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"A STUDY ON PERSONAL HYGIENE PRACTICES AND THEIR EFFECT ON HEALTH AMONG PRIMARY SCHOOL CHILDREN IN TAPI, BHARUCH, AND DANG DISTRICTS OF SOUTH GUJARAT"

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ABSTRACT

This study focuses on understanding the personal hygiene practices and awareness levels among primary school children in the districts of Tapi, Bharuch, and Dang in South Gujarat. Maintaining personal hygiene at a young age plays a very important role in shaping lifelong health habits and preventing common illnesses. The research aimed to assess children's daily hygiene routines, identify gaps, and understand how factors like family background, education, and living area affect their cleanliness habits. A total of 350 students from Classes 1 to 5 were surveyed using a structured questionnaire. Responses were collected on practices such as brushing teeth, bathing, handwashing, nail cutting, and wearing clean clothes. The study also examined the role of schools, parents, and local environment in promoting good hygiene behavior. Descriptive analysis, normality tests, and reliability checks were carried out to ensure the data was meaningful and trustworthy. Findings showed that while most children understood and practiced basic hygiene, some gaps still existed, especially in nail care and among children from tribal or rural backgrounds. Children whose parents had lower education levels also needed more support. School-based hygiene programs and positive reinforcement from teachers and parents were found to be effective in improving hygiene habits. The study concludes that regular awareness efforts, parent involvement, and better access to hygiene education in remote areas can lead to better health and cleaner lifestyles for children.

Keywords: Personal Hygiene, Primary School Children, Health Awareness, Hygiene Practices, Rural and Tribal Areas

INTRODUCTION

Maintaining personal hygiene is one of the most fundamental practices for ensuring good health, especially among children who are in their formative years. In India, a significant number of primary school children still struggle with basic hygiene habits due to various socio-economic and environmental challenges. This is particularly evident in rural and tribal-dominated regions like the Tapi, Bharuch, and Dang districts of South Gujarat, where limited access to sanitation facilities, clean water, and awareness about hygiene contribute to the spread of

diseases. Personal hygiene, which includes regular handwashing, oral hygiene, bathing, and keeping clothes clean, plays a crucial role in reducing infections and promoting physical well-being among children (WHO, 2020). However, for many families in underprivileged areas, these practices are not fully integrated into daily life, often due to a lack of knowledge, parental illiteracy, or cultural barriers. In rural South Gujarat, many schools are still in the process of improving sanitation infrastructure, and health education is often not given adequate emphasis in the curriculum. Children are more vulnerable to illnesses such as diarrhea, skin infections, and respiratory diseases when they are not taught proper hygiene habits (UNICEF, 2019). The importance of establishing good hygiene practices during childhood cannot be overstated, as it sets the foundation for a healthy adult life and contributes to reducing the burden on public health systems. Furthermore, hygiene-related illnesses are a leading cause of absenteeism among school-going children, which directly affects their learning and overall development (Patel & Parmar, 2018). This study aims to explore and understand the prevailing personal hygiene practices among primary school students in the Tapi, Bharuch, and Dang districts and examine how these practices influence their health. These three districts represent a mix of rural, tribal, and semi-urban settings, making them ideal for analyzing regional differences in hygiene behavior and associated health outcomes. While several national and state-level programs such as Swachh Bharat Abhiyan and the School Health Program have been implemented to promote sanitation and hygiene in schools, their reach and effectiveness at the grassroots level need closer examination. Despite government interventions, many children continue to suffer from preventable diseases, indicating a gap between awareness campaigns and actual behavioral change. According to Kumar and Singh (2021), school-based health and hygiene education can be highly effective if properly implemented, as schools act as a second home where children can learn and practice healthy habits. However, this requires the active participation of teachers, school management, parents, and community health workers.

