# Self-Reported Emotional and Behavioural Problems among Adolescents, Kathmandu

Pandey A,[1] Adhikari K,[2] Dhakal K,[1] Pandey AR,[3] Upadhyay R,[1] Devkota N[4]

[1]Maharajgunj Nursing Campus,
Institute of Medicine, Tribhuvan University,
Kathmandu, Nepal.

[2]Nepal Health Research Council,
Ram Shah Path, Kathmandu, Nepal.

[3]Herald Secondary School, Kathmandu, Nepal.

[4]Department of Child and Adolescents' Psychiatric,
Kanti Children Hospital, Ministry of Health and
Population, Kathmandu, Nepal.

**Corresponding Author**

Apsara Pandey

Department of Pediatric Nursing,

Maharajgunj Nursing Campus,

Institute of Medicine, Tribhuvan University,

Kathmandu, Nepal.

E-mail: apsara.pandey@mnc.tu.edu.np

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## ABSTRACT

**Background**

Adolescents are highly vulnerable to different types of behavioural problems that can affect their academic and social lives. If left untreated, serious mental illness can develop.

**Objective**

The objective of this study was to find out emotional and behavioural problems among adolescents.

**Method**

A descriptive cross-sectional study was conducted among 275 adolescents studying in grades 7-11 at five private schools in Kathmandu. A non-probability convenience sampling technique was used to select required sample. The self-reported Strengths and Difficulties Questionnaire was used to collect data. Ethical approval was obtained from the Institutional Review Committee at the Institute of Medicine, Tribhuvan University. Descriptive statistics were used to analyse the data. The chi-square test was used to measure the association between behavioural problems and selected variables at a 95.0% confidence level.

**Result**

The mean age of the adolescents was 13.66 (SD ± 1.13) years, and 53.1% were female. In total, 7.3% and 13.8% of adolescents had abnormal and borderline levels of behavioural problems (total difficulties), respectively. Across different domains of difficulty levels, 5.0%, 12.0%, 3.3%, 5.5%, and 1.5% of adolescents had abnormal levels of emotional problems, conduct problems, hyperactivity/ inattention problems, peer relationship problems, and pro-social behaviours, respectively. Fathers' occupation was significantly associated with behavioural problems among adolescents (p=0.020), and 15.3% of adolescents had a significant impact on their daily life, such as at home, with friends, in the classroom, or during leisure activities, due to emotional and behavioural difficulties.

**Conclusion**

Emotional and behavioural problems are quite prevalent among adolescents and have a significant adverse impact on their daily lives.

## KEY WORDS

*Adolescents, Behavioural and emotional problems, Self-report, Strengths and difficulties questionnaire*

## INTRODUCTION

Adolescence is a transitional stage from childhood to adulthood that occurs between ages 10 and 19 years. The adolescent period is considered a time of storm and stress.[1] Adolescents are highly vulnerable to psychiatric disorders, and the global prevalence of mental disorders in children and adolescents is 10.0-20.0%.[2,3] Half of all mental illnesses begin by the age of 14 and three-quarters before the age of 25.[3,4] Globally, depression is one of the leading causes of illness and disability among adolescents. Suicide is one of the top three leading causes of death in 15-19 years old.[5] In developing countries, 10.5 % of adolescents suffer from mental health problems, with a significant proportion experiencing conduct problems.[6] In Nepal, adolescents constitute 24.1% of the population, comprising nearly one-fifth of the total population.[7] The prevalence rates of behavioural problems among adolescents in Nepal vary across different studies conducted in various areas. The prevalence of behavioural problems was 35.0% in Eastern Nepal and 30.0% in the city of Pokhara, Nepal.[8,9] The clinical prevalence of anxiety disorders was reported to range from 18.8% to 24.4%, while that of Attention Deficit Hyperactivity Disorder (ADHD) was 10.0 to 11.7% in various clinical samples of children and adolescents.[10] Mental health promotion and prevention are key to helping adolescents thrive.[5] The consequences of not addressing adolescent mental health conditions extend to adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults. However, very few studies about emotional and behavioural problems among adolescents in Nepal have been conducted. This study aimed to identify emotional and behavioural problems among adolescents in Kathmandu.

