



A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGRADING HAND WASHING PRACTICES AMONG STUDENTS OF SELECTED SCHOOLS OF NAGPUR CITY

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KEYWORDS :

INTRODUCTION

“Happy Child Nation's Pride”

It is beyond doubt a very true and meaningful slogan children are the world's greatest resources. Child development is an investment in the future of the nation. The life is the hardest in the developing country where the basic sanitations are inadequate. where Every day 2000 Children are die as a result of disease caused by unclean water and poor sanitation in developing countries diarrhea is the leading killer of children's about 8% of all the death about Children's worldwide in 2015, it translate 1400 /day young children or about 526000 children a year despite availability of simple effective treatment.¹

Also 21000 to 143000 deaths occur worldwide due to cholera. Fe-coral route of transmission of infection is most commonly seen in school going children. Nearly about 880 million children are in need of treatment of this infection. A worm infestation also mostly seen in primary school going children. These all-communicable diseases caused burden on the country so this problem can be solved by use of simple act of hand washing among school going children.¹

Hand washing is especially important for children and adolescence as these age groups are the most susceptible to infections gain from unwashed hands, in addition to this due to close proximity of children in school and childcare sitting there is a higher chance for the spread of infectious diseases.¹

Hand washing celebrated annually on October 15. A Global hand washing day aims to create awareness of importance of hand washing. The previous year Global hand washing Day theme is “Make hand washing a habit”. The department of health has emphasized the 2016 Global hand washing day should not be ones of event rather a contribution of ongoing struggle to get people to adopt safe hygiene practices to prevent diseases.⁴

Researchers in London estimated that if everyone routinely washes their hands a millions of death year could be prevented a large percentage of food borne disease outbreaks as sprayed by contaminated hands in many lower income countries a diarrhoeal diseases is the leading cause of death among children's.³

As soon as a child is born he takes shelter in home as he grows School plays very crucial aspect of his life. School is one of the most organized secondary groups as social Institute which implements strategies to make the health needs of children. School has been identified as the entry point of hygienic awareness as a part of total sanitation campaign.

PROBLEM STATEMENT

“A Study To Assess The Effectiveness Of Planned Teaching Programme Regrading Hand Washing Practices Among Students Of Selected Schools Of Nagpur City”

OBJECTIVES OF THE STUDY

1. To assess hand washing practices among primary school students.
2. To evaluate the effectiveness of planned teaching

programme on hand washing Practices of primary school students.

3. To co-relate the study findings with selected demographic variable.

OPERATIONAL DEFINITIONS

1. **Assess:** - According to Oxford dictionary “assess” means evaluate or estimate the nature and quality. In this study, assess means, evaluate the quality of hand washing practices.⁷
2. **Effectiveness (adverb):** - According to oxford dictionary “effectiveness” means producing the result that is wanted or intended⁸ In this study effectiveness refers to the intended result of planned teaching Given to the primary students in terms of hand washing practices
3. **Planned teaching:** - According to Loretta E .Heidgerked, planned teaching units within one course which emphasis the acquisition of knowledge and attainment of skills in the group action such as in clinical conference or individually In this study planned teaching means acquisition of knowledge about hand washing Practices.
4. **Hand washing:** - According to Annamma Jacob, Hand washing is a vigorous, brief rubbing together of all surface of hands lathered in Soap, followed by rinsing under a stream of water.⁸ In study, same as above.
5. **Primary school:** - According to English oxford living dictionary A School of children between the ages of about 5 & 11. In this study, same as above⁸

HYPOTHESIS

H0- there is no significant difference between pre -test and post-test practice score of primary school students.

H1- There is significant difference between pre-test and post-test hand washing practices among primary school students.

MATERIALS AND METHODS USED

Research approach: - pre-experimental studies

Research design: - one group pre test post test design

Setting of the study: - C.P. barer primary school of Nagpur

Population: - primary school going children

Target population: - primary school going children of C.P. barer primary school Nagpur

Samples: - primary school going children in selecting schools and fulfilling the inclusion criteria

Sample size: - 30

Sample technique: - non probability purposive sampling

VARIABLES

Dependent variable: - it is the outcome or response due to the effect of independent variables which researchers want to be predictor explain in the study the dependent variables hand washing practices

Independent variable: - it is a stimulus or activity that is menu planned or away right by the researcher to create the effect on the dependent variable in this study the independent variable is planned teaching programmed.

SAMPLING CRITERIA

Inclusion criteria

- School children in selected Schools of Nagpur city.
- School children are willing to participate

- School children are available at the time of Data Collection

Exclusion Criteria

Students who have participated in hand washing campaign.

Development And Discription Of Tools In Study

The tools asses the knowledge regarding hand washing practices in primary school children was developed and submitting to review. Validity and reliability of the tool was checked.

The Tools Consist Of 2 Sections

Demographic data for children hand washing practices by observing observation checklist

Data Collection Procedure

After getting permission from school authority, a brief introduction of self and study was given to students.

Phase I: - selection of primary school going children.

Phase II: - pre test and administration of planned teaching program.

Phase III: - post test after seventh day of planned teaching program.

