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A Study to Evaluate the Effectiveness of Puppet Show on Knowledge Regarding Personal Hygiene Among Primary School Children (7-10 Years) in Selected School at Pirda, Chattisgarh

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***Abstract*: Introduction: Personal hygiene is important in every stage of life, but good cleanliness habits start in childhood. Kids who learn what it is and how to follow proper hygiene practices will usually carry that into adulthood. Hygiene education starts with the family, and eventually youngsters can learn what to do and follow cleanliness rules on their own when a baby makes the transition into childhood, it may be more of a challenge to keep her fresh. As a child grows, so do his opportunities for the face, hands and feet to become messy and dirty. Learning proper cleanliness skills in childhood can help prevent the spread of germs and illness. As a child grows, good hygiene becomes increasingly important because hormonal changes during puberty lead to stronger body odor and oilier hair and skin. Personal hygiene is the applications that people perform, to protect their health and keep their life healthy. Personal hygiene are the behaviors that must be practiced in daily life, starting from morning to sleep time to protect our health. To protect health, body, hair, mouth and teeth must be cleaned regularly and clothes must be washed frequently. Personal hygiene is intimately involved with health. AIM: The aim of the study was to evaluate the effectiveness of puppet show on knowledge regarding personal hygiene among primary school children (7-10years) in selected school at Pirda (C.G.).'' Setting and Design: A quantitative research approach with pre experimental research design was adopted for this study. The study focused on primary school children aged 7 to 10 years at government primary school Barekel, Pirda (C.G.) Material and Method: The research approach used for this study was quantitative approach. A Pre-experimental, one group pre-test post-test research design was adopted. 60 students were selected for this study by using systematic random Sampling technique. Data was collected with the help of Self- Structured Knowledge questionnaire regarding personal hygiene. Results: Knowledge regarding personal hygiene among primary school children (7-10years) were analyzed using frequency and percentage. It is seen that out 60 students, in pre-test majority 38 (63.33%) had average knowledge score, 15 (25%) had poor knowledge score and only 7(11.66%) had good knowledge score regarding personal hygiene. However, in post- test knowledge score regarding personal hygiene was increase, majority 42 (70%) children's had good knowledge score and only 18 (30%) had good knowledge score and none of the children's had poor knowledge score. When evaluate the effectiveness of puppet show on knowledge regarding personal hygiene among primary school children (7-10years). In which pre-test mean is 8.93 while in post test mean is 14.96. The standard deviation of Pre-test is 3.64 and post test is 2.52. It indicates that there is significant gain in knowledge in post-test after the intervention of puppet show. Since the calculated "t" value is 20.69 is greater than the table value 2.00 at P< 0.05 level of significance. Conclusion: The study conducted that the puppet show was effective to increasing the knowledge regarding personal hygiene among primary school children (7-10 years) at government primary school Barekel, Pirda (C.G.).**

***Keywords*: assess, effectiveness, puppet show, knowledge, personal hygiene, primary school children, selected school.**

1. Introduction

Discussing personal hygiene is something most people prefer to avoid. Afterall, it can be tricky to let someone know that his hygiene is lacking without giving offense. In school, teachers often find themselves having to instruct students on the importance of good hygiene. Teaching the basics of proper personal hygiene is important for keeping kids healthy and clean. Children with poor hygiene often suffer from health problems. They may be ostracized and ridiculed by their peers, as well. To avoid damaging the student's self-esteem, a teacher must broach the subject of personal hygiene carefully.

World Health Organization defines, hygiene as the practices and conditions which help to prevent the spread of diseases maintain health. Personal hygiene mentions that the maintaining cleanliness of the body. Numerous people consider cleanliness with hygiene,' but hygiene is a complex process which is a combination of various methods and practices to achieve cleanliness and sterility. Good hygiene is a principal barrier to numerous communicable diseases, which includes the fecal–oral diseases, and which promotes well-being and healthier. To attain the significant health benefits, better hygiene should be built concurrently along with the development in the sanitation and water supply, and be merged with other interventions, equally improving in increasing

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income and nutrition

The prime goal of United Nation's Sustainable Development is well-being and good health which has a world-wide effect as its aim of reducing mortality. The possibilities of achieving the main goal requires a paradigm shift via the conventional approach to treatment, education and disease prevention Personal hygiene, also known as personal care, which includes: cleaning foot, nails, genitals, hair, bathing and dental cares, and washing of clothes. Grooming includes looking after hairs and fingernails, such as trimming of fingernails and barbing of hairs Household and personal hygiene can also act as a shielding strategy against upcoming epidemics. Therefore, hygiene is the prime security to lessen the spread of pathogens in every day's environment. Washing hands with soap is likely to be one of the principal keys of averting transmission of infectious disease. As personal hygiene is an important thing and which help to combat the germs on the body that could lead to bad odour and illness.