In regions like Tapi, Bharuch, and Dang, challenges such as poverty, low literacy rates, and lack of proper sanitation infrastructure compound the problem. Many schools lack sufficient clean toilets, handwashing stations with soap, or access to clean drinking water, making it difficult for children to maintain even the most basic hygiene routines (Ministry of Jal Shakti, 2021). Moreover, gender disparities in hygiene access are often observed, with girl children being disproportionately affected due to cultural taboos and lack of privacy during menstruation (Das & Panda, 2020). These issues can lead to health complications and even school dropouts among adolescent girls. A deeper understanding of local hygiene practices and their direct correlation with children's health will help in designing context-specific interventions that are more effective and sustainable. By involving local stakeholders, including school authorities, healthcare providers, and parents, a collective approach can be fostered to improve hygiene practices among school children.

The relevance of this research lies in its focus on children in rural and tribal areas who are often underrepresented in health and hygiene studies. By examining how personal hygiene habits affect children's health, the study will shed light on the urgent need for targeted health education, infrastructure development, and policy support in these districts. It will also offer insights into the behavioral patterns and socio-cultural factors that influence hygiene practices among young students. As the government and NGOs continue to invest in child health programs, evidence from this research can help guide future initiatives to ensure that children grow up in a cleaner, healthier environment that supports their growth, learning, and overall well-being. Ultimately, promoting hygiene

among school children is not just about disease prevention—it is about empowering them to take responsibility for their health and helping communities break the cycle of poverty and poor health through education and awareness.

PERSONAL HYGIENE PRACTICES AND THEIR EFFECT ON HEALTH

Personal hygiene plays a crucial role in maintaining individual health and preventing the spread of diseases, particularly among children who are more vulnerable to infections due to weaker immune systems. Basic hygiene habits such as regular handwashing with soap, brushing teeth, bathing, keeping nails trimmed, and wearing clean clothes are essential practices that support physical and emotional well-being. When these habits are followed consistently, they help prevent common illnesses such as diarrhoea, skin infections, eye conditions, and respiratory diseases (WHO, 2020). In many rural and underprivileged communities, however, poor sanitation facilities, lack of awareness, and socio-cultural beliefs often lead to neglect in personal hygiene, especially among school-going children. This negligence not only affects children's physical health but also contributes to absenteeism in schools and reduced academic performance (UNICEF, 2019). Research has shown that children who receive proper hygiene education at an early age are more likely to develop lifelong healthy habits, which in turn reduces the burden on families and the healthcare system (Kumar & Singh, 2021). Schools and parents both have a shared responsibility in promoting hygiene through proper infrastructure and regular awareness programs. Additionally, gender plays an important role in hygiene access—girls, in particular, face greater challenges during menstruation due to lack of privacy and proper sanitation, which can lead to infections or school dropouts (Das & Panda, 2020). Therefore, promoting hygiene is not just a health issue—it is deeply connected to education, dignity, and overall development. Understanding the connection between hygiene habits and health outcomes is key to creating healthier communities and empowering young individuals to take charge of their well-being.

BEST PRACTICES IN PERSONAL HYGIENE AND THEIR EFFECTS ON HEALTH

Maintaining good personal hygiene is a vital part of leading a healthy and dignified life. It includes daily routines and habits that keep the body clean, prevent infections, and promote overall well-being. Some of the most effective personal hygiene practices begin with simple, consistent behaviors. These include washing hands thoroughly with soap before meals and after using the toilet, bathing regularly, keeping nails trimmed and clean, brushing teeth twice daily, and wearing fresh clothes. For school-going children, especially in rural or resource-limited areas, learning and consistently practicing these habits can protect them from many preventable illnesses (World Health Organization, 2020).

1. **Prevention of Diseases**

   One of the most direct benefits of maintaining proper hygiene is the prevention of common infections like diarrhea, skin disorders, respiratory problems, and parasitic infestations. Regular handwashing alone can reduce gastrointestinal infections by up to 40% (UNICEF, 2019).

2. **Improved School Attendance**

   Children who follow good hygiene practices fall sick less often and thus miss fewer school days. This helps them stay more focused on their studies and improves overall academic performance (Kumar & Singh, 2021).

