

Practice of Health Promoting School among Selected Schools of Kathmandu Metropolitan City

Kanchan Shakya,^{1*} Neelu Sharma,¹ Yugesh Maharjan²

¹Department of Public Health, Om Health Campus, Kathmandu, Nepal.

²Department of Humanities, Beijing Language and Culture University, Beijing, China.

ABSTRACT

Introduction: Health-promoting school (HPS) is a concept to protect and promote the health of students. Schools in Nepal are mostly concentrated in the capital city comprising most of the private schools. Furthermore, the contribution of the government of Nepal in the health sector is minimal, and to this end, HPS plays an essential role in improving health conditions. Therefore, the aim of the study was to assess the practice of health-promoting schools in selected schools of Kathmandu Metropolitan City.

Methods: We conducted a descriptive cross-sectional study among 61 participants from 61 schools which were selected using a convenience sampling technique. The target population included the head of the schools, vice-principal, or teachers. Ethical approval for the conduction of the study was taken from the Institutional Review Committee whereas verbal and written consent was obtained from the participants. A structured questionnaire and checklist were prepared which was based on World Health Organisation (WHO) guidelines on health-promoting schools. The collected data was entered and analyzed using SPSS.

Results: We found out that the majority (73.8%) of respondents were male belonging to the 36-50 years age group. Despite the fact that most respondents had never heard of HPS, the health promotion initiatives in those schools were found to be effective (63.8 %). Likewise, in comparison to types of schools, public schools (61.1%) followed better practices of health promotion than private schools.

Conclusions: Private schools have good indicators of components like health policies, the physical environment, and the social environment. Likewise, public schools consist of better practice components like community relationships and school health services.

Keywords: *Health-promoting schools; Kathmandu; School health.*

INTRODUCTION

A health-promoting school is an environment in which the ability to live, learn, and develop is continuously strengthened. A place where all members of the school community work together to provide students with an inclusive and positive experience and structure that promotes and protects health. The elements of health promotion include six core areas i.e. school health policies, the school physical environment, the school social environment, community relationships, personal

health skills, and health services.¹

Health promotion has been the subject of prime concern since National Health Policy 1991 after democracy in Nepal.² The HPS framework enables schools to become acceptable settings for health promotion, marking a new age for school health. This framework is ideally suited for enhancing student health and community health in impoverished countries like Nepal.³ Thus, this study aimed to assess the practice of health-promoting schools in selected schools of Kathmandu Metropolitan City.

*Correspondence: Kanchugirl211@gmail.com

Department of Public Health, Om Health Campus, Kathmandu, Nepal

METHODS

A descriptive cross-sectional study was conducted on selected schools of Kathmandu metropolitan city after ethical approval from IRC of Nobel College (Ref no.IRC348/2021). Data was collected from the 15th of January 2021 to 31st January 2021. The study population was the head of schools or vice-principal or teachers of selected schools. Verbal and written consent was taken from the respondent of each school. Schools located inside Kathmandu metropolitan city were studied based on the list of the schools provided by the district education office of Kathmandu metropolitan city. Special schools, prison schools, and Montessori elementary schools were not included in the study. The sample size was calculated by using the formula:

$$\begin{aligned} \text{Sample size (n)} &= Z^2pq/d^2 \\ &= (1.81)^2 * 0.91 \times 0.09 / (0.07)^2 \\ &= 55 \end{aligned}$$

Where,

$$\text{Prevalence (p)} = (91\%) = 0.91$$

$$q = 1 - p = 1 - 0.91 = 0.09$$

$$\text{Confidence Interval (CI)} = 93\%, Z = 1.81$$

$$\text{Margin of error (d)} = 7\% = 0.07$$

The value of p in our study was taken from the study conducted in India which reported the value of p to be 90.8% which is nearly equal to 91%.⁴ So, we considered 91% as p in our study. Therefore, the calculated sample size was 55. Taking a non-response rate of 10%, the total sample size was 61 schools.

A structured questionnaire was used for the interview with the head of schools or vice-principal or teachers, and an observational checklist was prepared for observing school premises. The questionnaire and checklist were based on WHO guidelines on health-promoting schools.

The components of Health-promoting schools consisted of 6 areas in the WHO HPS guideline; however, the personal health skills component required a different tool for the collection of data on perception thus, the component was not selected for the study. Five areas were included in our study which were school health policies, school physical environment, school social environment, community relationship, and health services.¹

The questions were set through the review of different literature.^{5,6,7} Furthermore, experts' opinions were considered during the final stage of preparing the questions. Similarly, the schools were graded into good health-promoting practices and bad health-promoting practices categories based on mean scores.

