

Health-promoting Lifestyle among Students Studying in Secondary Level of a Government School

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ABSTRACT

Introduction: Health promotion during adolescence is the basic indicator of positive development. Adopting the healthy lifestyle in this period promotes health, prevents chronic diseases, and reduces the cost of treating diseases. This study was conducted to find the health promoting lifestyle of students studying in secondary level of a government school.

Methods: A descriptive cross-sectional study was conducted among students studying in grade 9 and 10 of a government school from 14 August 2022 to 10 September 2022. Convenience sampling technique was used to select the sample from the school. The validated tool "Health-promoting Lifestyle Profile II", developed by walker et al., was used to collect the information related to the health-promoting lifestyle of respondents. Data was collected by self-administered questionnaire. Data were entered and analyzed in IBM SPSS Statistics version 27.0. Point estimate and 95% confidence intervals were calculated.

Results: Among 123 participants, 93 (75.60%) (68.02-83.20, 95% Confidence Interval) participants' overall health-promoting lifestyle was good. Interpersonal relation was good in 112 (91.05%) participants.

Conclusions: The overall health-promoting lifestyle of adolescents was similar to studies done in similar settings in the past.

Keywords: adolescents, healthy lifestyle, health promotion, high school, students.

INTRODUCTION

Adolescence is the phase of life between childhood and adulthood, and it is an important time for laying the foundations of good health. Despite being thought of as a healthy stage of life, there is significant death, illness and injury in the adolescent years. Globally, over 1.5 million adolescents and young adults aged 10–24 years died in 2021, the leading causes of death are injuries, violence, self-harm, and maternal conditions among these causes many causes are related to the health risk behavior of adolescents.¹

Health promotion during adolescence is the basic indicator of positive development as it ensures optimal well-being and helps to find the beneficial pathways that lead to achieving a positive change in the transition to adulthood.² Adopting a health-promoting lifestyle plays an important role in the prevention of non-communicable diseases, and reduces the cost of treating the disease and minimizing its burden.³

Therefore, this study aims to find out the health-promoting lifestyle among students studying in selected grades of a government school.

METHODS

A descriptive cross-sectional study was conducted in Koteswor Saraswati Secondary School from 14 August 2022 to 10 September 2022. Ethical approval was taken from the Institutional Review Committee of Tribhuvan University, Institute of Medicine, Maharajgunj (Reference

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number: 30(6-11)E2 79/80). Convenience sampling technique was used. Students studying in grade 9 and 10 were selected for the study. Students with incomplete information in the proforma were excluded.

The sample size was calculated using the following formula:

$$n = Z^2 \times \sigma^2 / e^2$$

$$= 1.96^2 \times (0.27)^2 / (0.05)^2$$

$$= 3.84 \times 0.0729 / 0.0025$$

$$= 0.279936 / 0.0025$$

$$= 112$$

Where,

n= minimum required sample size

Z= 1.96 at 95% of Confidence Interval (CI)

σ = standard deviation of overall health promoting lifestyle from previous study, 0.27⁵

e= margin of error, 5%

Non-response rate 10% was added. Hence, the final sample size is 123.

The study was conducted among the students studying in grade 9 and 10. The self-administered questionnaire was used to collect the data. Health Promoting Profile II was used to collect the information related to health promoting lifestyle of adolescents.⁴ The instrument has measured health-promoting lifestyle profile in six domains (physical activity, Nutrition, health responsibility, interpersonal relation, spiritual growth, and stress management) that consist of 52 items which was measured with a 4-point response scale consisting of "Never"=1, "Sometimes"=2, "Often"=3 and "Routinely"=4. The score of all items were added and divided by the total numbers of items to obtain the overall health promoting lifestyle score. The lowest possible overall score was 1, and the highest possible overall score was 4 out of score 4. Participants those with obtained mean score <2.5 was considered poor health promoting lifestyle, and respondents those with obtained mean score ≥ 2.5 was considered good health promoting lifestyle based on the previous study.^{5,6} The original version scale was translated into Nepali language and back translation was done to make it suitable for the Nepalese context.

Among the secondary-level government schools of Kathmandu metropolitan city, one school (Koteshwor Saraswati Secondary School) was selected for the study. There were 312 students studying grades 9 and 10.

Data were entered and analysed using IBM SPSS Statistics version 27.0. Point estimate and 95% CI were calculated for binary data.

RESULTS

Among the 123 participants, 93 (75.60%) (68.02-83.20, 95% CI) participants' overall health-promoting lifestyle was good. Interpersonal relation was good in 112 (91.05%) participants. The mean score of the overall health-promoting lifestyle profile was 2.74 ± 0.38 . Regarding the subscales of a health-promoting lifestyle, the highest was in interpersonal relations (3.20 ± 0.61) and lowest was in physical activity (2.18 ± 0.53) (Table 1).

Table 1. Overall health-promoting lifestyle of study participants (n= 123).

Variables	Good n (%)	Poor n (%)	Mean $\pm$ SD
Interpersonal relation	112 (91.05)	11 (8.94)	3.20 $\pm$ 0.61
Spiritual growth	107 (87.00)	16 (13.00)	3.04 $\pm$ 0.54
Nutrition	99 (80.48)	24 (19.51)	2.83 $\pm$ 0.45
Stress management	81 (65.85)	42 (34.14)	2.6 $\pm$ 0.53
Health responsibility	60 (48.78)	63 (51.21)	2.45 $\pm$ 0.70
Physical activity	37 (30.08)	86 (69.91)	2.18 $\pm$ 0.53
Overall health-promoting lifestyle	93 (75.60)	30 (24.40)	2.74 $\pm$ 0.38

Among 123 participants, 49 (71%) male had a good health-promoting lifestyle and 44 (81.50%) female had a good health-promoting lifestyle (Table 2).