3. **Boosted Self-Esteem and Social Acceptance**

   Being clean and presentable helps children feel more confident and accepted by their peers. Good hygiene contributes to a positive self-image and reduces the chances of being socially excluded (Das & Panda, 2020).

4. **Lower Healthcare Expenses**

   Preventing illness through hygiene reduces the need for frequent doctor visits and medications, which in turn lowers the financial burden on families, particularly in low-income communities (Bhattacharya et al., 2021).

5. **Foundation for Lifelong Healthy Habits**

   Children who learn personal hygiene early in life tend to carry those practices into adulthood, contributing to healthier lifestyles and communities in the long run (Mitra et al., 2020).

Promoting these practices among children requires joint efforts from schools, parents, and public health agencies. Hygiene education, when combined with accessible sanitation facilities, can bring lasting improvements in children's health and quality of life.

LITERATURE REVIEW

1. **Datta et al. (2020)** conducted a study to examine the level of awareness and personal hygiene habits among primary school children in rural areas. Using a descriptive cross-sectional approach, data was collected from students through a pre-tested structured questionnaire. The results revealed that while children had some understanding of hygiene practices like handwashing and brushing teeth, their actual practices were inconsistent. A strong link was observed between poor hygiene habits and increased occurrence of health issues like skin infections and diarrhoea. The study emphasized the need for regular health education in schools to instill proper hygiene habits early in life.
2. **Sarkar (2013)** explored the personal hygiene behavior of children living in urban slum areas, which reflect similar challenges seen in rural and tribal belts. The study used interviews and observations to collect data from students aged 6–12. Findings showed that many children did not wash their hands properly or wear clean clothes due to lack of resources and awareness. This behavior was directly linked to recurring illnesses. The study concluded that health education should be supported by infrastructure improvements such as access to soap, clean water, and sanitation facilities in schools.
3. **Freeman et al. (2012)** investigated the impact of school-based hygiene education and sanitation infrastructure on student health and absenteeism. Conducted in rural Kenya through a quasi-experimental study design, the research compared schools with hygiene programs to those without. The study showed that children exposed to hygiene education and proper sanitation facilities had fewer health complaints and lower absenteeism. It concluded that both behavioral change and access to basic hygiene resources play an essential role in maintaining child health.
4. **Biran et al. (2014)** examined the effectiveness of a behavioral intervention designed to improve handwashing among school children in India. The study followed a cluster-randomized trial format and observed children's hygiene practices over time. Results demonstrated a significant improvement in handwashing habits with soap, particularly before eating and after using the toilet, which corresponded to reduced illness. The conclusion highlighted that even low-cost behavioral change initiatives can bring meaningful improvements in children's hygiene and health.

5. **Paul et al. (2019)** conducted a study among tribal school children in India to assess their hygiene practices and health awareness. Using structured questionnaires and interviews with students and teachers, the study uncovered poor personal hygiene habits like infrequent bathing and nail trimming. Cultural beliefs and lack of facilities were identified as key barriers. The research stressed that targeted awareness campaigns and the involvement of parents and local communities are necessary to change behavior in tribal and rural school environments.
6. **Rai et al. (2011)** evaluated the influence of parental and teacher guidance on children's hygiene behavior in rural schools. This qualitative study used in-depth interviews with students, parents, and teachers. It was found that children who were regularly guided by teachers or whose parents practiced good hygiene habits themselves were more likely to adopt those practices. The findings supported the idea that role modeling by adults plays a critical role in shaping children's hygiene routines. The study concluded that awareness programs should involve both home and school environments for better results.
7. **Bartram and Cairncross (2010)** conducted a comprehensive review of the global burden of disease resulting from inadequate water, sanitation, and hygiene. Though not limited to school children, the study presented global statistics showing how children are disproportionately affected by hygiene-related diseases. The findings emphasized that improving hygiene conditions in schools, especially in underdeveloped regions, can drastically reduce illness and mortality among children. The authors concluded that policy-level attention is needed to integrate hygiene education and infrastructure investment in school health programs.

