Health Needs Assessment of the Primary School Children in Nepal

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Abstract

Introduction	There is no doubt that schools could play more crucial role than perhaps any other single institution to maintain well-being and competence of children and adolescents. Yet schools, particularly primary schools in Nepal, have difficulty in addressing the critical physical, mental and social needs of the pupils. In order to protect and promote children's health and to reach parents through children school health program is highly important. There is a paucity of accurate information regarding health level of the school children in Nepal.
Objective	The study is intended to assess the health needs of the school children and the current practices on school health.
Methods	Descriptive cross-sectional study was carried out in Gorkha, Chitwan and Kathmandu valley, Nepal. Questionnaire, Focus Group Discussion and Clinical examination were conducted to collect data for the study.
Results	Pallor (30%), cyanosis (0.83%), dirty nails (29%), poor personal hygiene (21.4%) and skin diseases (28%) were found among the students. Missing and cavity tooth (25.8%) and unhealthy gums (68.9%), night blindness (7.5%), near sightedness (8.2%) and far sightedness (0.4%) impaired hearing (7.1%); enlarged liver (2.7%) and spleen (2.0%) were also prevalent among the students. About (14.8%) students had suffered from gastro-intestinal problems. Two - third of the schools surveyed had no games and sports facilities for the children. About one - fifth of the playground was not safe and about half of the schools surveyed were in noisy settings. Four fifths of the schools had inadequate and inappropriate furniture. First aid kits were found only in 16.6% schools. From half of the schools only, teachers had received first aid treatment. More than 80% students had knowledge of three or more causes of diseases. About 16.6% students were the victims of the injuries and or accident. But only 28.7% had received first aid treatment following after the injuries. Both the teachers and parents showed willingness to cooperate and support for school health activities.
Conclusion	Schools should be developed as entry point for health promotion with the active participation of teachers, parents and students. Coordination is yet to establish between the school and the local health workers.
Key Words	Health needs assessment, school health service, health instruction, and healthful school environment

Introduction

In order to achieve the twin goals, "HEALTH FOR ALL" and "EDUCATION FOR ALL", many countries, particularly the developing countries are striving hard for the promotion of healthy life style message in a range of school and community settings. Schools are one of the important community settings where life styles messages have the potential to reach parents by

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teaching the children. School settings have significant importance in reducing the burden of illness of many preventable injuries and disabilities. Schools are the inseparable part of healthy life styles messages in a range of community settings. But experiences from Nepal have shown that it is difficult, for health workers to work with schools in promoting health as they are focused to work in community health. On the other hand, schools are also not taking initiative for the promotion of health of the school children and the staffs. For they often consider that health promotion may be outside their core business. They have to engage in achieving educational objectives rather than health promotion.

Materials and Methods

The study was a cross- sectional, descriptive study involving 480 school students from grades four and five of the 12 randomly selected primary schools of Chitwan, Gorkha and Kathmandu Valley of Nepal.

The study covered the four aspects of the school health programme.viz. School health service, healthful school living, health instruction and school community cooperation for health promotion.

The study had been followed two focus group discussions, one each for the (a) parents and (b) teachers in each sample districts.

Clinical / health examination of the students, Observation of the school environment and physical facilities, Semi -structured questionnaire (SSI) and Focus group discussions (FGDs) were conducted to collect data.

Results

1. The mean age of the students was 11.8 yearsand the mean weight was 32.6 kilogram. Majority of the students (36.2%) had attained 130 - 139 cms of height
2. Mild, moderate and severe pallor was found in 2.29, 25.8 and 3.1 percent respectively. Cyanosis was seen only in 0.83 percent. Dirty nails (29.1%), poor personal hygiene (21.4%) and skin diseases (28%) were observed among the students. Similarly, enlarged lymph nodes in neck (27.1%), thyroid enlargement (0.6%) and tonsil enlargement (16.4%) were also seen among the students (23.1%).

Table1: Pupils Health Examination Result

S. N.	Physical Aspects	No.	Percent
1.	Pallor	150	30.2
2.	Cyanosis	4	0.83
3.	Dirty Nail	140	29.1
4.	Poor Personal Hygiene	103	21.4
5.	Scabies Skin Diseases	17	3.5
6.	Gastrointestinal Problems	71	14.8
7.	Enlargement of lymph nodes in Neck	13	2.7
8.	Thyroid Enlargement	3	0.6
9.	Enlarged Tonsils	79	16.4

3. Missing and cavity tooth (15.8%) and unhealthy gums (68.9%) were also observed in the students. Eye diseases, night blindness and color blindness was observed only in 6.04, 7.5 and 0.4 percent students. Similarly, nine in ten students had normal visual acuity. About 8.2% students were found near sighted and next 0.4% as farsighted. Only 1.6-% students were found squint.
4. Nearly one in ten students had ear discharge. Impaired hearing, deformed chest, and Murmur were seen in 7.1, 0.8 and 0.8 percent students respectively. Added crepitating and raunchy breath sound were observed in 1.6, 4.5 and 0.6 percent students examined.
5. Enlarged liver (2.7), and spleen (20%), Hydrocele (1.0%) and absent testis (0.8%), phymosis (0.8%), abnormal gait (2.6%), external spinal deformity (1.4%) and limb abnormality (2.0%) were the other indicators of students' health status.