The response for knowledge, on WHO Health-promoting

schools, were categorized as:

- ◆ Yes, I have heard
- ◆ No, I haven't heard about it.

The data was entered and analyzed using SPSS Version 23. Descriptive analysis was done using frequency and percentage.

RESULTS

Out of a total of 61 respondents we found out that health promotion practices were observed to be good in those schools whose respondents did not hear about HPS (63.8%). Likewise, in comparison to types of school, public schools (61.1%) followed better practises of health promotion than private schools.

Table 1. Descriptive statistics of the practice of HPS and dependent variables (n=61)

Variable (n=61)	Good HPS practice, n(%)	Bad HPS practice, n(%)
Heard about HPS		
Yes	6 (42.9)	8 (57.1)
No	30 (63.8)	17 (36.2)
Type of schools		
Public	11 (61.1)	7 (38.9)
Private	25 (58.1)	18 (41.9)

Table 2 shows the proportion of school respondents with information about the Health Promoting School concept. More than one-fifth of the respondents (23%) had heard about the concept of health-promoting schools with online articles/news (50%) being the major source of information.

Table 2: Descriptive statistics of knowledge of Health-promoting school concept (n=61)

Variables	n (%)
Heard about the concept of HPS	
Yes	14(23.0)
No	47(77.0)
Source of information (n=14)	
Online article/News	7(50.0)
Book	4(28.5)
Training	2(14.3)
Health professionals	1(7.1)

Table 3 shows the proportion of school respondents adhering to the research study. The majority of the respondents (44%) were of age between 36-50 years. More than two-thirds (73.8%) of participants were male. At the same time, the designated position of the majority (46%) was recognized as principal.

Table 3: Descriptive statistics of respondent related data (n=61)

Variables	n (%)
Age(in years)	
21-35	14 (23.0)
36-50	27 (44.0)
51-65	20 (33.0)
Gender	
Male	45 (73.8)
Female	16 (26.2)
Position of respondents	
Principal	28 (46.0)

Vice-principal	9 (15.0)
Coordinator	11 (18.0)
Teacher	6 (10.0)
Chairman	2 (3.0)
School administrator	5 (8.0)

The given table shows a comparison of components of health promotion according to the type of schools where private schools had good indicators of components like health policies, the physical environment, and social environment. Likewise, public schools consisted of the better practice of community relationships and school health services making up a total of 44.4% and 61.1% respectively.

Table 4. Descriptive statistics of components of HPS and heard about HPS (n=61)

			Private schools, n(%)	Public schools, n(%)
Components of health-promoting schools (n=61)	School health policies	Good policies	15 (34.9)	6 (33.3)
		Bad policies	28 (65.1)	12 (66.7)
	Physical environment	Good environment	25 (58.1)	3 (16.7)
		Bad environment	18 (41.9)	15 (83.3)
	Social environment	Good environment	17 (39.5)	5 (27.8)
		Bad environment	26 (60.5)	13 (72.2)
	Community relationship	Good relationship	18 (41.9)	8 (44.4)
		Bad relationship	25 (58.1)	10 (55.6)
	School health services	Good services	14(32.6)	11 (61.1)
		Bad services	29(67.4)	7 (38.9)

As shown in table 5, only 34% of schools had school health policies. Among 21 schools having a school health policy, we found only 33% of schools kept a record of students' medical conditions, whereas 86% of schools informed parents regarding the results of health screening of students. Similarly, a good social environment was ascertained as all the schools encouraged students to actively participate in the learning process and, in the case of misconduct, 73.8% of schools provided counselling to the students.

A vast majority of schools (95.1%) included parents in decision-making. More than half of schools (50.8%) offered health-related activities to the local community, while 77% of schools had a student committee. Likewise, 93.4% of schools had health screening programs and 41.2% had separate departments for counselling. Nearly one-fifth (18%) of schools had appointed school health personnel (nurses). Furthermore, 14.8% had provision for mid-day meals. About 34.4% of schools were found to be away from busy roads, and 96.7% of schools were not located near dampness or inundation. 96.7% of schools were adequately fenced, and 83.6% of schools had natural light in classrooms. The availability of clean water (96.7%) and separate washrooms for boys and girls (96.7%) was found in a major proportion of schools. Unauthorised vendors with the sale of sugary snacks were found around 52.5% of the school premises, while the sale of tobacco products was found in 49.2% of the school's area.

