

Research Article

A Study to Evaluate the Effectiveness of a Puppet Show on Knowledge Regarding Personal Hygiene among Primary School Children in Selected Primary Schools of Kanpur, U.P

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Abstract:

Personal hygiene is a fundamental component of health promotion, especially among primary school children. Poor hygiene practices can lead to various infections, absenteeism, and social problems. Innovative and child-friendly teaching methods like puppet shows can play a vital role in improving knowledge and practices related to personal hygiene among young children.

A quantitative research approach with a pre-experimental one-group pre-test–post-test design was adopted. The study was conducted among 60 primary school children aged 6–12 years in selected primary schools of Kanpur, Uttar Pradesh. A non-probability convenient sampling technique was used. Data were collected using a structured interview schedule to assess knowledge before and after the intervention. The puppet show on personal hygiene was administered on the same day as the pre-test, and the post test was conducted after seven days. Descriptive and inferential statistics were used for data analysis.

The findings revealed that before the intervention, the majority of children had inadequate (56.66%) and moderate (43.33%) knowledge, with no child having adequate knowledge. After the puppet show, there was a significant improvement in knowledge levels. The mean knowledge score increased markedly from 9.92 to 24.75, and the calculated t-value ($t = 24.82$) indicated a highly significant difference. Most demographic variables showed no significant association with knowledge, except maternal education, which had a significant influence.

The study concluded that the puppet show was an effective, engaging, and child-friendly teaching strategy to improve knowledge regarding personal hygiene among primary school children. Educational interventions using interactive methods can significantly enhance children's awareness and promote healthy practices.

Keywords: Personal hygiene, Puppet show, Primary school children, Knowledge, Health education, Nursing intervention.

1. INTRODUCTION:

Healthy hygiene habits start early in life, but maintaining personal cleanliness is important at every stage. Children who are taught proper hygiene and understand its importance are more likely to carry these habits into adulthood. As children grow, especially after infancy, it can become more challenging to keep them clean. Initially, families play a key role in teaching hygiene, but over time, children learn to take responsibility and follow cleanliness practices

on their own. As they get older, parts of the body such as the face, hands, and feet are more prone to becoming dirty. Establishing effective hygiene practices in childhood plays a crucial role in reducing the transmission of germs and illnesses. Hygiene takes on even greater significance during puberty, as hormonal shifts result in heightened body odor and greater oil secretion in the skin and hair.

Washing hands with soap before eating and after using the toilet helps prevent the spread of germs and restroom can prevent common childhood infections include bacterial skin infections, respiratory ailments, and childhood diarrhea. According to a UNICEF assessment, unsanitary surroundings and inadequate personal hygiene were responsible for about half of the illnesses discovered among Indian kids. It is essential for elementary students to maintain good hygiene practices, especially through regular hand washing, because they are often in close contact to one another in classrooms—sharing desks, seats, and even transmitting diseases. Researchers from the U.S. Centers for Disease Control and Prevention and Yamaguchi University School of Medicine in Japan conducted a study in a low-income area of Pakistan that highlighted this importance. In this research, families lacking the means to purchase soap were educated on effective hygiene practices and were supplied with soap through donations. Consequently, there was a 50% decrease in infections among children within that community.

Children can be taught good personal hygiene in a fun and engaging way. Activities like games can help test their ability to remember the steps needed to achieve proper hygiene. Children's enthusiasm in learning these habits is maintained through the use of imagination and creativity. They can be effectively motivated by tools including charts, graphs, comedy, stickers, puppets, and songs. It is important not to make hygiene practices too complicated for children. As they develop these lifelong habits, the process should remain enjoyable and light. Practicing proper hygiene helps children build healthy behaviors that last throughout their lives.

Need for the Study:

In rural areas, one of the largest populations of school-age children is found in India. Approximately 6.3 lakh rural primary and higher elementary schools serve 80 million school-age children. But it's also a fact that only 8% of schools have bathroom on campus. Just 44% of the 6.3 lakh rural primary and upper elementary schools have access to water, 19% have urinals, and 8% have restrooms. Just 19% have separate urinals, and only 4% have female-only restrooms. Under these conditions, schools and the surrounding environment turn very hazardous places where diseases propagate.