Table 2. Health-promoting lifestyle with different variables (n= 123).

Variables	Good n (%)	Poor n (%)
Sex		
Male	49 (71.00)	20 (29.00)
Female	44 (81.50)	10 (18.50)
Grades		
Nine	54 (79.40)	14 (20.60)
Ten	39 (70.90)	16 (29.10)
Living arrangement		
Living with parents	85 (78.00)	24 (22.00)
Living with others	8 (57.10)	6 (42.90)
Smoking habit		
Yes	4 (78.40)	3 (21.60)
No	89 (76.34)	27 (23.36)
Pocket money per day for snacks		

Yes	60 (73.17)	22 (26.8)
No	33 (80.48)	8 (19.52)
Having parents		
Both	87 (78.40)	24 (21.60)
Single parent	6 (50.00)	6 (50.00)
Father's education		
Up to basic level	48 (73.80)	17 (26.20)
Above basic level	41 (83.70)	8 (16.30)

The mean age of study participants was 15.44±1.09 years. Most of the respondents 97 (78.86%) lived in rent with their parents. Regarding the participants' habit of smoking and alcohol consumption, almost all 116 (94.30%) of them never consumed tobacco products (Table 3).

Table 3. Socio-demographic characteristics of study participants (n= 123).

Variables	n (%)
Age in years	
<15	62 (50.40)
≥15	61 (49.60)
Sex	
Male	69 (56.10)
Female	54 (43.90)
Religion	
Hindu	109 (88.61)
Kirat	8 (6.50)
Christian	5 (4.06)
Buddhist	1 (0.81)
Grades	
Nine	68 (55.28)
Ten	55 (44.71)
Pocket money per day (Nrs) for snacks	
<50	60 (48.78)
50-100	18 (14.63)
>100	4 (3.25)
Eats homemade snacks	41 (33.33)
Living arrangement	
With parents in own home	12 (9.75)
With parents in rent	97 (78.86)
In hostel	2 (1.62)
Serving and living in other's home	12 (9.75)

Smoking habit	
Never	116 (94.30)
Sometimes	6 (4.87)
Usually	1 (0.81)

Among the 123 respondents, 111 (90.24%) respondents had both parents. Regarding parental education status, 46 (40.35%) respondents' fathers had a basic level and 48 (40.00%) respondents' mothers had a basic level of education. Similarly, 35 (30.70%) respondents' fathers were involved in a job, and 53 (44.16%) respondents' mothers were homemakers (Table 4).

Table 4. Parental status of study participants (n= 123).

Variables	n (%)
Having parents	
Both	111 (90.24)
Father only	3 (2.43)
Mother only	9 (7.31)
Educational status of father (n= 114)	
Illiterate	10 (8.77)
Informal education	9 (7.89)
Basic level	46 (40.35)
Secondary level	35 (30.70)
University level	14 (12.28)
Educational status of mother (n= 120)	
Illiterate	32 (26.66)
Informal education	19 (15.83)
Basic level	48 (40.00)
Secondary level	17 (14.16)
University level	4 (3.33)
Occupation of father (n= 114)	
Job	35 (30.70)
Agriculture	33 (28.94)
Business	32 (28.07)
Labor	9 (7.89)
Foreign employment	5 (4.38)
Occupation of mother (n= 120)	
Homemakers	53 (44.16)
Job	25 (20.83)
Agriculture	20 (16.663)
Business	19 (15.8)
Labor	3 (2.50)

DISCUSSION

The overall health-promoting lifestyle of respondents was 2.74 ± 0.38 out of the score of 4 which is similar to a previous study conducted in Nepal.⁷ This study found a good health promoting lifestyle, as the health promoting lifestyle profile score equal to and greater than 2.5 is considered as good, and a score less than 2.5 is considered poor which is consistent with the finding of the study conducted among the government school student in Nepal.⁵

Regarding the subscales of the health-promoting lifestyle profile, respondents scored highest on interpersonal relations which is consistent with the study findings conducted among adolescents in Turkey.⁸ This study results showed that the lowest mean score was for physical activity (2.18 ± 0.53) and health responsibility (2.45 ± 0.73) domain which is consistent with the study of Egypt and Nepal.^{9,5} spending more time on viewing TV, playing video games, computer and internet were one of the factor of low physical activity in adolescents.¹⁰ Unavailability of Play Park and playground around the home are related to low physical activity among the adolescents in Nepal.¹¹ Lowest score in physical activity in current study also might be due the more involvement of adolescents in indoor game and time spent on social media, the lack of playing park and playground, lack of assigned in physical activities in school.

This study result found a good health promoting lifestyle in most (78.00%) of the adolescents those who were living with their parents than those who were living with others. This result is similar to the study findings conducted in Iran.¹² In this study, students whose parents' educational status was above the basic level had a good health-promoting lifestyle compared to others. This finding is supported by a similar study conducted in Nepal.⁵ Family processes such as parenting and parent-child relationship play an important role in developing positive interpersonal relations in their child.¹³ Similarly, involvement in religious education activities enables and supports the parents in developing their children's spirituality.¹⁴

This is the cross sectional study at one government school, the result may not be generalized to wider context. A study could be done to find out the factors of poor physical activity and health responsibility among adolescents.

CONCLUSIONS

The overall health-promoting lifestyle of adolescents was similar to studies done in similar settings in the past. Since adolescents' physical activity and health responsibility are poor, they should be encouraged to participate actively in physical activity and make them responsible for their health.

Conflict of Interest: None.

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