Current Situation of hygiene related problems at present, several developing countries even now struggle to survive with consistent water shortages and is deficient of satisfactory water infrastructure. Hygiene creates a worldwide health challenge specially in the developing countries even though hygiene has been barely listed on the global development program in spite of the fact that a hygienic behaviour like hand washing could save lives of people every year. Maintaining proper techniques may help to control this parasitic infestation, which comprise taking bath regularly, washing clothes using hot water, fumigation also needed for sometimes. Dental Caries; which is also known as cavities and most commonly known as tooth decay. It is caused by breakdown of enamel; which occurs due to presence of bacteria on teeth that breakdown foods and generate acid that destroys tooth enamel. Maintaining good oral hygiene can prevent dental carries; which include brush teeth twice a day, eat nutritious meals, visiting dentist regularly.

Hygiene has long-established links with public health. On Global Hand washing Day, United Nations International Children's Emergency Fund and World Health Organization launched 'State of the World's Hand Hygiene: a global call to action to make hand hygiene a priority in policy and practice'. The simple act of cleaning hands can save lives and reduce illness by helping prevent the spread of infectious diseases. These diseases can be caused by pathogens (germs) transmitted through the air or via surfaces, food or human faeces. Because people frequently touch their face, food and surfaces, hands play a significant role in spreading disease. It is estimated that 1.4 million people including nearly 400,000 children under five die each year from preventable diseases attributable to inadequate wash including diarrhoea, acute respiratory infections, soil transmitted helminths and under nutrition. Unsafe hand hygiene alone is responsible for 394,000 deaths from diarrhoea and 356,000 deaths from acute respiratory infections. As well as preventing a multitude of diseases, hand hygiene can help avoid significant financial costs resulting from sickness and death.

During clinical posting and community posting in Bachelor of Science in nursing training period as well as formal & informal discussions with the children's and their mothers, the investigator have got the idea. So based on above findings and experience in pediatric wards the investigator had decided to conduct research on effectiveness of puppet show on knowledge regarding personal hygiene among school going children (7-10 years) in selected schools at Pirda (C.G.)."

2. Objectives

1. To assess the pre-test and post-test knowledge score regarding personal hygiene among primary school children (7-10years) in selected schools at Pirda (C.G.).
2. To evaluate the effectiveness of puppet, show on knowledge score regarding personal hygiene among primary school children (7-10 years) in selected schools at Pirda (C.G.).
3. To find out the association between pre-test knowledge score regarding personal hygiene among primary school children (7-10 years) with their selected socio-demographic variables.

A. Hypotheses

- H_0: There will be no significant difference between pre test and post test of knowledge score regarding personal hygiene among primary school children (7-10years) in selected school at Pirda (C.G.).
- H_1: There will be significant difference between pre test and post test level of knowledge score regarding personal hygiene among primary school children (7-10years) in selected school at Pirda (C.G.).
- H_3: There will be significant association between pre-test knowledge score regarding personal hygiene among primary school children (7-10years) with their selected socio-demographic variables.

3. Operational Definition

- *Evaluate*: in this study the word evaluate refers to assess the effectiveness of puppet show on knowledge regarding personal Hygiene.
- *Effectiveness*: It refers to the desired change brought about by the puppet Show and is measured in terms of significant knowledge gain in the posttest.
- *Puppet show*: In this study it refers to the learning method developed by investigator regarding personal hygiene.
- *Knowledge*: Knowledge refers to level of understanding of school going children (age 7-10years) on personal hygiene.
- *Personal Hygiene*: It refers to the care of hair, skin, face, teeth, ears, nose, nails, feet.
- *Primary School children*: In this study, primary school children refer to specifically to 2nd, 3rd, 4th, 5th grades (age 7-10 years) in selected schools Pirda.