## METHODS

A descriptive cross-sectional study was conducted among adolescent students in Kathmandu. The study included students aged between 11 and 17 years studying in grades 7 to 11 from five private schools in Kathmandu. The required information was collected from these schools using non-probability convenience sampling techniques. The sample size was 275, calculated using the formula $n=4pq/l^2$ with a 6.0% allowable error, a prevalence of 35.0% from a previous study, and 10.0% non-response rate.[8] A structured, validated, self-reported Strengths and Difficulties Questionnaire (SDQ) was used as the research instrument for data collection.[11] The questionnaire consisted of questions related to socio-demographic characteristics and behaviour problems i.e. the SDQ and an Impact supplement.

The SDQ is a brief behavioural screening tool for adolescents aged 11-17 years old. It exists in several versions to meet the needs of researchers, clinicians, and educators. The validated version of SDQ has 25 questions. These 25 items are divided into five scales: Emotional symptoms (5 items), Conduct problems (5 items), Hyperactivity/inattention (5 items), Peer relationship problems (5 items), and Pro-social behaviour (5 items). The second item of the conduct problems subscale; the fourth and fifth items of the hyperactivity subscale; and the second and third items of the peer problems subscale are positive statements, while the remaining items are negative statements. This is a three-point Likert scale. The Impact Supplement extended version of the SDQ asks whether the adolescents think the young person has a problem and, if so, inquires further about chronicity, distress, social impairment, and burden to others. For this supplement, a total of 5 items are included in the scoring system.[12]

The SDQ is easiest to score by completing all five scales first before calculating the total difficulties score. 'Somewhat True' is always scored as 1, but the scoring of 'Not True' and 'Certainly True' varies depending on the item. Each of the five scales can have a score ranging from 0 to 10 if all items are filled out. The total difficulties score is obtained by adding scores from all scales except the pro-social scale, resulting in a total score ranging from 0 to 40. When using a version of the SDQ that includes an 'impact supplement', the items on overall distress and impairment can be added together to generate an impact score ranging from 0 to 10.[11]

**Cut off-points for SDQ Scores: Original Three-band Categorization[12]**

| Self-completed SDQ | Normal | Borderline | Abnormal |
|---|---|---|---|
| Total difficulties score | 0-15 | 16-19 | 20-40 |
| Emotional problems score | 0-5 | 6 | 7-10 |
| Conduct problems score | 0-3 | 4 | 5-10 |
| Hyperactivity score | 0-5 | 6 | 7-10 |
| Peer problems score | 0-3 | 4-5 | 6-10 |
| Pro-social score | 6-10 | 5 | 0-4 |
| Impact score | 0 | 1 | 2-10 |

The SDQ has been widely used to assess mental health problems, emotional and behavioural problems and strengths among children and adolescents.[12] The reliability of the SDQ was satisfactory, with a mean Cronbach's α of 0.73; cross-informant correlation mean of 0.34, and mean retest stability after 4 to 6 month of 0.62. SDQ scores above the 90$^{th}$ percentile predicted a substantially raised probability of independently diagnosed psychiatric disorders (mean odds ratio: 6.2 for youth scales).[13]

Both the validated Nepali and English versions of the SDQ are available in the public domain. However, copyright permission was obtained through email. The SDQ is frequently used in Nepalese adolescent populations in different studies.[8,13]

Ethical approval was obtained from the Institutional Review Committee at the Institute of Medicine. Written permission was obtained from the respective schools' administration.

Due to the COVID-19 pandemic situation, virtual means for data collection were applied. The study tool was converted to a Google survey form in both English and Nepali languages within the same Google form. With the help of the school administration, virtual meetings with students and parents were conducted via the Zoom application. At the school administration's request, researchers conducted a 45-minute session on adolescent health and adolescent-friendly health services provided by the Nepal government to the students before collecting data. The purpose and procedure of the study were explained to the adolescents. Verbal informed consent was obtained from both adolescents and parents before distributing the questionnaire. The adolescents were invited to a Zoom class, and a Google Forms questionnaire link was shared with 275 adolescents. Clear verbal and written instructions on how to complete the online questionnaire were provided.

