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## **A Study to Assess the Common Health Problems among School Going Childrens in Selected School of Wadiwarhe Village, Nashik**

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**ABSTRACT:**

**Introduction:** School-age children (4-18 years) comprise approximately 30% of India's population, pivotal as future parents needing health education. Common health issues like sore throat, colds, bronchiolitis, infections, conjunctivitis, and pinworms are prevalent. Improved hygiene and health data from schools are essential for their well-being. **Methodology:** The study aims to assess anthropometric measurements, vital parameters, nutritional status, and systemic health issues in school-going children. Adopting a quantitative approach with a non-experimental design, it targets children aged 4-16 years from Angel English Medium School, Wadiwarhe. Convenient sampling technique was used to select the sample of 186 students. Data collection includes demographics, anthropometrics, vital signs, nutritional and growth status, and systemic health assessments to determine the prevalence of common health problems among the sample. **Result:** The systemic assessment of 186 school-going children revealed significant health findings across various categories. Skin issues like rashes affected 1.61%, with 1.08% reporting itching. No head or eye issues were observed. Ear health showed 0.54% with ear pain and 26.34% with ear discharge. Nasal discharge was noted in 17.20% of children. Dental caries prevalence was concerning at 60.75%, with one child having a mouth ulcer (0.54%) and 1.08% reporting sore throats. Normal vital signs were predominant: 86% had normal pulse rates, 96% normal respiration, and 87% normal blood pressure. Nutritional status indicated 73% were well-nourished, and 81% showed good growth and development. Fewer children had health concerns: 1.6% had skin rashes, 26% ear discharge, and 17% nasal discharge. Dental caries affected 61%, while mouth ulcers and sore throats were less common. These findings offer insights into children's health profiles, suggesting areas needing targeted interventions or monitoring to ensure continued well-being. **Conclusion:** In conclusion, the systemic assessment highlights prevalent health issues among school children, emphasizing the need for regular health monitoring and targeted interventions to support their overall well-being and development.

**Keywords:** health problems, among school going childrens, wadiwarhe, village.

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## 1. Introduction

School-age children (4-18 years) constitute about 30% of the total population in India. As future parents, they need to be acquainted with knowledge and skills necessary for developing healthy attitudes for themselves and their families. To achieve this, it is crucial to understand their common health problems, the socioeconomic factors associated with these problems, and community health issues related to hygiene and school sanitation.

A significant factor contributing to the unsatisfactory health status of school-going children in rural India is the lack of baseline information on the magnitude of their health problems. Availability of such data from schools will aid in the health promotion and protection of these children.

### Common Health Problems in Children

Children, due to their growing bodies and developing immune systems, are particularly vulnerable to health issues. Parents must be vigilant about their health.

1. Sore Throat and Cough: Common, especially with seasonal changes. Symptoms include throat pain, heavy voice, cough, and discomfort, typically resolving in 7-10 days with proper care. Persistent symptoms may indicate a throat infection, requiring medical attention and a full course of antibiotics.

2. Common Cold: Frequent in children, occurring 3-4 times a year or more. Symptoms include runny nose, cough, and fever, lasting up to 10 days. A doctor's diagnosis is essential, and in severe cases, antibiotics may be prescribed.

3. Bronchiolitis: A respiratory infection primarily affecting infants but also older children. Symptoms include breathing difficulties and agitation while eating or sleeping, often with a wheezing sound. Medical evaluation is crucial for proper diagnosis and treatment, which may involve antibiotics.

4. Infections: Children are prone to ear, skin, and urinary tract infections. Symptoms like ear pain, stomach pain, and burning sensation in the urinary tract require medical attention to determine the cause and provide appropriate treatment.

5. Conjunctivitis: A contagious eye infection characterized by inflammation, redness, yellowish discharge, itching, and crusty eyelashes. Prompt medical consultation is needed.

6. Pinworm or Threadworm: Intestinal infections presenting with anal itching, eating difficulties, and visible worms. Early treatment is necessary.

Understanding and addressing these common health issues, along with improving hygiene and sanitation in schools, is vital for the well-being of school-age children in India.

### Need of the Study

Understanding and addressing the health issues faced by school-going children is paramount for several reasons. Firstly, school-age children constitute about 30% of the total population in India. Their health status significantly influences their academic performance, social development, and future well-being. Additionally, as future parents, these children need to develop healthy attitudes and behaviors that will impact the health of subsequent generations. To foster such attitudes, it is crucial to provide them with the knowledge and skills necessary for maintaining good health.

A comprehensive assessment of the common health problems faced by school-going children is essential to develop targeted interventions that can improve their overall health. This is particularly important in rural areas, where the lack of baseline information on the magnitude of health problems contributes to unsatisfactory health outcomes. Availability of such data from schools will help in the formulation of effective health promotion and protection strategies.

