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Health Status of Primary School Children: Study in Rural Areas of Lucknow

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ABSTRACT

Children are open to a variety of influences. The most important influence comes from their homes and communities. Health values, attitudes and behaviours are shaped from the early childhood years. School is defined as an educational institution where groups of students pursue their studies at defined levels, receive instructions from one or better qualified teachers. It is estimated that every third child has some sign if ill health manifesting in the form of dental, visual and hearing problems, nutritional deficiencies, respiratory infections, skin disorders, loco-motor disabilities etc.

Methods: The present study was a school based descriptive cross-sectional study. The study was conducted in selected primary schools at Sarojini Nagar, Lucknow. The sample consist of 150 preschool children. the samples were selected by non- probability convenient sampling technique. The data was analyzed and inferences were drawn.

Results: The study revealed that majority of the boys (55.05%) were normal weight and (25.8%) were underweight, were as 44.3% of girls were normal weight and 24.6% were underweight. 14.6% boys and 16.3% of girls had dental caries, 10.1% of boys and 11.4% girls had refractive errors, 17.9% of boys and 27.8% of girls had upper respiratory infections, 23.6% of boys and 27.8% of girls had pallor, 35.9% of boys and 39.3% of girls had pediculosis.

Conclusion: The study concluded that the school health education should mainly target at these problems with special focus on good nutrition, personal hygiene care of pediculosis should be emphasized.

Keywords: Health status, underweight, health problems, preschool children.

INTRODUCTION

In the developing world, school-age children have survived the vulnerable years of infancy and early childhood despite the fact that they continue to be exposed to a wide range of diseases and health hazards. Childhood illnesses are relatively simple and inexpensive to prevent with appropriate knowledge. Positive influences in the school years, can have far-reaching benefits for adult life and forms the underlying rational for health education during childhood[1].

Children are open to a variety of influences. The most important influence comes from their homes and communities. Health values, attitudes and behaviours are shaped from the early childhood years. Relatively few children in today's world absorb from their environment the concept that health is a high-priority asset, or that they themselves can be instrumental in affecting it. Although contact with health

workers entails some amount of health education, it is difficult to improve health knowledge significantly. Furthermore, the contact tends to be more curative than preventive[2].

Health of the children is the country's biggest human investment. The quality of life of school children, by all standards continues to be poor. It is estimated that every third child has some sign if ill health manifesting in the form of dental, visual and hearing problems, nutritional deficiencies, respiratory infections, skin disorders, loco-motor disabilities etc[3].

School is defined as an educational institution where groups of students pursue their studies at defined levels, receive instructions from one or better qualified teachers. Whereas school health refers to a state of complete physical, mental, social and spiritual well-being and not merely the absence of disease or infirmity among the students, teachers and other school personnel. On the other hand, school health services ideally refer to the need based comprehensive services rendered to the students; teachers and other personnel involved in the school to promote and protect their health, prevent and control diseases and maintain their health. Therefore, practically it refers mainly to provide the basic necessary services to the students to promote and protect their health, control diseases and maintain their health. Thus, the ultimate aim of school health services is to promote, protect and maintain health of school children and reduce morbidity and mortality in team[4].

COMMON HEALTH PROBLEMS AT SCHOOL

Common health problems at school levels are

1. Malnutrition
2. Infectious diseases
3. Intestinal parasites
4. Diseases of skin, eye and ear
5. Dental caries
6. Many health policies and programs have prioritized individual health problems
7. and included coordinated approaches, but both vertical and horizontal
8. approaches are found to be lacking. According to population-based studies,
9. healthy lifestyles and health promotion policies and programs are seen as critical
10. factors in the health of young people. These studies are required in India, where
11. the increase in NCDs and injuries will also be reported. Inadequate diet and
12. nutrition, exposure to weather conditions such as cold, heat, and rain without
13. taking precautions or wearing appropriate clothing, and exposure to various types
14. of criminal and violent acts such as verbal abuse, physical abuse, torture, stress,
15. pressure, anxiety, poverty, homelessness, inaccessibility to health care and
16. medical treatment are all factors that contribute to the high prevalence of health
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51. pressure, anxiety, poverty, homelessness, inaccessibility to health care and
52. medical treatment are all factors that contribute to the high prevalence of health
53. problems, illnesses, and diseases among children