All the adolescents were volunteers, and they were allowed to object to their participation at any point in the study. The completed questionnaire was requested to be sent back to the researchers. Only 275 adolescents had submitted a completed Google form questionnaire. The duration of data collection was from May first to June 30, 2020. All data were transferred to a Google spreadsheet; then checked and cleaned for completeness and internal consistency of information. Data were again exported to SPSS Version 20.0 for further analysis. All data were rechecked and cleaned to minimize errors. Initially, the data were analysed using frequency, mean, and percentage, and then chi-square was used to examine the association between behavioural problems and selected variables at a 95.0% confidence level.

## RESULTS

Regarding the socio-demographic characteristics, the mean age of the adolescents was 13.66 (SD ± 1.1) years. More than half (53.1%) were female; about two-thirds (65.8%) belonged to the upper caste group, and most (85.5%) of the adolescents followed Hinduism. Likewise, more than two-thirds (68.7%) of the adolescents lived in a nuclear family, and the majority (77.8%) were from within Kathmandu (Table 1).

Regarding parental education and occupation, a higher proportion of adolescents' mothers (42.2%) had a secondary level of education, while fathers (49.8%) had a higher level of education. Similarly, more than half of the adolescents' mothers (55.3%) were house managers (household work), and fathers (50.9%) were in service (Table 2).

**Table 1. Socio-demographic characteristics of adolescents n=275**

| Characteristics | | Number | Percent |
|---|---|---|---|
| Age | Range= 11-17 years, Mean ± SD= 13.66± 1.13 | | |
| Sex | Female | 146 | 53.1 |
| | Male | 129 | 46.9 |
| Ethnicity | Upper-caste groups | 181 | 65.8 |
| | Relatively advantaged Janajati | 57 | 20.7 |
| | Disadvantage Janjati | 30 | 10.9 |
| | Disadvantage non-Dalit Terai | 5 | 1.8 |
| | Dalit | 1 | 0.4 |
| | Religious minorities | 1 | 0.4 |
| Religion | Hinduism | 235 | 85.5 |
| | Buddhism | 34 | 12.4 |
| | Others | 6 | 2.2 |
| Family Type | Nuclear | 189 | 68.7 |
| | Joint | 77 | 28 |
| | Extended | 9 | 3.3 |
| Permanent Residence | Kathmandu | 214 | 77.8 |
| | Bhaktapur | 4 | 1.5 |
| | Lalitpur | 1 | 0.4 |
| | Outside Kathmandu Valley | 56 | 20.4 |

**Table 2. Parental education and occupation of the adolescents n=275**

| Variables | | Number | Percent |
|---|---|---|---|
| Mothers' education | Secondary level education | 116 | 42.2 |
| | Higher education | 87 | 31.6 |
| | Basic level education (1-8) | 39 | 14.2 |
| | Informal education (Can read and write) | 20 | 7.3 |
| | Cannot read and write | 13 | 4.7 |
| Fathers' education | Higher Education | 137 | 49.8 |
| | Secondary level education | 103 | 37.5 |
| | Basic level education (1-8) | 26 | 9.5 |
| | Informal education (Can read and write) | 8 | 2.9 |
| | Cannot read and write | 1 | 0.4 |
| Mothers' occupation | House manager | 152 | 55.3 |
| | Service | 82 | 29.8 |
| | Business | 39 | 14.2 |
| | Agriculture | 2 | 0.7 |
| Fathers' occupation | Service | 140 | 50.9 |
| | Business | 116 | 42.2 |
| | Daily worker | 14 | 5.1 |
| | Agriculture | 3 | 1.1 |
| | House manager | 2 | 0.7 |

**Prevalence of Behavioural Problems and Total Difficulties in Adolescents**

Among the adolescents, most scored within the normal range for behavioural problems in all five domains. Only a small percentage of adolescents exhibited abnormal emotional problems (6.5%), conduct problems (12.0%), hyperactivity or inattention (3.3%), peer problems (5.5%), and pro-social behaviour (1.5%) (Table 3).