Recent research underscores the importance of this approach. According to a study by Kumar et al. (2022), "Assessing health issues in school-aged children is crucial for developing targeted health interventions and policies. Understanding these health challenges allows for the implementation of specific programs that cater to the unique needs of this demographic, ultimately leading to improved health outcomes and quality of life" (Kumar et al., 2022).

This perspective highlights the importance of localized data in designing interventions that are both relevant and effective. By identifying the most common health issues among school-going children and understanding the socioeconomic factors associated with these problems, this study will contribute to the development of comprehensive health programs. These programs can enhance the well-being of children and ultimately improve the health status of the broader community.

### **Aim of the Study**

To assess the common childhood health problems among school-going children in selected schools of Wadiwarhe. The study aims to identify prevalent health issues, understand associated socioeconomic factors, and evaluate the impact of hygiene and sanitation practices in these schools.

## **2. Methodology**

The objectives of this study are to assess the anthropometric measurements, vital parameters, nutritional status, and systemic health problems of school-going children, and to determine the proportion of health problems among them. A quantitative approach and a non-experimental research design were adopted. The target population comprises school-going children aged 4-16 years, with a sample size of 186 students from Angel English Medium School, Wadiwarhe, selected using a convenient sampling technique. The tool used for data collection consists of six sections: demographic data (sex, age, standard, school), anthropometric measurements (height, weight, BMI), vital signs (temperature, pulse, respiration, blood pressure), nutritional status (malnourished, well-nourished, over-nourished), growth and development (poor, good), and systemic assessment (skin, head, eyes, ears, nose, teeth, mouth, tongue, throat, neck, skeletal system). Additionally, the tool includes a section to determine the proportion of common health problems among the children.

## **3. Result**

### **Section-I Demographic Variables of Children.**

#### **Frequency and Percentage Distribution Of Demographic Variables**

##### **1. Sex:**

- Male: The majority of the participants were male, with 134 boys representing 72.04% of the sample.

- Female: There were 52 girls, making up 27.96% of the sample.

##### **2. Age:**

- 4 to 8 years: The largest age group was 4 to 8 years, with 102 children, accounting for 54.84% of the participants.

- 9 to 13 years: This group included 56 children, making up 30.10% of the sample.

- 14 years and above: The smallest age group was 14 years and above, with 28 children, representing 15.06% of the participants.

##### **3. Standard:**

The distribution of children across different standards in Angel English Medium School was as follows: 12 children (6.45%) were in JKG, 23 children (12.37%) were in SKG, and 29

children (15.60%) were in 1st standard. There were 20 children (10.75%) in 2nd standard, 18 children (9.68%) in 3rd standard, and 12 children (6.45%) in 4th standard. Both 5th and 6th standards had 16 children each, making up 8.60% of the sample per grade. In 7th standard, there were 12 children (6.45%), while 8th standard had 11 children (5.91%). The 9th standard included 9 children (4.84%), and the 10th standard had the smallest group, with 8 children (4.30%).

#### 4. School:

- All 186 participants were from Angel English Medium School, representing 100% of the sample.

### **Section- Ii Anthropometric Measurement**

#### **Frequency & Percentage Distribution of Anthropometric Measurement of Childrens**

1. Height: The analysis of height among the school-going children reveals a diverse distribution across several categories. A significant portion, 33.33% of the sample, falls within the height range of 98 cm to 118 cm. The next substantial group, comprising 39.78% of the sample, ranges from 119 cm to 139 cm. Additionally, 19.90% of the children fall between 140 cm to 159 cm, while the tallest category, 160 cm to 179 cm, includes 6.99% of the participants. These findings illustrate the range of height variations observed among the children, reflecting different stages of growth and development within the school environment.

2. Weight: The distribution of weight among the school children shows notable disparities across defined categories. A majority, accounting for 52.69% of the sample, falls within the weight range of 12 kg to 25 kg. The next significant group comprises 33.33% of the sample, with weights ranging from 26 kg to 38 kg. A smaller percentage, 10.75% of the children, are in the weight range of 39 kg to 51 kg, while only 3.23% of the sample weighs between 52 kg to 65 kg. These findings highlight the varying weights among the children, influenced by factors such as age, diet, and physical activity levels, which contribute to their overall health and development.

3. BMI (Body Mass Index): The analysis of Body Mass Index (BMI) categories among school children indicates predominantly healthy weight status across the sample. A significant majority, 94.09% of the children, have BMIs ranging from 12 to 20, reflecting a healthy weight distribution within the population. A smaller proportion, 5.38% of the sample, falls within the BMI range of 21 to 29, indicating some variability in weight status among a minority of participants. Interestingly, no children fall into the higher BMI categories of 30 to 39, highlighting a generally healthy BMI distribution among the studied population. Only one child, comprising 0.53% of the sample, falls in the BMI range of 40 to 49, indicating an outlier with a higher BMI. These BMI findings provide insights into the overall health and nutritional status of the children, emphasizing the importance of monitoring and promoting healthy BMI ranges during their formative years.

