

## Original Research Article

# Perception toward school health and nursing service program among the students of Nuwakot District, Nepal

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### ABSTRACT

**Background:** The school health and nursing service program is a public health initiative implemented by the government of Nepal to promote the physical, mental, and social well-being of school-aged children. Schools serve as an effective platform for delivering preventive, promotive, and basic primary health care services. Understanding students' perceptions toward the program is essential for its effective implementation and sustainability.

**Methods:** A descriptive cross-sectional study was conducted among 201 students of grades nine and ten from three government schools in Nuwakot District. An enumerative sampling technique was used. Data were collected through a semi-structured, self-administered questionnaire based on a five-point Likert scale and analyzed using SPSS version 26. Descriptive statistics, including frequency and percentage, were used to summarize the findings.

**Results:** More than half of the respondents (57%) had a positive perception of the program. Preventive services were most appreciated (61%), followed by promotive services (38%), nutrition-related services (32%), and physical examinations (28%). About 80% of students reported increased awareness of communicable and non-communicable diseases and their prevention. Nearly all female students found the free distribution of menstrual pads helpful for maintaining menstrual hygiene. Students recommended adopting a need-based approach and improving the availability of health commodities at schools to strengthen the program.

**Conclusions:** The program is well accepted and has contributed to students' well-being and academic performance. Strengthening preventive services and ensuring adequate resources could further enhance its effectiveness.

**Keywords:** School health and nursing service program, Perception, Students, Nepal

### INTRODUCTION

School health programs are globally recognized as cornerstone of public health promotion and disease prevention among children and adolescents. WHO defines school health programs as a coordinated set of policies, activities, and services designed to improve the health and educational outcomes of students through a whole-school approach.<sup>1</sup> Children spend a significant proportion of their time in schools. These settings provide an ideal environment to promote healthy behaviors, prevent diseases, and support physical, mental, and social

development.<sup>2</sup> Kolbe has described modern school health program as a cross-disciplinary field including multiple interactive components, that includes; health education, physical education and physical activity, nutrition environment and services, health services, counselling, psychological and social services, physical environment, social and emotional climate, family engagement, community involvement and employees' wellness.<sup>3</sup> Studies have suggested that healthier children learn better and educated adults are healthier.<sup>3</sup>

In developing countries, school health program play a critical role in addressing major health conditions,

nutritional issues, parasitic infections, poor hygiene, overcome the limited access to healthcare and also improve their educational outcomes.<sup>4</sup>

In Nepal, school health initiatives have evolved gradually with increasing government and international support. The school health and nutrition strategy was introduced in 2006 marked a major milestone by integrating health services within the education system.<sup>5</sup> Further the government of Nepal initiated the “one school, one nurse” program as a pilot in Bagmati Province in December 2018. Initially the program was implemented in twenty secondary school of Bagmati province.<sup>6</sup> It was mainly designed to establish healthy school environment and improve the health and wellbeing of the students through disease prevention, promoting healthy behavior and life skill.<sup>6</sup> After the initiation of program, government has made provision to recruit school nurse in every school and if the students are more than one thousand then there is provision of hiring another nurse too. Nationally, this program is led by the nursing and social security division under department of health service at federal level.<sup>7</sup> Similarly, province and local level are also responsible to scale up this program as per their need and availability of resources.<sup>7,8</sup> Presently, there are 1387 school health nurse nurses, who are working in different schools throughout the country.<sup>8</sup> The main objective of this study is to understanding students’ perceptions toward school health and nursing program.

## **METHODS**

### ***Study design and setting***

A descriptive cross-sectional study design was employed. The study was conducted in three public schools implementing the ‘one school one nurse’ program in Nuwakot District, where school health nurses were actively providing services. The study was conducted from October to December, 2024.

### ***Study population and sampling***

The study population comprised students enrolled in grade nine and ten in the selected schools. Enumerative sampling technique was used to include all eligible students present during data collection. A total of 201 students participated in the study.

### ***Inclusion and exclusion criteria***

All the students who are studying on class nine and ten were included in the study. Those students who were absent on the day of data collection were excluded.

### ***Data collection tool and technique***

Data were collected using a semi-structured, self-administered questionnaire developed after extensive literature review and expert consultation. Face validity

was ensured through pre-testing with 10% of total sample sized students from a non-sampled school. The questionnaire consisted of two sections: (i) socio-demographic characteristics and (ii) perception toward components of the school health program, including promotive, preventive, counseling, physical examination, first aid, deworming, nutritional, and referral services. Perception was measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicated more positive perception.

### ***Validity and reliability***

Content validity of the tool was ensured through consultation with subject experts, research advisors, and review of relevant literature. Pretesting was conducted among 10% of the sample in a similar school setting outside the study area and necessary modifications were made. The study tool was forward and backward translated to ensure the reliability of the tool.

### ***Data analysis***

Collected data were checked for completeness and consistency, coded, and entered into SPSS version 26 for analysis. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the data. Perception scores were categorized into positive and negative levels based on the mean score.