**Table 3.** Emotional and behavioural problems of the adolescents n=275

| Problems | Number | Percent | Mean score ±SD |
|---|---|---|---|
| **Internalizing problems *Subscales*** | | | |
| Emotional problems | | | |
| Normal (0-5) | 235 | 85.5 | |
| Borderline (6) | 22 | 8.0 | 3.28 ± 2.09 |
| Abnormal (7-10) | 18 | 6.5 | |
| **Peer problems** | | | |
| Normal (0-3) | 211 | 76.7 | |
| Borderline (4-5) | 49 | 17.8 | 2.50±1.64 |
| Abnormal (6-10) | 15 | 5.5 | |
| **Externalizing problems *Subscales*** | | | |
| **Hyperactivity/Inattention** | | | |
| Normal (0-5) | 243 | 88.4 | |
| **Borderline (6)** | 23 | 8.4 | 3.12±1.94 |
| Abnormal (7-10) | 9 | 3.3 | |
| **Conduct problems** | | | |
| Normal (0-3) | 215 | 78.2 | |
| Borderline (4) | 27 | 9.8 | 2.33± 1.7 |
| Abnormal (5-10) | 33 | 12.0 | |
| **Other problems *Subscale*** | | | |
| **Pro-social behaviour** | | | |
| Normal (6-10) | 247 | 89.8 | |
| Borderline (5) | 24 | 8.7 | 8.12±1.71 |
| Abnormal (0-4) | 4 | 1.5 | |

Based on the SDQ score, the majority (78.9%) of adolescents reported a normal score, while only 7.3% and 13.8% of adolescents reported symptoms at abnormal and borderline levels of total difficulties, respectively (Table 4).

**Table 4.** The total difficulties (Behavioural problems) of the adolescents n=275

| Total difficulties | Number | Percent | Mean Score ± SD |
|---|---|---|---|
| Normal (0-15) | 217 | 78.9 | |
| Borderline (16-19) | 38 | 13.8 | **11.23±5.39** |
| Abnormal (20-40) | 20 | 7.3 | |

### Association between Behaviour Problems of Adolescents and Selected Variables

The behavioural problems among adolescents are significantly associated with the father's occupation (p-value =0.02) (Table 5).

### Impact of Behavioural Problems (Difficulties) on Adolescents' Day-to-Day Life

The impact of the behavioural problems of the adolescents on their daily activities, such as home life, friendships, classroom interactions and leisure activities was also assessed in the study. When adolescents were asked if they had difficulties in one or more areas such as emotions, concentration, behaviour, or getting along with others,

**Table 5.** Association between behavioural problems and selected variables n=275

| Variables | Behavioural problems | | | $\chi^2$ | P-value |
|---|---|---|---|---|---|
| | Normal No. (%) | Borderline No. (%) | Abnormal No. (%) | | |
| **Gender** | | | | | |
| Female | 113 (77.4) | 24 (20.2) | 9(10.6) | 2.162 | 0.356 |
| Male | 104 (80.6) | 14(17.8) | 11(9.4) | | |
| **Mothers' education** | | | | | |
| Secondary level | 98(84.5) | 11(9.5) | 7(6.0) | | |
| Higher level | 68(78.2) | 12(13.8) | 7(6.3) | | |
| Basic level | 32(82.1) | 5(12.8) | 2(5.1) | 12.765 | 0.117 |
| Informal (Can read and write) | 11(55) | 6(30) | 3(15) | | |
| Cannot read and write | 8(61.5) | 4(30.8) | 1(7.7) | | |
| **Father's education** | | | | | |
| Higher level | 111(81) | 15(10.9) | 11(8) | | |
| Secondary level | 81(78.6) | 15(14.6) | 7(6.8) | | |
| Basic level | 19(73.1) | 5(19.2) | 2(7.7) | 6.115 | 0.552 |
| Informal (Can read and write) | 5(62.5) | 3(37.5) | 0 (0.0) | | |
| Cannot read and write | 1(100) | 0(0.0) | 0(0.0) | | |
| **Mother's occupation** | | | | | |
| House manager | 119(78.3) | 24(15.8) | 9(5.9) | | |
| Service | 67(81.7) | 9(11) | 6(7.3) | 5.658 | 0.441 |
| Business | 30(76.9) | 4(10.3) | 5(12.8) | | |
| Agriculture | 1(50) | 1(50) | 0(0.0) | | |
| **Father's occupation** | | | | | |
| Service | 112(80) | 21(15) | 7(5.0) | | |
| Business | 94(81.0) | 14(12.1) | 8(6.9) | | |
| Daily worker | 8(57.1) | 1(7.1) | 5(35.7) | 21.721 | 0.020 |
| Agriculture | 2(66.7) | 1(33.3) | 0 (0.0) | | |
| House manager | 1(50) | 1(50) | 9(5.9) | | |
| **Family type** | | | | | |
| Nuclear | 143(75.7) | 29(15.3) | 17(9) | | |
| Joint | 68(88.3) | 6(7.8) | 3 (3.9) | 8.741 | 0.071 |
| Extended | 6(66.7) | 3(33.3) | 0 (0.0) | | |

