that around 20.0% of the world's adolescents have a mental health or behavioral problem. The stigma attached to mental illness is the main obstacle to the provision of care for people with this disorder. In South East Asia Region (SEAR), the estimated suicide rates per 100,000 populations in 15 to 29 years age group varied from 3.6 in Indonesia to 25.8 in Nepal to 35.5 in India.⁶

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In Nepal, Mental health problems are increasing in the country as 2.0% of the total populations are suffering from some kind of mental diseases.⁷ The objective of this study is to assess Mental health status and associated factors among School going adolescents of Gorkha district.

METHODS

A descriptive cross-sectional study design was conducted at Gorkha district from 1st Jan 2018 to 15th March 2018 among school students of age group 13 years to 19 years, studying in a secondary level school. In the study, 317 respondents were enrolled. Participants in the study were selected using simple random sampling technique following Population Proportionate to Size technique (PPS) from randomly selected nine schools in the district. Individuals who were studying in secondary level from grade nine to twelve residing within a Gorkha district were enrolled in a study, whereas those who were dependent on other for their basic daily function and were under serious medication were not enrolled in the study.

The written informed consent was taken from students and for those who were below 18 years, written consents were taken from the guardians. Permission was taken from the principal of each school. Introduction of researcher was done, and the research topic and its importance were explained in

detail.

Then, a pretested structured self-administered questionnaire was used and distributed in Nepali. According to its scoring guideline minimum score was 0 while maximum score was 84. One who scored 23 and below were identified with no mental health problem, while one who scored 24 and above were identified as having mental health problems.⁸

Data quality control, and reliability of the tool was assured via pre testing the tools and Crohcach's alpha was 0.71. Collected data were entered in an Epi-data sheet and was analyzed in SPSS 11.5 software. Descriptive statistics frequency, percentage, mean, standard deviation (S.D) were calculated. Ethical approval was obtained from IRC, B.P.Koirala Institute of Health Sciences, Dharan.

RESULTS

The study revealed that almost one in four (24.9%) of respondents had some kind of mental health problem. The objective of the study was to assess the mental health status among the Secondary Level students. Among 317 participants, the majority were females (58.4%). The mean age of respondent was 16.47 years (SD \pm 1.32). Almost half of the respondents belonged to Janjati ethnicity (44.40%) and More than half (56.8%) of respondents were from Community schools as shown in table 1.

Table 1: Socio-demographic Characteristic of the respondents (n=317)

Characteristics	Frequency (n)	Percentage (%)	Characteristics	Frequency (n)	Percentage (%)
1. Gender			4. Ethnicity		
Male	132	41.6	Dalit	54	17.2
Female	185	58.4	Janjati	141	44.4
2. Age			Muslim	8	2.5
Mean age in years \pm SD	16.47 \pm 1.32		Brahmin/ Chhetri	114	35.9
3. Class			6. School		
Nine	123	38.7	Community	180	56.8
Ten	98	30.9	Private	137	43.2
Eleven	53	16.8			
Twelve	43	13.6			

Assessment of student's personal behavior reported 11.0% of the respondents drank alcohol, 5.0% smoked cigarettes and 2.8% of them chewed tobacco. Mean sleep duration was 8.72 ± 1.12 hours as shown in Table 2.

Parental characteristics of students are shown in Table 3. One fifth (18.6%) of respondents' mothers were illiterate. Likely, 73.2% mothers of respondents' were home makers. Likewise, 80.2% of the respondents had support for study from their

Table 2: Personal Behavior of the respondents (n=317).

Characteristics	Frequency (n)	Percentage (%)
1. Cigarette smoking		
Yes	16	5.0
No	301	95.0
2. Tobacco chewing		
Yes	9	2.8
No	308	97.2
3. Alcohol intake		
Yes	35	11.0
No	282	89.0
4. Duration of sleep		
< 8 hours	127	40.0
\geq hours	190	60.0
Mean hours of sleep duration \pm SD		8.72 ± 1.12

Table 3: Parental Characteristics of respondents (n= 317).

Characteristics	Frequency	Percentage (%)
2. Educational status of mother		
Illiterate	59	18.6
Basic level	185	58.5
Secondary level	38	11.9
Bachelors level and beyond	35	11.0
3. Mother working out of home		
Yes	85	26.8
No	232	73.2
4. Parental support for study		
Yes	254	80.2
No	63	19.8
5. Sufficient family income		
Yes	294	92.8
No	71	8.2
6. Parental conflict		
Yes	390	61.5
No	244	38.5
7. Parental punishment		
Yes	73	23.7
No	244	76.3
8. Internet access		
Yes	201	63.4
No	116	36.6

Table 4: Mental Health Status of respondents (N= 317).

