Research Article

A Descriptive Study to Assess the Health Status of Construction Site Workers' Children from Selected Areas of Pune City

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Abstract

Background: Children of construction workers are a vulnerable population due to inadequate living conditions, poor nutrition, interrupted education, and limited access to healthcare services. Their health and well-being may be affected by the temporary nature of their families' employment and frequent relocation. Assessing their health status is essential for identifying health-related problems and planning appropriate interventions. The present study aimed to assess the health status of children of construction workers in selected areas of Pune city.

Methods: A quantitative descriptive research design was adopted for the study. A total of 200 children aged 6–14 years were selected using non-probability purposive sampling. Data were collected using a structured questionnaire and a demographic proforma. The content validity index of the tool was 0.94, indicating good content validity. The reliability of the tool was established using the test–retest method to ensure consistency in data collection. The collected data were analyzed using appropriate descriptive and inferential statistical methods to assess the health status of the children and determine associations between health status and selected demographic variables.

Results: The findings revealed that the majority of children (72.5%) had an average health status, while 27% had good health status. Only 0.5% of the children were categorized as having poor health status. A statistically significant association was found between school attendance and health status ($p = 0.005$). However, no statistically significant association was observed between health status and age, gender, parents' occupation, duration of residence, or educational status.

Conclusion: The study indicates that most children of construction workers had an average health status, highlighting the need for continued attention to their health and developmental needs. School attendance was significantly associated with health status, emphasizing the importance of regular education and school-based health initiatives. Strengthening nutritional support, improving access to healthcare services, conducting regular health screenings, and implementing community-based health education programs may contribute to better health outcomes. Collaboration among healthcare professionals, educational institutions, community organizations, and government agencies is essential to promote the overall health and well-being of children of construction workers.

Keywords: Construction workers, Child health, Health status, Migrant children, School attendance, Community health nursing.

Introduction

Children represent the future human resource of every nation. Their health status directly influences educational achievement, productivity, and national development. In India, children belonging to migrant and socio-economically disadvantaged families often experience barriers to healthcare, nutrition, sanitation, and education. Among these groups, children of construction site workers .

Construction workers frequently migrate in search of employment. Their families often live at temporary construction sites where access to clean water, sanitation facilities, immunization services, and healthcare is inadequate. Frequent relocation disrupts schooling and continuity of healthcare. These circumstances expose children to malnutrition, respiratory infections, skin disorders, injuries, Previous studies have reported high rates of undernutrition, stunting, wasting, and micronutrient deficiencies among children living at construction sites. Environmental exposure to dust, overcrowding, and poor living conditions further increase morbidity. Despite several government welfare schemes, many migrant families remain outside the reach of essential health services.

Assessment of health status is a critical step in identifying health problems, planning interventions, and monitoring outcomes. Community health nurses play an important role in promoting child health through screening, health education, immunization support, nutrition counseling, and referral services. Therefore, the present study was undertaken to assess the health status of construction site workers' children from selected areas of Pune city and to generate evidence for future health planning and policy development.

Need for the Study

Construction workers' children are exposed to numerous health risks because of unstable living conditions, poor sanitation, inadequate nutrition, and limited healthcare access. Frequent migration affects continuity of education and health services, increasing vulnerability to preventable diseases and developmental delays.

Studies have shown high prevalence of underweight, stunting, respiratory infections, and micronutrient deficiencies among children living in labor camps and construction settlements.

Health assessment helps identify existing problems at an early stage and provides evidence for designing preventive, promotive, and curative interventions. Findings from such studies support healthcare professionals, administrators, and policymakers in planning services tailored to the needs of migrant children. The study also contributes to nursing knowledge and community health practice Previous studies have reported higher rates of undernutrition, stunting, micronutrient deficiencies, and respiratory illnesses among children of migrant laborers. Researchers emphasize the need for focused public health strategies to address these inequalities.
According to UNICEF and public health researchers, migrant children experience significant health inequities because of social exclusion, poverty, mobility, and inadequate access to welfare services. Researchers emphasize the need for comprehensive health assessment and targeted interventions to improve nutrition, immunization coverage, education, and overall quality of life among children of migrant workers

Aim of the Study
To assess the health status of construction site workers' children from selected areas of Pune city and identify associations between health status and selected demographic variables.

Research Methodology

Objectives of the Study
1. To assess the health status of construction site workers' children.
2. To find the association between health status and selected demographic variables.

Research Methodology
Research Approach: A quantitative research approach was adopted to assess the health status of construction site workers' children in selected construction sites of Pune City.
Research Type: Descriptive research study.
Research Design: A non-experimental descriptive research design was employed.
Research Setting: The study was conducted at selected construction sites of Pune City, Maharashtra.
Study Population: Children of construction site workers residing at selected construction sites of Pune City.
Sample and Sample Size: A total of 200 children of construction site workers were included in the study.
Sampling Technique: A non-probability purposive sampling technique was used to select participants.