4. Sampling Criteria

A. Inclusion Criteria

Primary school students those who were,

- Willing to participate in the study
- Available at the time of data collection
- Regular in the class

1) Exclusion Criteria

Primary school students those who were,

- Suffering from developmental problem and mental illness
- Age below 8 year and above 12 years

5. Material and Method

The conceptual frame work adopted for the study is Imogene kings goal attainment theory. In this study pre-experimental research design was used for study. The tool includes socio demographic data and multiple-choice questionnaires to assess the knowledge regarding personal hygiene. The study was conducted on among 60 primary school childrens from selected from government primary school Barekel, Pirda (C.G.). In the present study the target population is primary school childrens (7-10 year of age). The sampling techniques adopted for this study was systematic random sampling technique. In the present study, independent was puppet show on level of knowledge personal hygiene and dependent variable was knowledge level of primary school children regarding personal hygiene

6. Description of the Tool

Data collection tools are the procedure or instruments used by the researcher to observe or measure the key variables in the research problem.

The self-administered questionnaire comprised of two sections.

- *Section I:* This consists of 11 questions related to the demographic variables of the respondents about age, gender, class, father education, mother education, father occupation, mother occupation, family income, Religion, previous knowledge of primary school children and source of information.
- *Section II:* This section consists of 20 multiple choice questionnaires, each question 4 option. Every right answer given 1 marks and in each wrong answer given 0 marks.

The knowledge of school going children regarding personal hygiene which is divided into five parts:

- *Part-1*: Deals with general information on personal hygiene
- *Part-2*: This section deals with hair care.
- *Part-3*: This section deals with oral hygiene.
- *Part-4*: This section deals with skin care.
- *Part-5*: This section deals with impact of poor personal hygiene.

7. Result and Discussion

A. Distribution of the Subject According to Socio-Demographics Variable

Table 1 (Fig. 1) Depict that of children 20 (33.33%) belong to 7 years of age, 17 (28.33%) belong to 10 years, 12(20%) belongs to 9 years only 11 (18.33%) belong to 8 years of age.

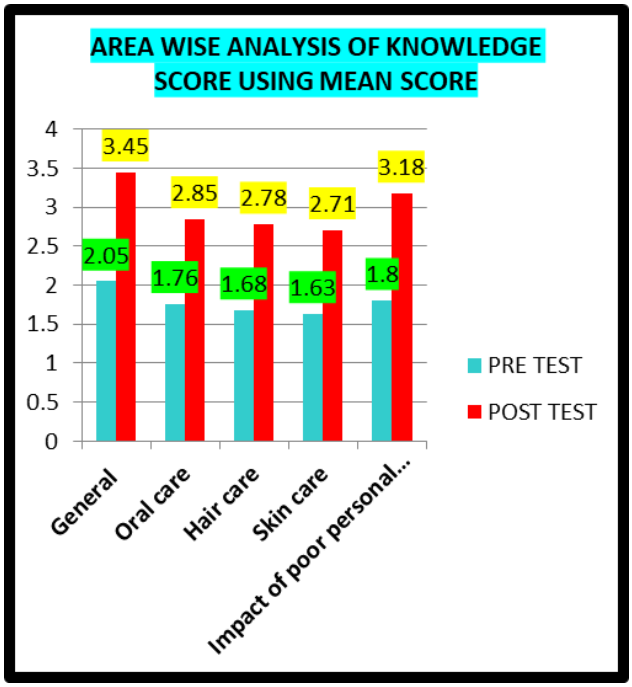

Fig. 1.

Table 2 (Fig. 2) Reveals the majority 39(65%) children's were girls and only 21(35%) were boys.

Result indicate that among all children, majority 18 (30%) studying in 2nd standard, 17 (28.33%) studying in 5th standards, 13 (21.66%) studying in 3rd standards and only 12 (20%) studying in 4th standard.

Maximum 22 (36.6%) father were having secondary school

Table 1

Area of knowledge	Pre test		Post test	
	Obtain score	Mean	Obtain score	Mean
General	123	2.05	207	3.45
Oral care	106	1.76	171	2.85
Hair care	101	1.68	167	2.78
Skin care	98	1.63	163	2.71
Impact of poor personal hygiene	108	1.8	191	3.18

Table 2

Level of knowledge	Pre Test				Post Test			
	(n)	(%)	Mean	SD	(n)	(%)	Mean	SD
Good (14-20)	7	11.66	8.93	3.64	42	70	14.98	2.52
Average (7-13)	38	63.33			18	30		
Poor (0-6)	15	25			0	0		

education, 16(26.66%) father had studied in diploma, 10 (16.66%) father had studied graduation and above, 8 (10%) father had studied in primary school and 4 (6.66%) father had illiterate.