183 adolescents responded "yes." Among them, 15.3% and 18.6% of adolescents had abnormal and borderline impacts, respectively, on their day-to-day life (Table 6).

**Table 6.** Impact of behavioural problems n=183

| Impact score | Number | Percent | Mean score ± SD |
|---|---|---|---|
| Normal (0) | 121 | 66.1 | |
| Borderline (1) | 34 | 18.6 | **0.60±1.05** |
| Abnormal (2-10) | 28 | 15.3 | |

## DISCUSSION

In this study, 6.5% of adolescents had abnormal emotional problems. This finding is similar to the findings of a study conducted in Tansen, Nepal and lower than the study in eastern Nepal where 7.0% and 13.3% had abnormal emotional disorders, respectively.[8] Likewise, another study reported emotional problems in 24.5% of adolescents.[14] A study in India reported emotional problems in 33.7% of adolescents.[15] These variations might be due to differences in study time, setting, and population. In this study, 8.0% of adolescents had a risk for developing (borderline) emotional problems, which is similar to the findings of the study in eastern Nepal and Tansen, where 8.0% and 9.8% had borderline emotional problems, respectively.[8,16]

In the present study, 12.0% of adolescents had abnormal conduct problems, which is similar to the study conducted in eastern Nepal, where 11.2% had abnormal conduct problems.[8] However, a study conducted in Dhaka and Gujrat reported that 20.9% and 31.7% of school-going children had conduct problems, respectively.[17,18] Similarly, 9.8% of adolescents were also at risk for developing (borderline) conduct problems in the current study, which is slightly lower than the study in eastern Nepal, where 11.5% had borderline conduct problems.[8] This difference may be attributed to variations due to differences in study settings and populations.

In this study, only 3.3% and 8.4% of adolescents had abnormal and borderline levels of hyperactivity or inattention problems, respectively. These findings are lower than the study conducted in eastern Nepal, which reported 7.2% and 11.1% had abnormal and borderline hyperactivity problems among adolescents.[8] Studies conducted in Bangladesh and India reported hyperactivity in 1.5% and 6.9% of children with abnormal hyperactivity problems, respectively.[17,18] This difference may also be due to variations in study settings and populations.

In this study, 5.5% and 17.8% of adolescents had abnormal and borderline peer problems, respectively. These findings are almost similar to the findings of a study done in eastern Nepal, which reported that 4.9% and 15.9% of adolescents had abnormal and borderline peer problems.[8] However, studies conducted in Bangladesh and India reported that 22.4% and 18.0% of children had abnormal and borderline peer problems.[17,18] This study found that 1.5% of adolescents had abnormal pro-social behaviour, which is similar to the findings of the study conducted in eastern Nepal, where 2.1% of adolescents had abnormal pro-social behaviour.[8] These findings are lower than the study conducted in Bangladesh and India, where 54.1% and 14.4% of school-going children had abnormal pro-social behaviour.[17,18] These differences might also be due to variations in study settings and populations. This study found that 8.7% of adolescents had a risk for developing (borderline) pro-social behaviour whereas a study in eastern Nepal reported that 4.4% of adolescents had borderline problems in social activities.[8]