At the end of 2007, UNICEF reported that diarrhea killed over 1000 children in India per day. By the end of 2002, around 2.6 billion people (40%) worldwide lacked access to sanitary facilities and had poor hygiene, according to the WHO- UNICEF joint monitoring program. At the end of 2008, UNICEF reported that approximately 35% of Indian schools lacked restrooms, and those that did were frequently inoperable or unusable.

In four schools in Delhi—two in urban slums and two in rural villages—the study sought to determine the prevalence of eye-related disorders among elementary school students. All enrolled students underwent clinical examinations and interviews, while their parents provided socio demographic information. Among the 775 participants, 22.7% were found to have ocular problems. The most common conditions included refractive errors (5.4%), conjunctivitis (4.6%), trachoma (4.3%), xerophthalmia (4.1%), sty (1.3%), and other disorders. The findings also showed that factors such as low socioeconomic status, poor personal hygiene, religion, and birth order were associated with a higher risk of eye diseases.

Problem Statement:

“A Study to Evaluate the Effectiveness of a Puppet Show on Knowledge Regarding Personal Hygiene among Primary School Children in Selected Primary Schools of Kanpur, U.P.”

OBJECTIVES OF THE STUDY:

Research objectives are specific accomplishment that the researcher hopes to achieve by conducting study.

- To assess the pre-test knowledge level of primary school children regarding personal hygiene.
- To evaluate the effectiveness of a Puppet show on personal hygiene by comparing the pre-test and post-test knowledge scores.
- To find out the association between pre-test knowledge level of primary school children regarding personal hygiene with selected socio-demographic variables.

Hypothesis:

Hypothesis was tested at 0.05 level of significance.

Research Hypothesis

- **H1**- There is statistically significant difference between the personal hygiene knowledge scores of primary school children before and after the test.
- **H2**- There is significant association between pre-test knowledge scores regarding personal hygiene among primary school children with their selected socio-demographic variables.

Null hypothesis

- **H01**- There is no statistically significant difference between the personal hygiene knowledge scores of primary school children before and after the test.
- **H02**- There is no significant association between pre-test knowledge scores regarding personal hygiene among primary school children with their selected socio-demographic variables.

2. METHODS AND MATERIALS:

Research approach:

The Research Approach used for this study was a Quantitative research approach.

Research Design:

The research design used in this study was pre-experimental research design, one-group pre-test–post-test research design.

Variables:

Independent Variables: In the present study, the independent variable was puppet show about personal cleanliness

Dependent Variables: In the present study, the dependent variable was the degree of personal hygiene awareness among elementary school students.

Socio-Demographic Variables: In the present study, the socio-demographic variables were age in years, gender, religion, class, father's education, mother's education, type of family.

Population-

The population for the present study consisted of all primary school children.

Target Population-

The target population of the present study consisted of all primary school children in Kanpur, UP

Accessible Population-

The accessible population of the present study consisted of primary school children studying in a selected rural primary school in Kanpur, Uttar Pradesh.

Sample-

In this study, the sample comprised primary school children who fulfilled the sampling criteria for the study.

Sample Size-

The sample size for this study was 60 primary school children.

Sampling Technique-

In this study, Systemic Convenience Sampling Technique was used to select the sample.

Sampling criteria-

Inclusion Criteria:

- Children in elementary school who fit the following criteria were included:
- Enrolled in a government school in a rural area
- There were both boys and girls present.
- Attending elementary school
- Willing to take part in the research

- Presentwhenthe datawasbeing collected
- CapableofspeakingandcomprehendingEnglishand Hindi.

ExclusionCriteria:

- Childrenwhodeclinedtotakepartintheresearch
- Childrenwhoweren'tpresentwhenthe data wasbeing collected

DevelopmentoftheTool:

Datagatheringtoolsaremethodsorapparatus thataresearcher usesto evaluateorobserve significant variables in a study.

Methodsofdevelopingthe tool:

Thefollowingwereusedto constructthetool:

- Ananalysisofrelevantliterature
- Professionaladvice
- Makinga blueprint

Thetoolconsistedoftwosections:

SectionA:Thissectioncomprisedsocio-demographicvariablessuchasageinyears,gender, religion, class, father's education, mother's education, type of family

SectionB:ThissectioncomprisedaSelf-StructuredQuestionnairewhichincluded30 multiple- choice questions.

