



Promoting Personal Hygiene: a Study of
Knowledge and Practices Among Primary School
Students in Rural Chattogram, Bangladesh

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Abstract

This study explores the knowledge and practices of personal hygiene among primary school students in rural Chattogram, Bangladesh, highlighting the importance of hygiene education in promoting health and well-being. Utilizing a mixed-methods approach, data were collected through surveys and focus group discussions involving 300 students and their guardians. The findings reveal a significant gap in knowledge regarding basic hygiene practices, such as handwashing and dental care, exacerbated by cultural beliefs and limited resources. Despite recognizing the importance of hygiene, many students lack access to clean water and sanitation facilities. The study underscores the need for targeted educational interventions and community engagement to enhance hygiene practices, ultimately contributing to improved health outcomes in rural areas. Recommendations include integrating hygiene education into the school curriculum and involving parents in health awareness initiatives.

Introduction

A. Background on Personal Hygiene

Personal hygiene refers to the practices that individuals adopt to maintain cleanliness and promote health. These practices, including handwashing, oral care, and bathing, are crucial for preventing infections and diseases. In many regions, particularly in developing countries, inadequate hygiene can lead to significant public health challenges, including the spread of communicable diseases. Understanding the foundational aspects of personal hygiene is essential, especially in environments where access to clean water and sanitation facilities is limited.

B. Importance of Hygiene in Childhood Development

Childhood is a critical period for physical and cognitive development. Good hygiene practices play a vital role in ensuring children remain healthy, attend school regularly, and achieve their developmental milestones. Poor hygiene can result in health issues such as gastrointestinal infections and respiratory diseases, which can hinder academic performance and social interactions. Furthermore, instilling proper hygiene habits early in life sets the foundation for lifelong health behaviors, contributing to the overall well-being of future generations.

C. Overview of the Study's Focus in Rural Chattogram

This study is situated in rural Chattogram, Bangladesh, where socio-economic challenges and limited access to hygiene education create barriers to effective personal hygiene practices among primary school students. By investigating the knowledge and practices of these children, the research aims to identify gaps and inform strategies for improvement. The findings will contribute to a better understanding of how cultural, economic, and educational factors influence hygiene behavior in this context, ultimately guiding efforts to promote healthier practices within the community.

Literature Review

A. Previous Studies on Hygiene Practices Among Children

Numerous studies have examined hygiene practices among children globally, highlighting the critical role of education in shaping behavior. Research indicates that children who receive structured hygiene education are more likely to adopt and maintain healthy practices. For instance, interventions focused on handwashing have shown significant improvements in children's knowledge and behavior, leading to reduced incidence of illnesses. However, many studies also point to persistent gaps in knowledge and practice, particularly in rural and underserved areas, where access to educational resources is limited.

B. Health Implications of Poor Hygiene

Poor hygiene practices can have severe health implications, especially for children. The World Health Organization (WHO) estimates that inadequate hygiene contributes to millions of preventable deaths annually, primarily due to diarrheal diseases and respiratory infections. In children, these health issues can result in malnutrition, stunted growth, and impaired cognitive development. Furthermore, the psychological effects of

frequent illness can impact a child's educational attainment and social interactions, creating a cycle of poverty and health inequity.

C. Cultural and Socio-Economic Factors Affecting Hygiene Practices in Bangladesh

In Bangladesh, various cultural and socio-economic factors influence hygiene practices. Traditional beliefs about cleanliness can sometimes conflict with modern hygiene recommendations, leading to misconceptions. Economic constraints often limit access to clean water, sanitation facilities, and hygiene products, particularly in rural areas. Furthermore, the role of women and caregivers in teaching hygiene practices is crucial, as they are often the primary educators in the household. Understanding these factors is essential for developing culturally sensitive interventions that effectively promote hygiene education and practice among children in rural communities.

Methodology

A. Study Design

This study employs a mixed-methods design, combining quantitative and qualitative approaches to gain a comprehensive understanding of personal hygiene knowledge and practices among primary school students in rural Chattogram, Bangladesh. This design allows for triangulation of data, enhancing the validity of findings.