This study found that 7.3% of adolescents had an abnormal level of behavioural problems (total difficulty score), which is slightly lower than the similar study done in different parts of Nepal where 10.0%, 21.7%, 35.0%, and 30.0% of adolescents had an abnormal level of behavioural problems.[8,9,19-21] These differences might be due to differences in the study setting, population and screening tools. Similarly, 13.8% of adolescents had a borderline total difficulty score in the present study. This finding is almost similar to the study in western Nepal, where 15.0% had a borderline total difficulty score.[20] However, the study in eastern Nepal reported a 30.7% borderline total difficulty score.[8] This difference might also be due to differences in the study setting and population. Studies in different parts of India reported that 30.4%, 20.9%; 27.2%, and 22.7% of adolescents had behavioural problems.[2,18,19,22]

The behavioural problem among adolescents is significantly associated with the father's occupation (p-value = 0.02) in this study. In contrast to this finding, the mother's occupational status appeared as a significant predictor of a child's emotional and behavioural disorder reported in India.[18] This difference might also be due to differences in the study setting and population. Similarly, a study done in Korea reported that significant factors associated with emotional/behavioural problems included Body Mass Index (BMI); study tendencies in boys, and drinking, study tendencies, and economic levels in girls.[21] Studies in Ethiopia reported that lower age, having a non-kin caregiver, parental loss and having a distressed caregiver had a statistically significant association with emotional and behavioural problems (EBPs).[8] Another study in Egypt reported that emotional difficulties were significantly higher among females compared to males. Conduct difficulties, peer problems, pro-social behaviour, and total difficulties were significantly higher among urban adolescents compared to rural students.[17] These differences might also be due to differences in the study setting and population.

The present study has some limitations, such as a small sample size from only five private schools in Kathmandu using convenience sampling techniques. Additionally, only the SDQ self-report questionnaire was used, and the teacher and parent versions were not utilized.

## CONCLUSION

The majority of the adolescents had scored above normal. However, a few adolescents had behavioural problems and another had a risk of developing behavioural problems. Domain wise difficulty prevalence suggests a higher

proportion of adolescents had conduct problems compared to other emotional, hyperactivity, peer relationship, and social activities problems. Father's occupations appeared to be significantly associated with behavioural problems.