3. RESULTANDFINDINGS:

SECTIONI

Frequencyandpercentagewisedistributionofdemographicvariableofprimaryschool children.

Themajorfindingsofthe studywereasfollows: -

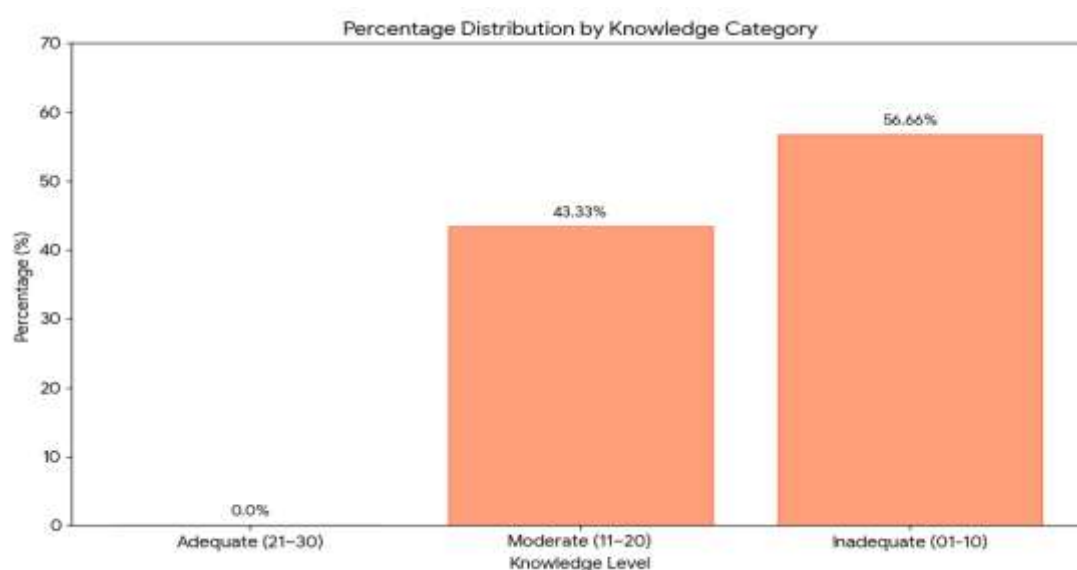
1. Majorityofprimary schoolchildren 32 (53.33%) werein theagegroupof05-06 years.
2. Majorityofprimaryschool children35(58.33%)wereboys.
3. Majorityofprimaryschoolchildren 53(88.33%)werefrom Hindu religion.
4. Majorityofprimaryschoolchildren30(50%) werefrom <3rdstandard.
5. MajorityofFather'seducation 38(63.33%) werefrom primaryeducation.
6. MajorityofMother'seducation 50(83.33%) werefrom primaryeducation.
7. Majorityofprimaryschoolchildren39(65%) werefrom jointfamily.

SECTIONII

Pre-test knowledge scores of the primary school children regarding personal hygiene.
Classification of respondent on pre-test knowledge regarding personal hygiene among primary school children.

n= 60

Knowledge	Category	Frequency	Percentage
Adequate	21-30	0	00%
Moderate	11-20	26	43.33%
Inadequate	01-10	34	56.66%
Total		60	100%