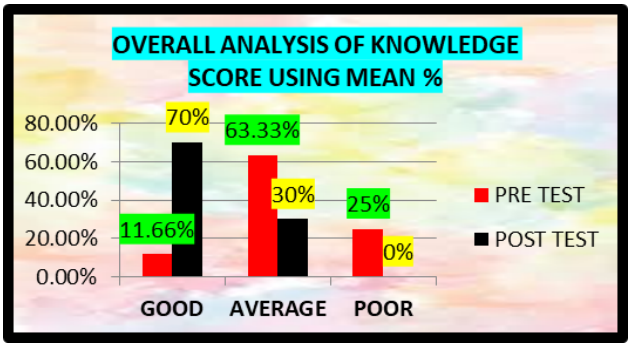

Fig. 2.

Distribution of according of children's according to education of mother. The result reflects that maximum 25 (41.66%) mother had studied in diploma school, 11(18.33%) had studied in secondary school, 10(16.66%) had studied in primary school, 10(16.66%) had illiterate and only 4 (2%) had studied in graduation and above.

Maximum fathers i.e. 30 (50%) were working in Government employee, 17 (28.33%) were private employee, 6(10%) were unemployed, 4(6.66%) were farmer and only 3(5%) were belong to other occupation.

Maximum 35 (58.33%) mother are unemployed, 14 (23.33%) were farmer, 8(13.33%) were Govt. employee, 2(3.33%) were private employee and only 1(1.66%) were belong to other occupation.

Maximum i.e., 28 (46.66%) were belongs to monthly income Rs. 10,001-15,000, 12(20%) have earn Rs < 10000 monthly, only 10 (16.66%) have earn Rs 15,001-20,000 and 10(16.66%) have earn Rs >20,001. monthly.

Majority 49 (81.66%) were Hindu, 6(10%) were Christian and only 5(8.33%) were Muslim.

Majority of 46 (76.66%) childrens have no previous knowledge regarding personal hygiene and 14(23.33%) have previous knowledge regarding personal hygiene.

The exposure of knowledge is about 7(11.66%) from mass media, 6(10%) from health worker and 1(1.66%) get knowledge through parents.

B. Area Wise Analysis of Pre-Test and Post Test Knowledge Regarding Personal Hygiene Among Primary School Children (7-10years) in Selected Schools at Pirda Using Mean Score

In relation to area wise analysis, in the pre test highest score get in the area of general (Mean 2.05) and lowest score get in the area of skin care (Mean 1.63). While in post test the highest knowledge score get in the area of impact of poor personal hygiene (Mean 3.81) and lowest score get in the area of skin care (Mean 2.71). The area wise analysis concluded that in the pre and post test children's had lowest knowledge score found in the area of skin care.

C. Overall Analysis of Pre-Test and Post Test Knowledge Regarding Personal Hygiene Among Primary School Children (7-10years) in Selected Schools at PIRDA

In pre-test among 60 children's majority 38 (63.33%) had average knowledge score, 15 (25%) had poor knowledge score and only 7(11.66%) had good knowledge score regarding personal hygiene. However, in post- test knowledge score regarding personal hygiene was increase, majority 42 (70%) children's had good knowledge score and only 18 (30%) had good knowledge score and none of the children's had poor knowledge score.

D. Paired "t" Test Analysis to Evaluate the Effectiveness of Puppet Show on Knowledge Regarding Personal Hygiene Among Primary School Children (7-10years) in Selected Schools at Pirda

The effectiveness of puppet show on knowledge regarding personal hygiene among primary school children (7-10years). In which pre test mean is 8.93 while in post test mean is 14.96. The standard deviation of Pre-test is 3.64 and post test is 2.52. It indicates that there is significant gain in knowledge in post-test after the intervention of puppet show. Since the calculated "t" value is 10.58 is greater than the table value 1.96 at $P< 0.05$ level of significance.