### **Section- Iii Vital Signs**

#### **Frequency & Percentage Distribution of Vital Signs of Childrens**

1. Temperature: The majority of children, 97.31% of the sample, exhibited normal temperature readings. A very small percentage, 1.61%, had low temperatures, and 1.08% showed high temperatures. These findings indicate that the vast majority of children had normal body temperature, with only a few showing deviations that may require further medical attention.

2. Pulse: All children in the sample had normal pulse readings, accounting for 86.02% of the sample. No children exhibited low pulse readings, and 13.98% had high pulse readings. This

suggests that while the majority of children had normal pulse rates, a notable percentage showed elevated pulse rates that may warrant monitoring or further investigation.

3. Respiration: Similar to pulse, all children had normal respiration rates, comprising 95.70% of the sample. None of the children exhibited low respiration rates, while 4.30% had high respiration rates. These findings indicate generally healthy respiratory function among the children, with a small percentage showing elevated respiration rates.

4. Blood Pressure (BP): All children in the sample had normal blood pressure readings, accounting for 86.56% of the sample. None of the children exhibited low blood pressure readings, and 13.44% had high blood pressure readings. This suggests that while the majority of children had normal blood pressure levels, a notable percentage showed elevated blood pressure readings that may require further monitoring or intervention. These vital signs provide crucial insights into the overall health status of the children, highlighting areas where medical attention or further monitoring may be necessary to ensure their well-being.

#### Section- IV Nutritional Status

##### Frequency & Percentage Distribution of Nutritional Status of Childrens

TABLE 1: frequency & percentage distribution of nutritional status of childrens

S.NO.	NUTRITIONAL STATUS	FREQUENCY	PERCENTAGE
1.	MALNOURISHED	43	23.12%
2.	WELL NOURISHED	136	73.12%
3.	OVERNOURISHED	07	03.76%

1. Malnourished: A total of 43 children, representing 23.12% of the sample, were classified as malnourished. This category indicates that these children may be experiencing nutritional deficiencies that could impact their growth and overall health if not addressed promptly.

2. Well Nourished: The majority of children, comprising 73.12% of the sample, were classified as well-nourished. This category suggests that these children are receiving adequate nutrition, which is crucial for their physical and cognitive development during their formative years.

3. Overnourished: A small percentage, 3.76% of the sample, were classified as overnourished. This category indicates that these children may be consuming excess calories or nutrients beyond their daily requirements, which could potentially lead to health issues such as obesity if not managed properly.

These findings underscore the importance of monitoring and promoting balanced nutrition among school children to ensure optimal growth, development, and overall well-being. Identifying and addressing nutritional deficiencies or excesses early on can contribute significantly to improving the health outcomes of children in the school environment.

#### Section- V Growth and Development

##### Frequency & Percentage Distribution of Growth and Development of Childrens

1. Poor: A total of 34 children, accounting for 18.28% of the sample, were classified as having poor growth and development. This category suggests that these children may be experiencing delays or issues in their physical, cognitive, or emotional development that warrant attention and intervention.

2. Good: The majority of children, comprising 81.72% of the sample, were classified as having good growth and development. This category indicates that these children are progressing well across various developmental milestones, demonstrating positive outcomes in their physical, cognitive, and emotional well-being.

These findings highlight the importance of monitoring and supporting children's growth and development within the school environment. Early identification of developmental challenges and timely interventions can significantly contribute to improving outcomes and enhancing the overall health and well-being of school children.

### Section- VI Systemic Assessment

#### Frequency & Percentage Distribution of Systemic Assessment of Childrens

S.NO.	SYSTEMIC ASSESSMENT	FREQUENCY	PERCENTAGE
1.	SKIN	3	1.61%
	a) Rash	2	1.08%
2.	HEAD	00	00.00%
3.	EYE	00	00.00%
4.	EAR	01	00.54%
	a) Ear pain	49	26.34%
5.	NOSE	32	17.20%
	a) Nose discharge		
6.	TEETH	113	60.75%
	a ) dental caries		
7.	MOUTH AND TONGUE	01	00.54%
	a) mouth ulcer		
8.	THROAT	02	01.08%
	Sore throat		
9.	NECK	00	00.00%
10.	SKELETAL	00	00.00%

The systemic assessment conducted among school-going children revealed several notable health findings across different categories. In terms of skin health, a small percentage, 1.61% of the children, exhibited skin rashes, while 1.08% reported itching. No issues related to the head or eyes were observed during the assessment. Ear health showed that 0.54% of the children experienced ear pain, and a significant portion, 26.34%, had ear discharge. Nasal discharge was noted in 17.20% of the children under the nose category. Dental health findings indicated a concerning 60.75% prevalence of dental caries among the children. One child, accounting for 0.54% of the sample, had a mouth ulcer, while sore throat symptoms were reported by 1.08% of the children. No issues related to the neck or skeletal system were identified. These findings underscore the importance of regular health assessments in schools to promptly address common health issues like ear and dental problems, ensuring children receive necessary care and interventions to support their overall health and well-being.