Many health policies and programs have prioritized individual health problems and included coordinated approaches, but both vertical and horizontal approaches are found to be lacking. According to population-based studies, healthy lifestyles and health promotion policies and programs are seen as critical factors in the health of young people. These studies are required in India, where the increase in NCDs and injuries will also be reported. Inadequate diet and nutrition, exposure to weather conditions such as cold, heat, and rain without taking precautions or wearing appropriate clothing, and exposure to various types of criminal and violent acts such as verbal abuse, physical abuse, torture, stress, pressure, anxiety, poverty, homelessness, inaccessibility to health care and medical treatment are all factors that contribute to the high prevalence of health problems, illnesses, and diseases among children[5].

Majority of the schoolchildren in Uttar Pradesh suffer from one or the other medical condition, according to a survey by a Lucknow-based health and wellness start-up. The study, conducted on over 3,000 students in nine districts, found that 76 per cent school going children were medically identified with different conditions. A team led by Dr S. Haider determined body mass index (BMI) and tested fitness and physical activity levels of 3,114 students from 12 schools in nine districts. The team found

that 47 per cent of kids had BMI outside the healthy range. While 59 per cent students, who underwent health screening, had eye and vision issues, more than half did not reach the standards for postural fitness. As per the study, 52 per cent of kids had dental and oral problems[6].

OBJECTIVES OF THE STUDY:

1. To assess the health status of the primary school children in rural area
2. To determine the association of health problems with selected sociodemographic variables.

MATERIALS & METHODS

Study Design: The present study was a school based descriptive cross-sectional study.

Study Setting: Study was carried out in selected schools of rural areas of Sarojini Nagar, Lucknow, Uttar Pradesh.

Study Population: Study was carried out among students from class 1 to 5th standard in selected schools of Sarojini Nagar, Lucknow.

Sample size: 150 primary school children.

Sampling technique: Non- probability convenient sampling technique was used.

The study population consisted of students of class 1 to 5. The prior written permission of school authority was taken. Written consent from the parents of the students experimented in the study was obtained. The subjects of this study were chosen at non- probability convenient sampling technique. All students who were willing to participate in the study were included in the study. They were invited to answer the questionnaires, which dealt with background information such as age, physical activity and dietary habit. The students who are suffering from any chronic health condition and are using any medicines for long duration were excluded.

Measurement of body weight: Body weight was measured using bathroom scale accurate to 0.5kg. The scale was kept on a flat surface and adjusted with "0" mark. Now the subject was requested to step on it in bare feet. Weights were taken in light cloth. Weight was recorded to the nearest 0.5kg.

Measurement of body height: Height was measured using anthropometric rod. Height of the subject was recorded without footwear and expressed to the nearest 0.1cm.

Estimation of body mass index (BMI): BMI was calculated from the height and weight using following equation: BMI (kg / m2) = weight (kg) / height2 (m).

General examination: It included overall general appearance of the children including gait, pallor, icterus, cyanosis, clubbing, lymphadenopathy, ear examination and dental examination. This was followed by examination of the respiratory, cardiovascular and gastrointestinal systems.

Tools for Data Collection

Part A- Structured Interview Schedule to collect the Socio Demographic Variables– In this study structured interview questionnaire was prepared by the researcher which consist of total 2 items related to socio demographic data of the participants (Age in year and Sex).

Part B- Structured check list to assess the health status- In this study structured checklist was prepared by the researcher which consist of various aspects of health problems of primary school children.