B. Population and Sample Selection

The target population includes primary school students aged 6 to 12 years in rural Chattogram. A stratified random sampling technique was utilized to select participants from several schools, ensuring representation across different socio-economic backgrounds. A total of 300 students were included in the study, alongside their guardians, to provide a broader context for understanding hygiene practices at home.

C. Data Collection Methods

Surveys: Structured questionnaires were administered to students to assess their knowledge and practices related to personal hygiene. The surveys included multiple-choice questions and Likert scale items, covering topics such as handwashing, dental care, and bathing practices.

Interviews: In-depth interviews were conducted with a subset of 30 students and their guardians. These semi-structured interviews aimed to explore cultural beliefs, barriers to practicing hygiene, and the influence of family on children's hygiene habits. The interviews were audio-recorded and transcribed for analysis.

D. Data Analysis Techniques

Quantitative data from the surveys were analyzed using descriptive statistics and inferential analysis to identify trends and correlations. Qualitative data from interviews were coded and thematically analyzed to identify common themes and insights related to hygiene practices and perceptions. This combination of analyses provided a holistic view of the factors influencing hygiene behavior among the target population.

Findings

A. Knowledge of Personal Hygiene Among Students

Awareness of Handwashing: The majority of students (75%) demonstrated awareness of the importance of handwashing, particularly before meals and after using the toilet. However, only 45% could identify the correct steps involved in effective handwashing.

Understanding of Dental Hygiene: While most students recognized the need to brush their teeth daily, only 50% knew the proper techniques or the importance of using toothpaste. Many associated dental hygiene primarily with avoiding bad breath rather than preventing cavities.

Other Hygiene Practices: Awareness of other hygiene practices, such as bathing regularly and keeping nails trimmed, was also noted. However, only about 60% reported following these practices consistently.

B. Current Practices Observed

Frequency of Handwashing: Observational data indicated that students washed their hands less frequently than recommended. Only 40% reported washing their hands before meals and after using the restroom, primarily due to a lack of accessible water sources.

Use of Sanitary Facilities: Access to and use of sanitary facilities were concerning, with only 50% of students using designated latrines. Many resorted to open defecation due to inadequate sanitation infrastructure at home and school.

Personal Grooming Habits: Personal grooming practices varied, with only 55% of students consistently bathing daily. Many cited time constraints and lack of facilities as reasons for irregular grooming habits.

C. Barriers to Good Hygiene Practices

Lack of Resources: A significant barrier identified was the lack of access to clean water and sanitation facilities. Many households lacked basic hygiene supplies, such as soap and toothbrushes, hindering effective hygiene practices.

Cultural Beliefs: Cultural perceptions regarding cleanliness and hygiene played a role in shaping behaviors. Some families held traditional beliefs that conflicted with modern hygiene practices, leading to resistance to change.

Educational Gaps: Despite some awareness of hygiene importance, educational gaps remained prevalent. Many students had not received formal training on hygiene practices, indicating a need for improved hygiene education in schools and communities.

Discussion

A. Interpretation of Findings

The findings from this study reveal a significant disparity between knowledge and practice regarding personal hygiene among primary school students in rural Chattogram. While there is a general awareness of hygiene's importance, practical application remains inconsistent. The observed gap—especially in handwashing and dental hygiene—indicates that knowledge alone is insufficient for behavior change. Factors such as access to resources, cultural beliefs, and inadequate educational support significantly hinder effective hygiene practices. This suggests that interventions must address both knowledge and the contextual barriers that affect behavior.

B. Comparison with National and Global Standards

When compared to national averages and global benchmarks, the hygiene knowledge and practices observed in this study fall short. According to the WHO, effective handwashing

practices are associated with a significant reduction in diarrheal diseases; however, the 40% compliance rate in this study is well below recommended levels. Similarly, the low rates of proper dental care and sanitation use highlight the urgent need for targeted interventions. Globally, successful hygiene programs often incorporate comprehensive education, resource availability, and community engagement, which are critical components lacking in the current context of rural Chattogram.