Table2: Students' Health status on Abdomen, Testes, Gait and Limbs

S.No.	Health Status	No.	Percent
1.	Enlarged Liver	13	2.7
2.	Enlarged Spleen	10	2.0
3.	Testis Absent	4	0.8
4.	Hydrocele Present	5	1.0
5.	Phymosis Present	4	0.8
6.	Abnormal Gait	14	2.9
7.	External Spinal Deformity	7	1.4
8.	Limb Abnormality	10	2.0

6. BCG scar and evidences of immunizations were recorded in (81.2%) students. Knowledge of 3 or more, two and one vaccines was found in 82.2, 7.7 and 1.5% students.
7. About 14.8% students were suffering from gastro-intestinal problems, such as diarrhea and dysentery.

8. Two-third of the schools had no playing facilities for the children. Even the indoor playing facilities were not available in three-fourth of the sampled schools. The minimum and maximum per capita availability of playground was $0.34m^2$ and $74.4m^2$. About one-fifth of the playground was not safe. However, 80% of the classrooms were well lighted and ventilated. About one-fourth of the classrooms were crowded. Nearly half of the schools surveyed were located in a noisy setting. Four-fifth of the schools had inadequate and inappropriate furniture.
9. None of the school children had access to the health check up facilities in their school. First aid kits were seen only in two schools (16.6%). However, in half of the schools first aid training was given to one of its teachers. Teachers were not self-confident on their knowledge and skills.
10. There is no any mechanism to coordinate with the health workers and institutions for providing health care facilities to the school children. It is noteworthy that a child as well as parents' tendency to seek health workers during illness and injuries is ever increasing.
11. About one fourth of the classrooms were very dirty. In three-fourth of the schools, open burning was the main method of waste disposal against dumping in one-fourth of the schools. There are no latrines in the two schools surveyed (16.6%).
12. Tap water (75%) and well water (25%) were the main sources of drinking water. None of the schools had provision of filtered water for the students. They drunk it directly either from the source or from the vessels.
13. More than 50 percent of the schools had no any provision of canteen or safe eatery. Vast majority of the students were (98%) positive in avoiding stale foods.
14. Teachers (85%), television (48.5%), newspapers (37.5%), parents (34.7%), peers (34.7%) and health workers (15.5%) were the main sources of information for the students.
15. The students who wanted to bath to become neat and tidy, keep body healthy and holy were 26.4, 66.4 and 3.1 percent respectively. Majority of the students bathed with soap (95.8%), soil (1.4%) and plain water (2.7%). Students bathed daily (6.8%) twice a week (47.7%) and once a week (45.4%).
16. Toilet was used for privacy (10.2%), environmental sanitation (32.9%), control of diseases (33.5%) and all of the above (22%). After defecation the students used paper (2.3%) ash (2.9%), soil (4.1%), water (3.5%), leaves (0.8%) and soap water (2.0%) for washing the stool. About 84.1 percent students reported that they did not use any thing to wash stool and hands. However, 97.5 percent of them noted that they used to wash their hands before their meals.
17. The students who had knowledge of three or more, two and one causes of diseases were 80.6, 9.3 and 1.8 percent respectively.
18. About 16.6 percent students reported that they had suffered from an accident or injury. The major injuries were falls, cuts, bruise, burns, fractures, hand and eye injuries and burns. Crowded classrooms, inappropriate building, unsafe corridors and furniture, teachers and parents and negligence were the main causes of students' injuries and accidents. Little more than one fourth (28.7%) had received first aid treatment in their last injuries or accidents.
19. Both the teachers and parent groups agreed upon the need of cooperation and collaboration for the promotion of student's health in the schools as well as people's health in the community.
20. About one third of the teachers were untrained and more than half of the schools surveyed had no teachers trained in safety and first aid treatment procedures.

Discussions

Despite the efforts made by the government through its health care system, peoples' health, basically those of the rural poor, has yet to improve. Millions of children in Nepal have been enrolled in school level education. This huge population of school students as well as their parents should be taken into consideration while implementing any programs for promoting people's health. In Nepal, schools are scattered in every nook and corner. As a result, the accessibility and coverage of schools is so large than even the coverage of health care institutions. In this context, implementing school health program could come up with considerable impact in people's health promotion. This study though basic in school health sector in Nepal, has identified the existing school health problems, need and practices and will provide baseline information for taking informed decision and health promotional activities in the days to come.

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