Mental Health Status	Frequency	Percentage (%)
Mental Health Problem	79	24.9
Not Mental Health Problem	238	75.1

Table 5: Socio-demographic characteristics of respondents associated with Mental health status (n= 79).

Characteristics	Frequency (n)	Percentage (%)
1. Gender		
Male	36	45.5
Female	43	54.4
2. Class		
9 & 10	48	60.7
11 & 12	31	39.3
4. Ethnicity		
Dalit	19	24.1
Janjati	32	40.5
Muslim	4	5.1
Brahmin/Chhetri	24	30.3
5. Type of school		
Community	52	65.8
Private	27	34.2

parents. Almost ninety three percent (92.8%) of students' families had sufficient income to fulfill basic needs.

Regarding parental conflict, more than half (61.5%) of respondents reported that their parents had conflict between them.

Mental health status of respondents assessed through General Health Questionnaire-28 (GHQ-28)

Mental health status was the primary outcome of this study which was assessed through General Health Questionnaire-28 (GHQ-28). GHQ-28 was composed of 28 questions. Respondents answered each question of GHQ-28 on the basis of what they had experienced within the two weeks before the study.

Scoring was followed as per standard rule of GHQ-28 guideline. Score ranged from 0 to 84. Cut-off score of the scale was 24.⁸

The study revealed that almost one in four (24.9%) of respondents had some kind of mental health

problem as shown in table 4.

Table 5 shows that among the respondents identified with mental health problems, 54.4% of the respondents were females and 45.5% were males. On the other hand, 60.7% of the respondents were from classes 9 & 10, while 39.3% of respondents were from classes 11 & 12. Study reported that 40.5% of the respondents who had Mental health problem were Janjati followed by 30.3% Brahmin/Chhetri, 2.4% Dalit and 5.1% Muslim. Meanwhile, 65.8% were studying in community schools and the rest 34.2% were studying in private schools.

DISCUSSION

The term "adolescents" refers to the individuals between the ages of 10 to 19 years.¹ In this phase, the individuals face many internalizing and externalizing problems attributable to the transition from childhood to adulthood.³ It is a stressful developmental period filled with major changes in physical maturity and sexuality, cognitive process, emotional feelings and relationship with others. It is

a phase of life marked by special attributes like rapid physical, psychological, cognitive and behavioral changes.⁴

This study was focused on assessing mental health status among the secondary level school adolescents of Gorkha, which was assessed through General Health Questionnaire-28 (GHQ-28). The cut-off score of GHQ-28 was 24, as the individuals scoring 24 and above were identified having mental health problem, while those scoring below 24 were identified having no mental health problem.⁸

This study revealed that 24.9% of respondents had some kind of mental health problem which is similar to a study conducted by Bhattarai D, et al.⁹ The finding falls in the prevalence range from 10.7% to 51% identified by a scoping review conducted by Chaulagain A, et al.¹⁰ However the finding of our study was comparatively higher than the study of Dash PM, et al. (14.0%)¹¹ and Bista B, et al. (17.0%) conducted in Nepal.¹² The prevalence of this study is comparatively higher because the Gorkha was the epicenter of mega-quake of the year 2015.

The mean age of the respondents participated in this study was found to be 16.47 years with SD \pm 1.32 years, which is similar to studies conducted in USA and India.¹³ Respondents who had access to internet were almost two third (63.4%) which was comparatively lower than the finding of study conducted at Pokhara by Singh, S et al. (85.4%).¹⁴ Similarly, the mean duration of sleep was calculated to be 8.72 ± 1.1 hours. The study was conducted immediately after they had long vacation so they might have had ample amount of sleeping hours.

Respondents who smoked cigarette were 5.0% which was similar to the finding of the study conducted in 2002 by Williams PG, et al.¹⁵ While the prevalence of adolescent smoking was comparatively low in comparison to a study Pradhan, PMS et al. (13.7%).¹⁶ Respondents who chewed tobacco were 2.8%. In this study it was reported that 11.0% of respondents drank alcohol which was almost similar to a study done by Reijneveld SA, et al.¹⁷

The study revealed that a vast proportion of adolescent students (24.9%) were suffering from mental health problems in the study site.

The study could not be generalized in whole Nepal as data was collected from Gorkha district only. Similarly, only adolescent not going in the school were not enrolled in the study which are the limitation of the study.

CONCLUSIONS

In this study, two out of five adolescents were found to have mental health problems. The magnitude of mental health problems was more with increase in age. Adolescents from Community school were more vulnerable to mental health problems. Thus, mental health problems among the school going adolescents was in an alarming situation. Comprehensive effort from home, school and community is to be initiated to address the existing situation.

Conflict of Interest: None

NJHS

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