E. Chi-Square Analysis to Find Out Association Between Pre-Test Knowledge Score Regarding Personal Hygiene Among Primary School Children (7-10years) with Their Selected Socio-Demographic Variables

- There is significant association between pre-test knowledge score regarding personal hygiene among primary school children (7-10years) with their selected socio-demographic variables. Which includes gender (chi square value 47.85 is higher than critical value 5.99), education of father (chi square value18.49 is higher than critical value 15.50), Previous knowledge regarding personal hygiene (chi square value 6.97 is higher than critical value 5.99).
- There was no significant association between the pre test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with age (chi square value 8.22) at 0.05 level of significance.
- There was no significant association between the pre test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with class (chi square value 6.14) at 0.05 level of significance.
- There was no significant association between the pre test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with Education of mother (chi square value 6.54) at 0.05 level of significance.
- There was no significant association between the pre test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with Occupation of Father (chi square value 7.55) at 0.05 level of significance.
- There was no significant association between the pre

Table 3

Knowledge score	Obtain score	Mean	SD	"t" Value	DF	Table value	Significance
Pre test	536	8.93	3.64				
Post test	899	14.98	2.52	20.69	59	2.00	P< 0.05 HS

test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with Occupation of mother (chi square value 7.66) at 0.05 level of significance.

- There was no significant association between the pre test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with Monthly family income (chi square value 7.37) at 0.05 level of significance.
- There was no significant association between the pre test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with Religion (chi square value 0.8) at 0.05 level of significance.
- There was no significant association between the pre test levels of knowledge regarding personal hygiene among primary school children (7-10 years) with Source of information (chi square value 0.5) at 0.05 level of significance.

8. Implication

A. Nursing Practice

- Nursing practice is an ongoing process of assistance which aims the whole round development of mankind. The main focus of nursing practice is to reduce the morbidity and mortality rate and to improve the quality of life.
- A regular health education program should be carried out by nurse educator regarding personal hygiene.
- Educate the primary school children regarding personal hygiene and its importance.
- Educational programs with effective teaching strategies motivate children to learn about personal hygiene. Puppet show is considered an effective education strategy to improve the awareness and knowledge regarding personal hygiene.

B. Nursing Education

- Nursing education helps the nurse to excel in theoretical as well as practical level.
- In this present study the nurse educator gives priority to uphold the value of education regarding personal hygiene.
- Nurse educators need to lay emphasis on personal hygiene and its importance and primary school children to recognize the impact of poor personal hygiene.
- Nurse educators should give more prominence to practice of good personal hygiene.
- Nurse educators help to conduct educational programs among primary school children because hygiene practices can stave off childhood illness and infections. So training in personal hygiene could also save child from embarrassing moments and teasing by peers.

C. Nursing Administration

- The study helps the nurse administrators explore their potential innovative ideas in preparation in appropriate teaching material on personal hygiene and relative health tips.
- Nurse administrator should organize awareness camps for primary school children towards the personal hygiene.
- The study helps the nurse administrators to encourage the school health nurse to teach about the personal hygiene through in-service program.
- Nurse administrator should consider the health needs of children and educate children about importance of personal hygiene and impact of poor personal hygiene.

D. Nursing Research

- Research finding improve the knowledge of children about personal hygiene.
- Research must be done on various aspect of personal hygiene.
- Nurse researches should take efforts to conduct interactive sessions among children promoting their knowledge Moreover, it is important to assess the practice that are contribute to increased incidence of illness and infections.
- Evaluating the effectiveness of various interventions in the reduction of incidence of illness so that effective yet practical solutions can be developed.
- A research study can make remarkable changes in their knowledge, attitude, potentials and thereby improving the quality of nursing profession.

E. Limitations of the Study

- The sample size is limited to 60 primary school children in selected govt. primary schools, Pirda. Hence generalization is possible only to the selected settings.
- Duration of data collection is limited to 4 to 6 weeks.
- Systematic random sampling technique was used in the present study.
- The qualitative portion of the study consisted of a brief interview and did not involve a recorded, transcribed and was based solely on the notes of the researcher.

F. Recommendation

- Based on the findings of the study, following recommendations have been made:
- A similar study can be replicated on a large sample to generalize the findings.
- A similar study can be conducted by including

practical aspect.

- A similar study can be carried out to evaluate the efficiency of various teaching strategies like structured teaching program, role play; video assisted teaching programme and socio drama regarding personal hygiene.
- Based on study findings, intervention should be given to all children through mass media, role-play, drama, and classroom teaching, etc., to enhance the knowledge.
- A similar study can be undertaken with parents and other group.
- A similar study can be undertaken with control group design

9. Conclusion

In the present study it shows that in pre-test among 60 children's majority had average knowledge score, but in post-test knowledge score regarding personal hygiene was increase majority children's had good knowledge score. Hence it shows that there is puppet show is effective to increase the level of knowledge regarding personal hygiene among primary school children.

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