Table 5. Descriptive statistics of Health-promoting school components

Variables	n (%)
School health policies	
Availability of school health policies (n=61)	21(34.0)
Record of student's medical condition and drug use/management (n=21)	7 (33.0)
Informing parents about students' health screening results (n=21)	18(86.0)
School social environment (n=61)	
Encourage students to actively participate in the learning process	61(100.0)
Control misconduct of students (n=61)*	
Warning	5(8.2)
Suspense	5(8.2)
Calling parents	25(41.0)
Counselling	45(73.8)
Punishment	9(14.8)
Code of conduct	4(6.6)
Level of Community relationship (n=61)	
School involves parents in decision-making	58 (95.1)
School offers health-related activities for the local community	31 (50.8)
School with students committee	47 (77.0)
School health services (n=61)	
Health screening program in school	57(93.4)
School with separate counselling department	25 (41.0)
Appointment of school health personnel (nurse)	11 (18.0)
Provision of mid-day meals	9(14.8)
School physical environment (n=61)	
Safe school environment by observation	
Schools away from the busy road with continuous movement of vehicles	21(34.4)
Schools located on high land not subject to dampness or inundation	59(96.7)
School area is adequately fenced or surrounded by walls	59(96.7)
Classroom have natural light	51(83.6)
Water supply	
Safe and clean water is available for drinking	59(96.7)
Toilet facilities	
Availability of Washrooms	60(98.4)
Separate washrooms for boys and girls	59(96.7)
Availability of unhealthy food around school	
Unauthorised vendors with the sale of sugary snacks around the school premise	32(52.5)
Shops with the sale of tobacco products around school	30(49.2)

*multiple response

DISCUSSION

The research study included a total of 61 public and private schools from 10 different wards of the Kathmandu Metropolitan City to identify the practices of different components of health-promoting schools in the selected schools. Based on the findings, private schools had better practices in formulating health policies, maintenance of the physical environment, and implication of a suitable social environment for students. However, school health services such as recruiting school health nurses and oral health services were mostly practised in public schools. The community people were found to be more engaged with the public school activities that were related to health in comparison to private schools. Within the type of school variable, the public schools were found to be better at practising health promotion.

A study on consideration for HPS visualised that sustainable and effective school health promotion required a thorough understanding of the system among the authorities.⁸ However, the findings of our study showed that a satisfactory number of school respondents had a good understanding about the concept but they lacked the knowledge about health-promoting schools. A study conducted in India reported more compliance on health education domains in private schools which is similar to the findings represented by our study.⁴

Similarly, under the physical environment of the school, we found out that almost all schools (96.7%) were located on highlands not being subjected to inundation or dampness which is similar to the study conducted in Bangalore. Moreover, other variables such as adequate lighting in the classroom, separate washroom facilities for boys and girls, the proportion of shops around schools involved in the sale of tobacco-related products, and inclusion of parents in decision making were found to be identical among both the present and referred study.⁵

CONCLUSIONS

The study represented good health promotion practises among respondents who did not hear about HPS. Likewise, in comparison to types of school, public schools followed better practices of health promotion than private schools. However, private schools had good indicators of health policies, the physical environment, and the social environment whereas public schools consisted of the better practice of community relationships and school health services.

ACKNOWLEDGEMENT

We would like to acknowledge all the participants and respective schools.

CONFLICT OF INTEREST

None

FUNDING

This study was funded with the authors' own contributions.

REFERENCES

1. World Health Organisation. Health-Promoting Schools Regional Guidelines Development of Health-Promoting Schools-A framework for Action. 1996. Available from: <https://apps.who.int/iris/handle/10665/206847>.
2. Karki B. K. Policies and Practices of Health Promotion in Nepal. KMC Research Journal. 2018;2(2),107-118.
3. Lee A, Lo ASC, Keung MW, Kwong CMA, Wong KK. Effective Health Promoting School for Better Health of Children and Adolescents: Indicators for Success. BMC Public Health. 2019 Aug 13;19(1),1-12.
4. Joseph HP, Venkitachalam R, Joseph J, Janakiram C. Health Promoting Schools in Kerala, India. Indian J Community Med. 2019;44(Suppl 1):S38-S41.
5. Periyasamy S, Krishnappa P, Renuka P. Adherence to Components of Health Promoting Schools in schools of Bengaluru, India. Health Promot Int. 2019 Dec 1;34(6):1167-1178.
6. Hegde A, Shetty A. Child Friendly School Initiative at Karkala Taluk, Karnataka. 2006. Available from: <https://indianpediatrics.net/may2008/407.pdf>
7. Majra JP, Gur A. School Environment and Sanitation in Rural India. J Glob Infect Dis. 2010 May;2(2):109-111.
8. Rosas SR. Systems Thinking and Complexity: Considerations for Health Promoting Schools. Health Promot Int. 2017 Apr 1;32(2):301-311.