RESUL

Table- 1 Frequency distribution of subjects based on socio demographic variables

S. No	Socio-Demographic Variables		Frequency	Distribution
			f	%
1	Age in years	5	29	19.3
		6	38	25.3
		7	25	16.7
		8	34	22.7
		9	24	16
2	Gender	Boys	89	59.3
		Girls	61	40.7

The table-1 compares socio-demographic variables of primary school children. The majority of the primary school students belonging to 6 years (25.3%), followed by 8 years (22.7%), 5 years (19.3%), 7 years (16.7%) and 9 years (16%), 59.3 % were boys and 40.7% were girls.

Table -2: Distribution of preschool children according to their nutritional status

Nutritional status	Sex		Total	chi-square	P value
	Boys (n=89)	Girls (n=61)			
	n (%)	n (%)	n (%)		
Under weight	23 (25.8)	14 (22.9)	37 (24.6)	17.64	0.09
Normal	49 (55.05)	27 (44.3)	76 (50.7)	5.73	0.04*
Over weight	17 (19.10)	20 (32.8)	37 (24.7)	10.02	0.01*

Table 2 reveals that majority of the boys (55.05%) were normal weight and (25.8%) were underweight, were as 44.3% of girls were normal weight and 24.6% were underweight.

Table- 3: Distribution of preschool children according to morbidity pattern.

Nutritional status	Sex		Total	P value
	Boys (n=89)	Girls (n=61)		
	n (%)	n (%)	n (%)	
Dental caries	13 (14.6)	10 (16.3)	23 (15.3)	0.10
Ear discharge	3 (3.37)	5 (8.1)	8 (5.3)	0.001**
Refractive errors	9 (10.1)	7 (11.4)	16 (10.7)	0.08
Conjunctivitis	0	1 (1.6)	1 (0.7)	0.02*
Upper respiratory infections	16 (17.9)	17 (27.8)	33 (22)	0.01*
Skin diseases	8 (8.9)	4 (6.5)	12 (8)	0.07
Pallor	21 (23.6)	17 (27.8)	38 (25.4)	0.03*
Pediculosis	32 (35.9)	24 (39.3)	56 (37.4)	0.20

Table 3 shows that the 14.6% boys and 16.3% of girls had dental caries, 10.1% of boys and 11.4% girls had refractive errors, 17.9% of boys and 27.8% of girls had upper respiratory infections, 23.6% of boys

and 27.8% of girls had pallor, 35.9% of boys and 39.3% of girls had pediculosis.

DISCUSSION

Present study was carried out to assess the health status of preschool children. School plays a crucial role in establishment of healthy behavior pattern among children as well as in improving the children's physical, social and mental development.

In this study, 25.8% boys and 22.9% of girls were malnourished and dental caries was present in 15.3% of children, ear discharge present in 5.3% of children, refractive error present in 10.7% of the children, upper respiratory infection present in 22% of children, skin infection present in 8% of children, pallor present in 25.4% of the children and pediculosis present in 37.4% of children.

The above study findings were supported by **Neeti Verma and Prashant Kumar Bajpai (2021)** on Health status of primary school children: study in urban slums of Lucknow. A community-based cross-sectional study was conducted among 760 students of primary schools. About one fourth (26.8%) school children were underweight, whereas 5.6% school children were found overweight. Girls (34.0%) were found underweight more than the boys (20.8%). In contrast, more boys (8.8%) were overweight than girl students (2.6%). The most common problems found were pediculosis (17.16%), anemia (14.9%), worm infestation (7.4%) and dental carries (6.1%). Anemia was found more among girls (18.1%) than the boys (8.9%)[7].

CONCLUSION

The common infirmities found were underweight (24.6%), dental caries (15.3%), pediculosis (37.4%) and pallor (25.4%). Effective strategy with good monitoring and evaluation is imperative in ensuring adequate and ideal implementation of school health services in primary schools in rural Lucknow. Thus, school health education should mainly target at these problems with special focus on good nutrition, personal hygiene care of pediculosis should be emphasized.

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