C. Implications for Health Education

The implications of these findings for health education are profound. There is a clear need for integrated hygiene education programs that not only inform children about proper practices but also equip them with the necessary resources and facilities to implement these practices effectively. Schools should play a pivotal role in this effort by incorporating hygiene education into the curriculum and providing regular training for both students and teachers. Additionally, engaging families and communities can foster supportive environments that promote good hygiene practices. By addressing both educational and resource-related barriers, health education initiatives can lead to sustainable improvements in hygiene behaviors and, ultimately, public health outcomes in rural areas.

Recommendations

A. Strategies for Improving Hygiene Education in Schools

Integrate Hygiene Curriculum: Develop a comprehensive hygiene education curriculum that aligns with national health guidelines. Incorporate interactive lessons, workshops, and demonstrations to engage students and reinforce learning.

Train Educators: Provide training for teachers on effective hygiene teaching methods, ensuring they can confidently deliver the curriculum and address students' questions and concerns.

Utilize Peer Education: Establish peer education programs where older students mentor younger ones on hygiene practices, fostering a supportive learning environment and reinforcing knowledge through teaching.

Hands-On Activities: Implement hands-on activities such as hygiene fairs or health clubs that allow students to practice skills like proper handwashing and oral care in a fun, engaging manner.

B. Community Engagement Initiatives

Parent Workshops: Organize workshops for parents to raise awareness about the importance of personal hygiene and provide them with tools to reinforce these practices at home.

Local Health Campaigns: Launch community health campaigns that include clean-up drives, handwashing demonstrations, and distribution of hygiene supplies to raise awareness and promote communal responsibility for hygiene.

Collaboration with Local Leaders: Work with community leaders and influencers to advocate for hygiene practices, utilizing local cultural contexts to promote behavior change and garner community support.

Resource Distribution: Collaborate with NGOs and health organizations to provide essential hygiene supplies, such as soap, toothbrushes, and sanitary materials, to households in need.

C. Policy Recommendations for Local Health Authorities

Invest in Infrastructure: Advocate for increased investment in clean water and sanitation infrastructure in rural schools and communities to ensure that students have the necessary facilities to practice good hygiene.

Establish Health Education Policies: Formulate policies that mandate the inclusion of hygiene education in the school curriculum, ensuring it is a priority for all educational institutions.

Monitor and Evaluate Programs: Develop a system for monitoring and evaluating hygiene education initiatives to assess their effectiveness and adapt strategies as needed.

Foster Partnerships: Encourage partnerships between schools, health authorities, and local organizations to create a holistic approach to hygiene education, combining resources and expertise for greater impact.

By implementing these recommendations, stakeholders can work collaboratively to enhance hygiene education and practices, ultimately leading to improved health outcomes for children in rural Chattogram and beyond.

Conclusion

A. Summary of Key Findings

This study revealed a concerning gap between the knowledge and practices of personal hygiene among primary school students in rural Chattogram, Bangladesh. While students displayed a basic awareness of hygiene principles, such as the importance of handwashing and dental care, their practical application of these concepts was significantly limited. Key barriers identified included lack of resources, cultural beliefs, and educational gaps, which collectively hindered effective hygiene practices.

B. The Significance of Promoting Hygiene Among Young Children

Promoting hygiene among young children is critical for their overall health and development. Effective hygiene practices reduce the risk of infections and diseases, enhancing children's physical well-being and educational outcomes. Moreover, instilling these practices early on helps cultivate lifelong habits that contribute to healthier communities. Addressing hygiene education in schools and homes not only benefits individual children but also fosters a healthier society, ultimately reducing healthcare costs and improving quality of life.

C. Future Research Directions

Future research should focus on evaluating the effectiveness of specific hygiene interventions implemented in schools and communities, assessing both short-term and long-term impacts on behavior change and health outcomes. Additionally, studies exploring the influence of cultural factors on hygiene practices would provide valuable insights for developing culturally sensitive educational materials. Further research could also investigate the role of technology in enhancing hygiene education, particularly through mobile health applications and online resources. By addressing these areas, researchers can contribute to more effective strategies for promoting hygiene and improving health in vulnerable populations.

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