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## REFERENCES

1. Hashmi S. Adolescence: An age of storm and stress. *Rev Arts Humanit* [Internet]. 2013 [cited 2022 Jan 23];2(1):19-33. Available from: www.aripd.org/rah
2. Pathak R, Sharma RC, Parvan UC, Gupta BP, Ojha RK, Goel NK. Behavioural and emotional problems in school going adolescents. *Australas Med J* [Internet]. 2011/01/31. 2011;4(1):15-21. Available from: https://pubmed.ncbi.nlm.nih.gov/23289042
3. Klasen H, Crombag AC. What works where? A systematic review of child and adolescent mental health interventions for low and middle income countries. *Soc Psychiatry Psychiatr Epidemiol* [Internet]. 2013;48(4):595-611. Available from: https://doi.org/10.1007/s00127-012-0566-x
4. Clausen CE, Skokauskas N. Child and adolescent mental health: how can we help improve access to care? *J Indian Assoc Child Adolesc Ment Health* [Internet]. 2018;14(1):10-8. Available from: https://doi.org/10.1177/0973134220180103
5. World Health Organization. Mental health of adolescents [Internet]. World Health Organization. 2021. Available from: https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health
6. Atilola O, Singh Balhara YP, Stevanovic D, Avicenna M, Kandemir H. Self-reported mental health problems among adolescents in developing countries: Results from an international pilot sample. *J Dev Behav Pediatr* [Internet]. 2013 Feb [cited 2022 Jan 23];34(2):129-37. Available from: https://pubmed.ncbi.nlm.nih.gov/23369959/
7. Khatiwada N, Silwal PR, Bhadra R, Tamang TM. Sexual and reproductive health of adolescents and youth in Nepal: trends and determinants: further analysis of the 2011 Nepal Demographic and Health Survey. Available from: https://dhsprogram.com/pubs/pdf/FA76/FA76.pdf
8. Kafle TK, Kafle TK, Mashreky S, Rimal HS, Sapkota D, Pokhrel A. Behavioral problems among school going adolescents in Eastern Development Region of Nepal. *Birat J Heal Sci* [Internet]. 2019 Sep 4 [cited 2022 Jan 23];4(2):712–7. Available from: https://www.nepjol.info/index.php/bjhs/article/view/25442
9. Sharma B, Rai MK, Sharma A, Karki S. Emotional and Behavioral Problems among Adolescents in Pokhara City in Nepal. *J Nepal Health Res Counc*. 2019 Jan 28;16(41):419-24. PMID: 30739933.
10. Chaulagain A, Kunwar A, Watts S, Guerrero APS, Skokauskas N. Child and adolescent mental health problems in Nepal: A scoping review. *Int J Ment Health Syst* [Internet]. 2019;13(1):53. Available from: https://doi.org/10.1186/s13033-019-0310-y
11. Goodman R. The strengths and difficulties questionnaire: A research note. J Child Psychol Psychiatry Allied Discip [Internet]. 1997 Jul [cited 2022 Jan 23];38(5):581-6. Available from: https://pubmed.ncbi.nlm.nih.gov/9255702/
12. Goodman R. The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *J Child Psychol Psychiatry*. 1999 Jul;40(5):791-9. PMID: 10433412.
13. Goodman R. Psychometric properties of the strengths and difficulties questionnaire. *J Am Acad Child Adolesc Psychiatry* [Internet]. 2001 Nov 1;40(11):1337-45. Available from: https://doi.org/10.1097/00004583-200111000-00015
14. Rimal HS, Pokharel A. Assessment of mental health problems of school children aged 11-17 years using self report strength and difficulty questionnaire (SDQ). *J Nepal Paediatr Soc* [Internet]. 2013 May 24 [cited 2022 Jan 23];33(3):172-6. Available from: https://jlmc.edu.np/index.php/JLMC/article/view/392
15. Datta P, Ganguly S, Roy BN. The prevalence of behavioral disorders among children under parental care and out of parental care: A comparative study in India. *Int J Pediatr Adolesc Med* [Internet]. 2018;5(4):145-51. Available from: https://www.sciencedirect.com/science/article/pii/S2352646718301510
16. Chhetri UM, Lamichhane A, Pokhrel S, Sharma B. Assessment of mental health problems of school children using self report strengths and difficulties questionnaire. *J Lumbini Med Coll* [Internet]. 2021 May 24 [cited 2022 Jan 23];9(1):6 pages-6 pages. Available from: https://jlmc.edu.np/index.php/JLMC/article/view/392
17. Puwar T, Yasobant S, Saxena D. Are school-going adolescents mentally healthy? Case study from Sabarkantha, Gujarat, India. *Indian J Community Med* [Internet]. 2018 [cited 2022 Jan 23];43(5):23. Available from: https://www.ijcm.org.in/article.asp?issn=0970-0218;year=2018;volume=43;issue=5;spage=23;epage=27;aulast=Puwar
18. Jahan N, Islam Md Shariful, Monika Mazumder DMNS. Prevalence of mental health problems and its associated factors among school going children in urban Pppulation, Dhaka, Bangladesh. *IOSR J Dent Med Sci.* [Internet].2019;18(5):61-7. Available from: https://www.iosrjournals.org
19. Banstola RS. Psychosocial Problem among school-going adolescents in Pokhara, Western Nepal. *Janapriya J Interdiscip Stud* [Internet]. 2018 Mar 2;6(0):121-33. Available from: https://www.nepjol.info/index.php/JJIS/article/view/19314
20. Karki S, Laukkanen E, Länsimies-Antikainen H, Voutilainen A, Pietilä AM. Self-reported emotional and behavioral problems in Nepalese adolescents from urban and rural areas. *Nurs Heal Sci* [Internet]. 2015 Mar 1 [cited 2022 Jan 23];17(1):90–6. Available from: https://pubmed.ncbi.nlm.nih.gov/25307497/
21. Park HY, Choi YH. Factors affecting emotional behavioral problems in early adolescence: A multilevel model study. *J Korean Acad Community Heal Nurs* [Internet]. 2017 Dec 1 [cited 2022 Jan 23];28(4):482-93. Available from: https://doi.org/10.12799/jkachn.2017.28.4.482