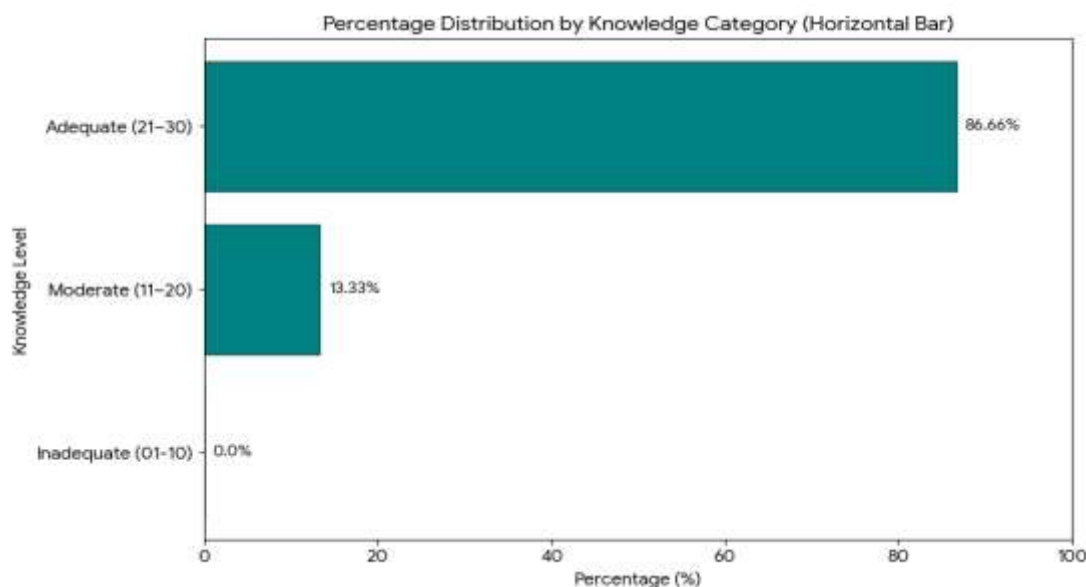
InPre-test, out of 60 samples 34 samples (56.66%) had inadequate level of knowledge, 26 samples (43.33%) had moderate level of knowledge, no one had adequate level of knowledge.

Section III

Post-test Knowledge Scores of the Primary School Children Regarding Personal Hygiene.
Classification of respondent on post-test knowledge regarding personal hygiene among primary school children.

n= 60

Knowledge	Category	Frequency	Percentage
Adequate	21-30	52	86.66%
Moderate	11-20	08	13.33%
Inadequate	01-10	00	00%
Total		60	100%



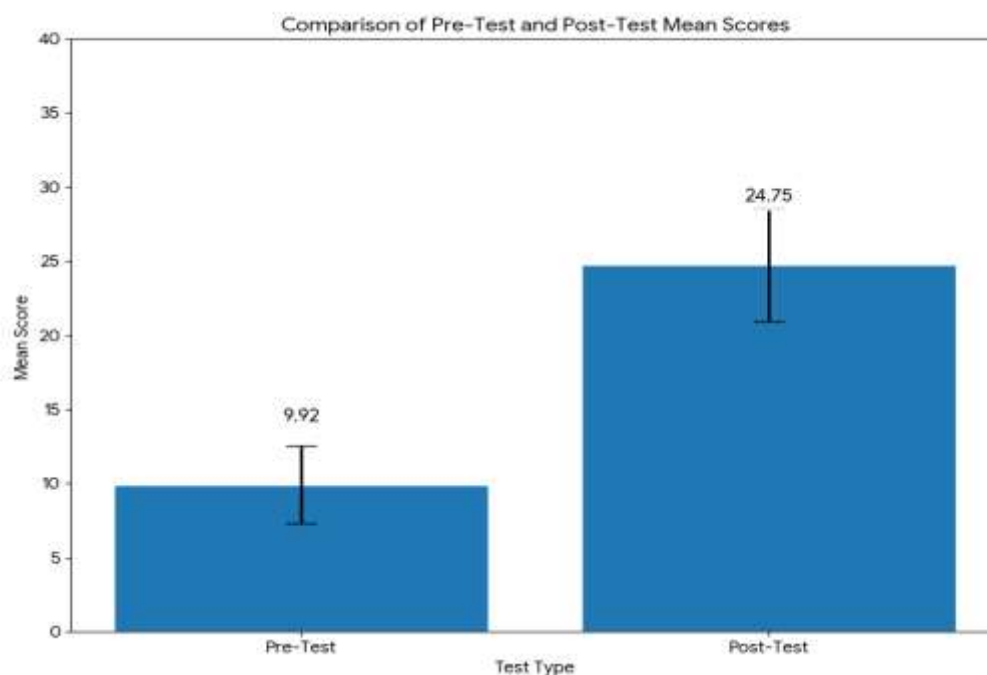
In Post-test, out of 60 samples no one had inadequate level of knowledge, 08 samples (13.33%) had moderate level of knowledge, 52 samples (86.66%) had adequate level of knowledge.