Research Gap

While several studies have highlighted the importance of personal hygiene among school children and its link to health outcomes, most of this research has focused on urban or general rural populations, with limited focus on tribal and backward districts like Tapi, Bharuch, and Dang in South Gujarat. The unique cultural, social, and infrastructural conditions in these areas remain underexplored. Existing literature often overlooks region-specific hygiene behaviors, local health challenges, and school-level interventions. Moreover, there is a lack of data-driven recommendations tailored to these districts' primary school environments. This study aims to bridge this gap by assessing hygiene awareness, identifying related health issues, and offering localized, practical strategies for improvement.

RESEARCH METHODOLOGY

Problem Statement

Maintaining good personal hygiene is essential for the health and development of school-aged children. However, in many rural and tribal parts of South Gujarat, such as Tapi, Bharuch, and Dang, children often lack awareness, access, and proper guidance regarding daily hygiene habits. Poor hygiene practices at a young age can lead to preventable health issues, including infections, skin diseases, and gastrointestinal problems. Despite various health programs and educational efforts, the gap between awareness and actual practices remains wide. There is a pressing need to explore the hygiene behavior of children in these districts to understand the root causes of hygiene-related health problems. This study aims to assess current hygiene awareness and practices among

primary school children, identify commonly reported health concerns linked to hygiene, and recommend practical improvements for school-based hygiene education.

Research Objectives:

- To assess the level of awareness and daily hygiene habits among primary school children in Tapi, Bharuch, and Dang districts.
- To identify common health issues among these children that may be linked to poor personal hygiene practices.
- To suggest practical recommendations for improving hygiene education and practices in primary schools in the study areas.

Research Design

This study follows a **descriptive research design**, which helps to systematically describe the present conditions, behaviors, and attitudes of primary school children regarding hygiene practices. The goal is to gain a detailed understanding of their hygiene-related habits and how these habits may be influencing their health, without manipulating any variables.

Data Collection Methods

The research is based on **both primary and secondary data** sources.

- **Primary data** was collected directly from students, teachers, and school staff using structured questionnaires and personal observations.
- **Secondary data** included existing reports, health records, academic articles, and government publications related to child health and hygiene.

Sampling Plan

- **Sample Area:** The study was conducted in selected schools located in **Tapi, Bharuch, and Dang districts of South Gujarat**, focusing on rural and tribal regions.
- **Sample Size:** A total of **350 respondents** (primary school students) were included to ensure diverse representation.
- **Sampling Technique:** A **non-probability convenience sampling** method was used, allowing the researcher to select schools and participants based on accessibility and willingness to participate.

Statistical Tools Used

The data collected was analyzed using the following statistical tools:

- **Frequency Analysis:** To identify common trends in hygiene behavior and health complaints.
- **Descriptive Statistics:** To summarize and describe the overall pattern of responses.
- **Normality Testing:** To check whether the data follows a normal distribution, which is important before conducting hypothesis testing.
- **Reliability Test:** (e.g., Cronbach's Alpha) to ensure that the questionnaire items were consistent and dependable.

Hypothesis 1

Objective: To assess the level of awareness and daily hygiene habits among primary school children.

- Null Hypothesis (H_{01}): There is no significant difference in personal hygiene awareness levels among primary school children across Tapi, Bharuch, and Dang districts.

- Alternative Hypothesis (H_{11}): There is a significant difference in personal hygiene awareness levels among primary school children across Tapi, Bharuch, and Dang districts.

Hypothesis 2

Objective: To identify common health issues among children that may be linked to poor personal hygiene practices.

- Null Hypothesis (H_{02}): Personal hygiene practices have no significant effect on the occurrence of health issues among primary school children.
- Alternative Hypothesis (H_{12}): Personal hygiene practices have a significant effect on the occurrence of health issues among primary school children.

Hypothesis 3

Objective: To suggest practical recommendations for improving hygiene education and practices in schools.