Description of the Research Tool
A structured questionnaire was used to assess the health status of construction site workers' children. The tool consisted of two sections.
Section I – Demographic Variables: Consisted of demographic information related to the children of construction site workers.
Section II – Structured Health Status Questionnaire: Consisted of questions related to assessing the health status of construction site workers' children.
Reliability: The reliability of the research tool was assessed using the test–retest method. The findings indicated consistency of the tool. The numerical reliability coefficient was not specified.
Pilot Study: A pilot study was conducted before the main study to assess the feasibility of the research procedure and data collection tool. The pilot study was found feasible.
Data Collection Procedure: Data were collected from 200 children of construction site workers using the structured demographic questionnaire and health status assessment questionnaire.
Statistical Analysis: Descriptive and inferential statistical methods were used to assess the health status of construction site workers' children and examine its association with selected demographic

Results

Section I
Description of samples based on their personal characteristics.
More than half of the children (54%) were aged between 6 and 8 years, while 37% belonged to the 9–11 years age group and the remaining 9% were aged between 12 and 14 years. Regarding gender, 60.5% of the participants were boys and 39.5% were girls. Half of the parents or guardians (50%) were homemakers, while the other half (50%) worked as laborers. In terms of duration of residence at the construction site, 52.5% of the children had been living there for 1–2 years, 43.5% for 3–4 years, and only 4% for 5–6 years. Regarding education, the majority of the children (73%) had not received formal education, whereas only 27% were

enrolled in primary school. These findings highlight the educational challenges faced by children of construction workers and the need for better access to educational opportunities.

SECTION II

Findings related to the analysis related the health status of construction site workers children .

Table No1: n=100

Health Status	Frequency	Percent
Poor	1	0.5
Average	145	72.5
Good	54	27
Total	200	100

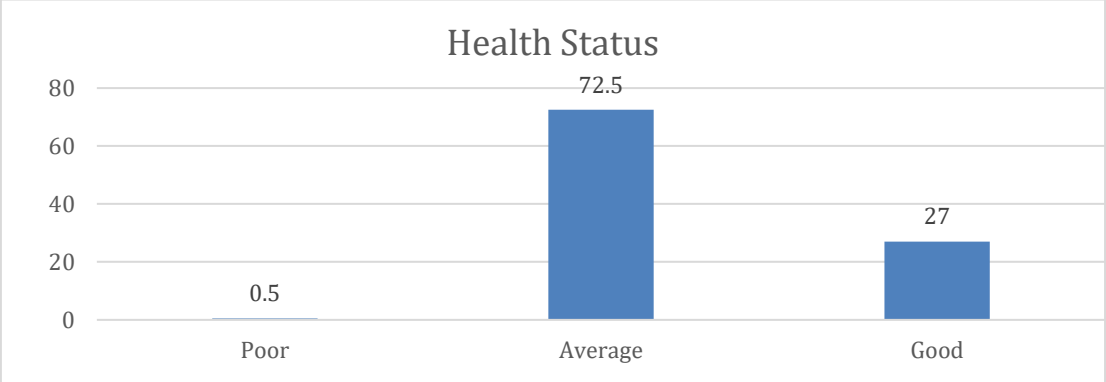


Fig no 1

The result shows that (72.5%) of the construction site workers children were having average health status, while 27% were in good health status. Only a very small proportion (0.5%) of the construction site workers children were found to have poor health status.

Discussion

The present study was conducted to assess the health status of construction site workers' children in selected construction sites of Pune City. The findings revealed that the majority of children demonstrated average health status, while a smaller proportion exhibited good health status and very few had poor health status. These findings highlight the health-related challenges experienced by children living in construction worker communities and emphasize the importance of improving their overall well-being.

The findings are consistent with previous studies conducted among migrant and construction worker families, which reported nutritional deficiencies, respiratory illnesses, inadequate sanitation, and limited access to healthcare services. Children residing at construction sites are frequently exposed to environmental hazards, overcrowded living conditions, poor hygiene, and inadequate nutritional facilities. Such conditions may adversely affect their physical growth, health status, and overall development.

The study further revealed a statistically significant association between school attendance and health status. Children attending school may benefit from regular health education, nutritional support programmes, structured daily routines, and improved social interactions. School attendance may also facilitate early identification of health problems and encourage appropriate healthcare-seeking behaviour. Conversely, children who do not attend school may experience greater vulnerability to nutritional deficiencies, inadequate supervision, and delayed access to healthcare services.

However, no statistically significant association was observed between health status and selected demographic variables such as age, gender, parental occupation, duration of residence, and educational status. These findings suggest that health-related challenges may affect children across different demographic groups within construction worker communities.

Overall, the study emphasizes the importance of community-based health screening, nutritional support, sanitation improvement, and educational interventions. Community health nurses and healthcare professionals can play a significant role in promoting child health through regular assessment, parental counselling, health education, and coordination with schools and community organizations to improve the health status of construction site workers' children.

Conclusion

The present study concluded that the majority of construction site workers' children in selected areas of Pune City had average health status, while a smaller proportion demonstrated good health status and very few had poor health status. The findings indicate that children living at construction sites remain vulnerable to various health-related problems due to inadequate living conditions, poor sanitation, nutritional deficiencies, and limited access to healthcare services.

The study further revealed a statistically significant association between school attendance and health status, highlighting the importance of educational engagement in promoting children's overall well-being. Regular school attendance may provide opportunities for health education, nutritional support, social development, and early identification of health problems.

The findings emphasize the need for coordinated efforts among community health nurses, healthcare professionals, educators, government agencies, and non-governmental organizations to improve the health status of construction site workers' children. Regular health screening, nutritional support programmes, immunization services, parental counselling, and improved sanitation facilities are essential for promoting child health.

Therefore, the study recommends strengthening community-based healthcare services, encouraging school enrolment, and implementing targeted health education programmes. Further research involving larger samples and different geographical areas is recommended to improve the generalizability of findings and support evidence-based interventions for vulnerable children.

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