Section IV

Comparison of Pre-Test and Post-Test Knowledge Regarding Personal Hygiene among Primary School Children.

n= 60

	Maximum	Mean	Standard Deviation	tTest	Inference
Pre-test	30	9.92	2.61	24.8	S
Post-test	30	24.75	3.82	2	S



The puppet show has been developed to impart knowledge among primary school children. The effectiveness of puppet show was tested and found effective results. The Mean scores difference and after administration of puppet show has shown significant difference. The Mean value of pre-test was 9.92 which has been increased to 24.75 in the post-test. The t-test value was 24.8 at the inference is significant. From the above interference, it is made clear that puppet show has positive impact on knowledge among primary school children. There is a significant difference between the pre-test and post-test level of knowledge regarding personal hygiene. Hence the H01 is accepted.

4. CONCLUSION:

On the basis of findings of the study, it was concluded that after puppet show on knowledge regarding personal hygiene the concept regarding puppet show was cleared to the primary school children which was indicated by significant increase in post test mean knowledge scores.

Good cleaning practices begin in childhood, but personal hygiene is crucial throughout life. Children who learn about it and how to maintain good hygiene will typically continue that knowledge into adulthood. Transitioning from infancy into childhood often presents new challenges in maintaining a child's cleanliness, yet this period serves as the foundational stage for hygiene education. While habits initially begin within the family unit, children gradually develop the autonomy to follow cleaning protocols independently. As children become more active, their face, hands, and feet are frequently exposed to dirt and pathogens; therefore, instilling consistent hygiene practices early on is a vital defense against the transmission of germs and illnesses. These habits become even more critical during the onset of puberty, as hormonal shifts trigger increased oil production in the skin and hair, as well as more pronounced body odor, necessitating a more rigorous personal care routine. Basic hygiene practices, such as washing hands with soap before meals and after using the restroom, serve as a primary defense against a range of pediatric health issues. Common children ailments like

bacterial skin infections, respiratory ailments, and diarrheal illnesses can be prevented with this easy regimen. About half of the illnesses found in schoolchildren in India were linked to unhygienic environments and poor personal cleanliness, according to a UNICEF report. Because elementary school students spend so much time in close quarters—sharing desks, seats, and educational materials—the classroom atmosphere becomes a high-risk setting for the spread of diseases.

Educating children on personal hygiene can be an engaging and enjoyable process rather than a rigid chore. By incorporating imagination and creativity—such as through the use of educational games, puppets, songs, humor, or visual aids like charts and stickers—parents and educators can sustain a child's interest and make hygiene goals memorable. The key is to maintain a light-hearted approach, ensuring the concepts are simple enough for their developmental stage to avoid frustration. When these practices are framed as fun, positive experiences, children are more likely to internalize them, fostering healthy habits that persist throughout their life.

REFERENCES:

1. Rama B. School health services in India: The social and economic context. New Delhi: Sage Publications Pvt Ltd; 2008. p. 1–2.
2. Ministry of Human Resource Development, Government of India. School water supply, sanitation and hygiene education: India technical note series. New Delhi: Government of India; 2004.
3. Kostanski M, Gullone E. The impact of teasing on children's body image. *J Child Fam Stud*. 2007.
4. Esrey SA, Potash JB, Roberts L, Shiff C. Effects of improved water supply and sanitation on infectious diseases. *Bull World Health Organ*. 1991;63:757–72.
5. Shaw S, Basu R, Harikrishna B, Paul B. Personal hygiene practices among school children. *Indian J Community Health*. 2025;37:750–5.
6. Dongre AR, Deshmukh PR, Borante AV, Thaware P, Garg BS. Hygiene education among rural school children. *Online J Allied Sci*. 2007;4(2).
7. Department of Drinking Water and Sanitation, Government of India. New TSC guidelines.
8. Chaturvedi S, Aggarwal OP. Pediculosis capitis in rural Delhi school children. *Asia Pac J Public Health*. 1999;11:30–3.
9. Ladera-Castañeda M, Córdova-Limaylla N, Briceño G, Rosas-Díaz J, Cayo-Rojas C. Puppet theater and oral health. *J Int Soc Prev Community Dent*. 2022;12.
10. Verma L, Rangila D, Shukla P. Promoting hygiene through stories. *Int J Humanit Soc Stud*. 2016;4:101–4.