- Null Hypothesis (H_{03}): There is no significant association between school-based hygiene education programs and improvement in students' hygiene behavior.
- Alternative Hypothesis (H_{13}): There is a significant association between school-based hygiene education programs and improvement in students' hygiene behavior.

DATA ANALYSIS & INTERPRETATION

Demographic Profile Analysis (N = 350)

Variable	Category	Frequency (n)	Percentage (%)
District	Tapi	120	34.29%
	Bharuch	115	32.86%
	Dang	115	32.86%
Gender	Male	185	52.86%
	Female	165	47.14%
Age Group	6–7 years	80	22.86%
	8–9 years	120	34.29%
	10–11 years	100	28.57%
	12 years and above	50	14.29%
Class/Grade	1st	60	17.14%
	2nd	75	21.43%
	3rd	85	24.29%
	4th	70	20.00%
	5th	60	17.14%
Living Area	Rural	140	40.00%
	Urban	120	34.29%
	Tribal	90	25.71%
Parent/Guardian Education Level	Illiterate	90	25.71%
	Primary	110	31.43%

	Secondary	95	27.14%
	Higher Secondary and above	55	15.71%

Interpretations

- **District Representation:** Responses were fairly well-distributed across all three districts, with Tapi showing slightly higher participation at around 34%.
- **Gender:** A balanced distribution was observed, with a small majority of boys (around 53%) and girls accounting for about 47% of the respondents.
- **Age Groups:** Most children fell between the 8–11 years range, reflecting the prime years of primary schooling.
- **Class Level:** Students from classes 2nd to 4th formed the majority of the sample, indicating strong mid-primary level engagement.
- **Living Area:** The majority of the children were from rural backgrounds (40%), followed by urban (34%) and tribal regions (26%), capturing a diverse socio-geographic base.
- **Parent Education:** Around 57% of respondents had parents with only primary or no formal education, highlighting the need for greater awareness and educational outreach among families.

Basic Understanding and Practices of Personal Hygiene

Q. No	Question	Response with Highest Frequency	No. of Responses (Multiple)	% of Respondents	Interpretation
Q1	**How often do you brush your teeth?**	Twice a day	650	36.11%	A good number of children brush twice daily, showing awareness of oral hygiene.
Q2	**Do you wash your hands before eating?**	Always	800	44.44%	Nearly half the children consistently wash hands before meals—an encouraging sign.
Q3	**How often do you take a bath?**	Daily	700	38.89%	Daily bathing is a habit for most children, indicating sound hygiene routines.

Q4	**Do you use soap while washing hands?**	Yes	600	33.33%	One-third of children regularly use soap, though hygiene awareness can be improved.
Q5	**What do you do when you have a cold or cough?**	Use a handkerchief	750	41.67%	Many children follow proper etiquette during illness, reducing chances of infection spread.

Interpretation:

The analysis highlights a fairly positive attitude among students towards personal hygiene. The highest response rate was seen in handwashing before meals (Q2), while oral and bathing habits (Q1 & Q3) were also commendable. However, a lower percentage using soap (Q4) suggests the need for better handwashing education. Overall, children show promising hygiene awareness, but there's still room for improvement through health education at schools.

Objective 1: To assess the awareness level regarding personal hygiene among primary school children

Statements:

- Awareness of brushing, bathing, handwashing, nail cleanliness, and proper hygiene techniques.

Descriptive Statistics (Mean Scores):

Statement	**Mean Score**
I know that brushing my teeth daily keeps my teeth healthy.	4.61
I understand the importance of washing hands before eating.	4.57
I know that bathing helps keep my body clean and fresh.	4.48
I am aware that dirty nails can cause illness.	4.36
I know the correct way to wash my hands with soap and water.	4.42

Interpretation:

Most children agreed or strongly agreed with the awareness statements, showing a good understanding of basic hygiene concepts.

Objective 2: To examine personal hygiene practices followed daily by children

Statements:

- Daily brushing, handwashing, nail trimming, bathing, and clean clothing habits.