### Section - Vii to Determine Proportion of Common Health Problems

Out of the 186 children assessed, 98 children (approximately 53%) weighed between 12 to 25 kg, indicating a significant proportion within the sample. Additionally, 175 children (about 95%) had a Body Mass Index (BMI) ranging from 12 to 20, reflecting a predominantly healthy weight distribution. Furthermore, 181 children (approximately 97%) exhibited normal temperature readings, underscoring favorable overall health conditions. In terms of vital signs, 160 children (86%) had normal pulse rates, while 178 children (96%) showed normal respiration rates, indicating stable cardiovascular and respiratory health. Moreover, 161 children (about 87%) had normal blood pressure readings during the assessment.

Regarding nutritional status, 136 children (about 73%) were classified as well-nourished, highlighting adequate dietary intake among a majority of the sample. In terms of growth and development, 152 children (approximately 81%) were noted to be progressing well, demonstrating positive developmental outcomes.

In terms of specific health concerns, a small percentage of children were noted to have certain conditions: 3 children (approximately 1.6%) had skin rashes, 49 children (about 26%) experienced ear discharge, and 32 children (approximately 17%) had nasal discharge. Dental health revealed that 113 children (about 61%) had dental caries, while very few reported mouth ulcers (0.5%) or sore throats (1%). These findings provide valuable insights into the overall health profile of the children assessed, highlighting areas where targeted interventions or further monitoring may be beneficial to ensure their continued well-being.

#### 4. Discussion

The systemic assessment of school children revealed significant health findings. Skin issues like rashes affected 1.61%, with 1.08% reporting itching. Ear problems included 0.54% with ear pain and 26.34% with ear discharge. Dental caries were prevalent in 60.75%. Nasal discharge was noted in 17.20%, and sore throat symptoms in 1.08%. No head, eye, neck, or skeletal issues were observed. Moola RS et al. found in their study of rural Kadapa district, Andhra Pradesh, that 38.79% of government primary school children had health issues. Dental problems were most common (21.66%), followed by ENT problems (22.84%), skin issues (8.05%), nutritional defects (7.61%), and eye disorders (6.88%). Only 5.42% maintained good personal hygiene. The majority were from low socioeconomic backgrounds, particularly class IV (19.62%) and class V (76.60%), with 83.39% living in poor housing conditions.

In the study, 43 children (23.12%) were malnourished, indicating possible nutritional deficiencies impacting their health. The majority, 136 children (73.12%), were well-nourished, crucial for their development. A small percentage, 7 children (3.76%), were overnourished, potentially at risk for health issues like obesity due to excess calorie intake. Aboagye RG et al. (2022) studied the nutritional status of school children in the South Tongu District, Ghana, finding an overall prevalence of undernutrition at 21.5% (CI = 17.7, 25.7) and overweight/obesity at 24.8% (CI = 20.8, 29.2). Specifically, the prevalence rates were 10.4% for stunting, 12.1% for thinness, 3.8% for underweight, 11.1% for overweight, and 13.7% for obesity.

#### 5. Conclusion

The comprehensive assessment of school children across various health parameters reveals a nuanced portrait of their well-being. Height distribution highlights significant variability, with notable segments in each range, reflecting diverse stages of growth. Weight distribution underscores disparities influenced by age and lifestyle factors, with the majority falling within healthy ranges. Body Mass Index (BMI) findings show a predominantly healthy profile, though some variability exists, emphasizing the need for ongoing monitoring. Vital signs assessments indicate largely favorable health conditions, with most children exhibiting normal temperature, pulse, respiration, and blood pressure readings. Nutritional status analysis reveals concerning figures for malnourishment, indicating potential nutritional deficiencies affecting growth. Conversely, a majority of children are well-nourished, crucial for their developmental trajectories, while a small percentage faces risks associated with overnutrition.



Systemic health assessments highlight common issues such as dental caries and ear discharge, necessitating targeted interventions. Moola RS et al.'s study in rural Kadapa district identifies prevalent health issues among primary school children, including dental and ENT problems, underscoring socio-economic disparities and poor housing conditions impacting health outcomes. These findings emphasize the importance of comprehensive health monitoring in schools to address prevalent health issues promptly. Strategies focusing on nutrition, oral hygiene, and socio-economic support are crucial to improving overall health and developmental outcomes among school children. Further longitudinal studies are needed to refine interventions and ensure sustained improvements in children's health and well-being.

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