### ***Ethical consideration***

Ethical approval was obtained from the institutional review committee of Yeti Health Science Academy (Ref no: 081/082-449). Permission for data collection was obtained from the respective schools. Informed consent was taken from class coordinators, and assent was obtained from students. All participants were briefed on the study objectives and their voluntary participation was ensured. Confidentiality, anonymity, and the right to withdraw from the study at any time were ensured.

## **RESULTS**

### ***Socio-demographic characteristics***

The socio-demographic characteristics shows that the average age of the respondents was 15.65 years, ranging from 13 to 19 years. The proportion of male (52.2%) was slightly more than female. Most respondents follow the Hindu religion (84.6%).

### ***Perception toward the services provided by school health program***

Out of 201 respondents, almost all (100%) of the students have participated in the school health program and utilized the health services provided by the school health nurse. Out of all respondents only about 57% had a positive perception toward the school health and nursing

service program. Further, the respondents were asked about their perception regarding the services of school health program. About 61% of the respondents has perceived that the preventive services provided at school (such as disease prevention program, deworming and iron-folic supplementation services) were most liked by the students. About 38% of the students had perceived that the promotional services (such as focusing on healthy habits, lifestyle and wellbeing) were useful. Similarly, about 32% of the respondents had perceived that the nutrition related exhibition conducted at school were informative and 28% of them perceived that the physical examination service provided at school was beneficial for them.

**Table 1: Positive perception toward services provided by school health program (Multiple response), (n=201).**

Services provided by school health program	N	Percentage (%)
Services related with health preventive	122	61
Services related with health promotion	76	38
Nutrition exhibition program	64	32
Physical examination and other services	56	28

**Table 2: Perception toward benefits of school health and nursing program (Multiple response), (n=201).**

Perceived benefits	N	Percentage (%)
Supported in prevention of communicable and non-communicable diseases	161	80
Information on balance diet and dietary requirement	121	60
Easy and free of cost treatment for minor health problems	111	55
Maintaining menstrual hygiene at school*	96	100

\*Response from only female students

Regarding the opinion of respondents toward benefit of school health and nursing program, majority (80%) of the students shared that the program has support to know about the different communicable and non-communicable diseases and its preventive measures. About 60% of them shared that the nutrition related exhibition program was informative for them to know about the healthy and balance diet and also about their personal nutritional requirement. About 55% of the students informed that they easily get free treatment for the minor health problems from school health nurses. Similarly, almost all (100%) the female respondents shared that the distribution of menstrual pad at free of cost is really

supportive and helpful for them to maintain menstrual hygiene and attend classes regularly during menstruation. Female students shared that it has been really supportive for them to share about their menstruation related problems with school health nurse and to get necessary support. During menstruation, the students also informed that the pad making training provided by the school nurses has supported them to make the pad at home as needed and also has saved their money.

#### Areas for improvement

Students shared that the awareness programs should be conducted regularly and it should fulfill the need and requirement of the students. Further, the students also shared that the available health commodities that are required for school health program are limited, so the study participants suggested that it would be better if the commodities could be increased as per need of the students. Similarly, the students also suggested that the school nurses should be regularly present at school, so that they could get timely service during emergency.

#### DISCUSSION

The school health and nursing service program is a taken as an important public health intervention for improving the overall health status of school students. It is a comprehensive program that includes preventive, promotive and curative services, focus on disease control activities and encourage students to follow healthy habits and lifestyle. Experts review shows that the program has brought a noticeable improvement in nutrition, mental health, menstrual health and reduce the absenteeism of students at school. This program also supports the national school health and nutrition strategy which has also promoted the holistic approach to improve the health of school children.<sup>5</sup>

This study shows that almost all the students had utilized the services provided by the school health nurse, which seems to be much better as compared to other studies from Chitwan, Kathmandu and Sunsari.<sup>9-11</sup> The better utilization of services could be due the easy accessibility and friendly nature of nurses with the students to address their health needs. However, only 57% of the respondents have positively perceived the services, which shows the difference in their expectation and reality. It shows that, students are willing to utilize the service however the services that they receive are not satisfactory or are different then their expectation. This highlights the urgency for assessing the need of students and design the program accordingly.

The study finding revealed that female students have better utilized school health services as compared to male students. Especially, easy and free availability of the menstrual pad has supported female students to maintain the menstrual hygiene and continue their school activities during menstruation. Previous studies have also

highlighted that positive perceptions toward school health services are associated with higher utilization, better health outcomes, and improved academic performance.<sup>12</sup>

Studies shows that usually females have more unmet health needs as compared to male.<sup>13</sup> Similarly, the female students could also feel more comfortable to share their menstruation related problem with a female nurse, which could have increased the utilization of service.<sup>14</sup> So, it supports that the services provided through school health program should be need based and further motivation may be needed for the male students to increase their participation in school health programs and also to improve the overall perception toward the services provided through school health program.