Descriptive Statistics (Mean Scores):

Statement	Mean Score
I brush my teeth twice a day.	4.10
I wash my hands before and after meals.	4.22
I cut my nails regularly.	4.00
I wear clean clothes every day.	4.34
I bathe daily using soap and water.	4.20

Interpretation:

Most students reported following good hygiene practices consistently. However, a slightly lower score for nail cutting may indicate the need for more reinforcement in this area.

Objective 3: To identify the effect of hygiene practices on children's health

Statements:

- Frequency of falling sick, feeling active, and positive reinforcement from parents/teachers.

Descriptive Statistics (Mean Scores):

Statement	Mean Score
I fall sick less often because I keep myself clean.	4.18
I feel active and healthy when I maintain hygiene.	4.31
I have fewer stomach aches or infections due to good hygiene.	4.10
My teachers and parents appreciate my hygiene habits.	4.40
I avoid sharing personal items to prevent infections.	4.02

Interpretation:

Children generally believed that their hygiene practices positively affect their health and well-being.

Normality Testing

- **Test Used:** Shapiro-Wilk Test
- **Result:** For most variables, $\mathbf{p < 0.05}$
- **Conclusion:** The data is **not normally distributed**, so **non-parametric tests** were used in hypothesis testing.

Reliability Testing

- **Tool Used:** Cronbach's Alpha
- **Result:** $\boldsymbol{\alpha = 0.84}$
- **Interpretation:** The questionnaire had a high level of internal consistency. This means the items were reliable and dependable for measuring hygiene awareness and behaviour.

Hypothesis Testing

Hypothesis 1

Objective: Assess hygiene awareness differences across Tapi, Bharuch, and Dang.

- **Null Hypothesis (H_{01}):** No significant difference in awareness levels.
- **Alternative Hypothesis (H_{11}):** Significant difference exists.

Test Used: Kruskal-Wallis H Test (due to non-normality and 3-group comparison)

- **Result: p-value = 0.022**
- **Conclusion:** Reject H_{01}
- **Interpretation:** There **is** a statistically significant difference in hygiene awareness levels among students from different districts. Regional factors such as school environment or local health programs might be influencing this difference.

Hypothesis 2

Objective: Identify if hygiene practices affect health outcomes.

- **Null Hypothesis (H_{02}):** Hygiene habits have no effect on health.
- **Alternative Hypothesis (H_{12}):** Hygiene habits do affect health.

Test Used: Spearman's Rank Correlation

- **Result:** Correlation Coefficient = **0.47**, **p = 0.000**
- **Conclusion:** Reject H_{02}
- **Interpretation:** A **moderate positive relationship** exists between good hygiene and better health. Children with better habits reported fewer sickness incidents and feeling healthier overall.

Hypothesis 3

Objective: Suggest school-based hygiene program improvements.

- **Null Hypothesis (H_{03}):** No association between programs and behavior.
- **Alternative Hypothesis (H_{13}):** Significant association exists.

Test Used: Chi-Square Test of Independence

- **Result: p-value = 0.008**
- **Conclusion:** Reject H_{03}
- **Interpretation:** There is a **strong link** between school hygiene education and improvement in children's daily hygiene habits. Schools are making a meaningful difference.

MAJOR FINDINGS OF THE STUDY

1. **Balanced Participation Across Districts**

   The survey responses were evenly spread across the three selected districts—Tapi, Bharuch, and Dang. Among them, Tapi had slightly more participants, reflecting good representation from all areas.

2. **Nearly Equal Gender Representation**

   The study included both boys and girls in almost equal numbers, with boys making up about 53% and girls around 47%. This balance ensures that the findings reflect the hygiene behavior of both genders fairly.

3. **Most Children in Key Learning Age Group**

   A large portion of the children were between 8 and 11 years old, which is a critical age for forming personal habits and learning lifelong skills like hygiene practices.

4. **Mid-Primary Students Formed the Majority**

   Students from 2nd to 4th standard made up the largest part of the sample. This is an ideal group to assess because they are young enough to benefit from guidance and old enough to understand hygiene concepts.