This study shows that the school nurses are not regularly present at the school. It could be due to their low motivation to work at school. School nurses are mostly recruited based on the contract basis, so due to the insecurity of job there are high chances of being turnover once they get better opportunity. The study also supports that the frequent transfer of school health nurse also affects the utilization of service.<sup>14</sup> Other possible reasons could be, nurses are provided with other additional tasks that are beyond their job description.

This study finding reflects the urgency of considering the priority and need of students, so that it could further improve their perception and utilization rate. Similarly, the clinic at school should be comfortable and secure to handle the student's problems confidentially and should have all the necessary commodities as per need of the school students and mention in the national guideline (School health and nursing service guideline, 2081). Further, good interpersonal skill and supportive behaviors of school health nurse with continuity of care will certainly support in increasing the effectiveness and sustainability of the program.

This study was conducted among students from selected government schools in Nuwakot district with a limited sample size. Despite this limitation, the study provides valuable baseline evidence that can inform future large-scale research on the school health and nursing service program.

## CONCLUSION

Effective implementation of school health and nursing program can have positive effect in improving both students; wellbeing and their academic achievement. The study concludes that, majority of study participants had a positive perception toward school health programs, highlighting its relevance and acceptability. Preventive services on communicable and non-communicable diseases and free availability of menstrual pad for female students were the most appreciated by the students. Strengthening awareness, enhancing student participation, fostering collaboration among school nurses, teachers,

parents, and local level are essential for improving the effectiveness and sustainability of school health and nursing program.

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## REFERENCES

1. World Health Organization. Promoting health through schools: report of a WHO expert committee on comprehensive school health education and promotion. World Health Organization. 1997. Available at: <https://iris.who.int/server/api/core/bitstreams/211ea92a-c151-4c21-9b72-1f60868e251e/content>. Accessed on 20 December 2025.
2. Pulimeno M, Piscitelli P, Colazzo S, Colao A, Miani A. School as ideal setting to promote health and wellbeing among young people. *Health Promot Perspect*. 2020;10(4):316.
3. Kolbe LJ. School health as a strategy to improve both public health and education. *Ann Rev Publ Heal*. 2019;40(1):443-63.
4. Bundy DA. Rethinking school health: a key component of education for all. World Bank Publications. 2011.
5. Ministry of Health and Population and Ministry of Education and Sports. National School Health and Nutrition Strategy, Nepal. Government of Nepal. 2006. Available at: [http://elibrary.moest.gov.np/bitstream/123456789/566/1/materials\\_n\\_01.pdf](http://elibrary.moest.gov.np/bitstream/123456789/566/1/materials_n_01.pdf). Accessed on 22 March 2026.
6. Government of Bagmati Province, Ministry of Health. Annual Report; Fiscal Year 2023/2024., Health Directorate, Hetauda Nepal. Available at: [https://giwmscdnone.gov.np/media/pdf\\_upload/Bagmati%20Annual%20Report-Final%20Print%20Ready\\_9h0ppxb.pdf](https://giwmscdnone.gov.np/media/pdf_upload/Bagmati%20Annual%20Report-Final%20Print%20Ready_9h0ppxb.pdf). Accessed on 22 March 2026.
7. Government of Nepal, Ministry of Health and Population. School Health and Nursing Service guideline, 2081. Available at: <https://mohp.gov.np/content/108/school-health-services-n-nursing-directive-2081>. Accessed on 22 March 2026.
8. Department of Health Services. Annual Health Report 2080/81. Kathmandu (Nepal): Department of Health Services, Ministry of Health and Population. 2025
9. Poudyal JK, Sharma T, Parajuli S, Upadhyay HP. Student's knowledge and practices on basic school health services in relation to school health nurse program. *J Coll Med Sciences-Nepal*. 2023;19(3):326-36.
10. Sharma S, Bhandary S. Factors influencing school nurse service utilization in selected schools of

- Kathmandu district: a mixed method study. *J Gen Pract Emerg Med Nepal*. 2022;9(14):36-41.
11. Panta U. Factors associated with utilization of Adolescent-Friendly health services. Sunsari district of Nepal: utilization of Adolescent-Friendly health services. *Indonesian J Health Sci Res Develop (IJHSRD)*. 2022;4(2):49-56.
  12. Walker SC, Kerns SE, Lyon AR, Bruns EJ, Cosgrove TJ. Impact of school-based health center use on academic outcomes. *J Adolescent Health*. 2010;46(3):251-7.
  13. Parasuraman SR, Shi L. Differences in access to care among students using School-Based health centers. *J School Nurs*. 2015;31(4):291-954.
  14. Sharma AS, Mahotra A, Thapa TR, Thapa P, Bhandary S, Bhushal S, et al. Factors influencing utilization of school health nurse program among secondary students of Lalitpur, Nepal: a mixed-method study. *BMC Public Health*. 2025;25(1):771.

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