5. **Higher Rural Representation**

   Most of the children belonged to rural areas (40%), followed by those from urban and tribal backgrounds. This mix highlights the need to tailor hygiene education programs to various living environments.

6. **Limited Parental Education**

   Over half of the children had parents who either had no formal education or only completed primary school. This points to the importance of involving schools and community programs in spreading hygiene awareness where parental guidance may be limited.

7. **Good Basic Hygiene Awareness Among Students**

   Most primary school children demonstrated a strong understanding of basic hygiene principles, such as brushing teeth, handwashing before meals, and the importance of bathing regularly.

8. **Regular Hygiene Practices Are Common**

   A majority of the students reported brushing their teeth twice a day, bathing daily, wearing clean clothes, and washing hands—showing that hygiene habits are being practiced consistently in daily life.

9. **Slight Gaps in Nail Hygiene Observed**

   While general hygiene practices were well-followed, some students admitted they did not cut their nails regularly. This highlights a small but important area for improvement in personal care routines.

10. **Hygiene Positively Impacts Health**

    Children who followed good hygiene practices regularly reported falling sick less often. Many also felt more active and energetic, showing a clear link between personal cleanliness and overall health.

11. **Appreciation from Parents and Teachers Matters**

    Students noted that encouragement from parents and teachers played a role in their hygiene behavior. This recognition seems to reinforce their motivation to stay clean and healthy.

12. **Differences Found Across Districts**

    The study found meaningful differences in hygiene awareness levels between children in Tapi, Bharuch, and Dang districts. These variations might be due to differences in school programs, community outreach, or living conditions.

13. **Strong Support for School-Based Hygiene Education**

    There was a noticeable improvement in hygiene behavior among students who were part of structured hygiene education programs at school. This suggests that such initiatives are effective and should be strengthened further.

14. Parental Education Influences Child Hygiene

The data revealed that children whose parents had higher education levels tended to follow better hygiene routines. This shows the importance of involving families in awareness efforts.

15. Tribal and Rural Areas Need More Focus

While overall hygiene awareness was decent, children from tribal and remote rural areas showed slightly lower scores, indicating the need for targeted support in those regions.

16. Reliable and Trustworthy Data

The questionnaire used in the study was found to be highly reliable, ensuring that the responses collected genuinely reflected the students' awareness and behavior related to hygiene.

CONCLUSION

The study aimed to explore the awareness and daily hygiene habits of primary school children across the Tapi, Bharuch, and Dang districts of South Gujarat. The findings present a comprehensive and encouraging picture of hygiene practices among the young population. Children demonstrated a fair understanding of personal hygiene concepts such as the importance of brushing teeth, handwashing, bathing, and wearing clean clothes. Most students reported following these practices regularly, reflecting the success of early hygiene education. However, the study also highlighted specific gaps—particularly in areas such as nail hygiene and among students from tribal and rural regions. These gaps suggest the need for targeted interventions and greater outreach efforts. The data also pointed out that children whose parents had limited formal education were more likely to have weaker hygiene habits, underlining the influence of family background on a child's day-to-day behavior. Notably, school-based hygiene education programs proved to be highly effective in improving student awareness and behavior. Appreciation and encouragement from teachers and parents also played a significant role in reinforcing these practices. Overall, the study concludes that while hygiene awareness is developing well among primary school children, there is still room for improvement, especially in underserved communities. Schools, parents, and local health authorities must work together to strengthen hygiene education and ensure that every child—regardless of location or background—has the knowledge and support needed to lead a clean and healthy life.

SUGGESTIONS

- Schools should conduct regular hygiene awareness sessions through fun and interactive activities to help children adopt clean habits from an early age.
- Special attention must be given to children from rural and tribal areas by organizing community-based hygiene programs and providing basic sanitation resources.
- Parents should be encouraged to participate in hygiene education initiatives so they can reinforce good practices at home and serve as role models for their children.

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