Plan For Data Analysis

The data obtained from 30 samples was analyzed by adopting the Descriptive statistics as frequency and percentage of samples, mean, mean percentage, standard deviation and inferential statistics as t test, chi-square test was prepared in accordance with various characteristics under study and percentage analysis was found.

RESULTS AND ANALYSIS

The results are presented in the following section

Section A:- Findings related to demographic characteristics of subject

Section B:- Effects on subject and their correlation with demographic data.

Statistical analysis was done under the supervision and guidance (statistician department of Preventive and social medicine Government Medical College and Hospital Nagpur).

Score represented as P value the performance was assessed by t- test and P value was considered as a non-significant difference.

The analyze data was interpreted it and conclusion was drawn and it is represented in the form of tables and graphs.

Table No.1 Assessment of effectiveness of planned teaching program regarding hand washing practices among students. N=30

	Pre test score	Post test score
Mean	5.76	10.67
SD	1.16	1.66
t-value	18.2525	
p-value	<0.0001, Highly Significant	
Effectiveness (%)	90.21%	

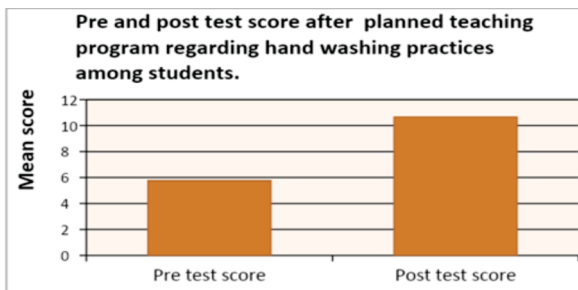


Figure no.1 Assessment of effectiveness of planned

teaching program regarding hand washing practices among students.

Inference:-Table no.1 and Figure no.1 shows the mean pre test score is 5.76+ 1.16 ,and post test score is 10.67+1.66. The difference between pre test and post test score is highly significant. (t -value =18.2525, p value is <0.0001). The mean effectiveness is 90.21%.

Table No.2 Correlation of effectiveness of planned teaching program regarding hand washing practices with gender of the subjects. N=30

Gender	Pre test	Post test	t- value	p- value	Effective-ness (%)	p-value
Male	5.80 ± 1.03	10.52± 1.53	14.8574	<0.0001, HS	86.29%	0.4148, NS
Female	5.66 ± 1.11	11 ± 2.0	10.6667	<0.0001, HS	99.36%	

NS: Not Significant.

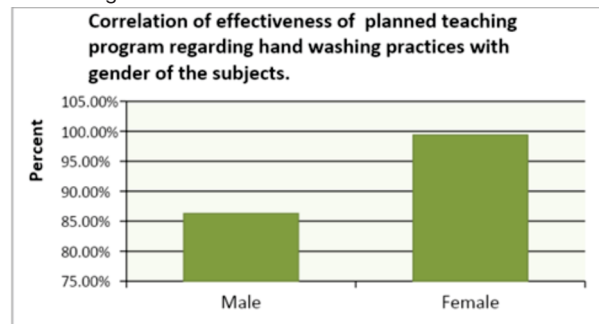


Figure no. 2 Correlation of effectiveness of planned teaching program regarding hand washing practices with gender of the subjects

Inference:- Table no 2 and figure no.2 deals with Correlation of effectiveness of planned teaching program regarding hand washing practices with gender of the subjects.

The mean pre test score of male is 5.80+ _0.3 and mean post test score is 10.52+ 1.53, so the difference is highly significant. Similarly the mean pre test score of female is 5.66+ _1.11 and post test score is 11 +2.0, so the difference is highly significant. The overall p value shows there is no any co relation between effectiveness of planned teaching and gender of the subjects (P=0.04148, NS)

Table No.3 Correlation of effectiveness of planned teaching program regarding hand washing practices with residence of the subjects N=30

Residence	Pre test	Post test	t-value	p-value	Effective-ness (%)	p-value
Urban	5.90 ± 1.17	10.95 ± 1.40	12.2973	<0.0001, HS	90.58	0.2965 ,NS
Slum	9.75 ± 0.70	10.12 ± 2.10	5.5841	0.0001, HS	75.58	

NS: Not Significant.

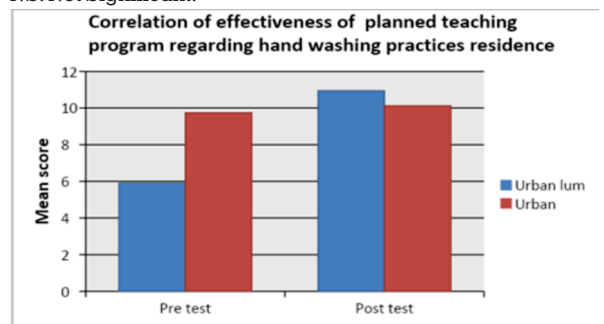


Figure no.3

Inference: Table no 3 and figure no.3 deals with Correlation of effectiveness of planned teaching program regarding hand washing practices with residence of the subjects.

The mean pre test score of urban slum residence is 5.90 ± 1.17 after planned teaching mean post test score is 10.95 ± 1.40 . The mean pre test score of urban residence is 9.75 ± 0.70 after planned teaching mean post test score is 10.12 ± 2.10 .

There is no any significant Correlation of effectiveness of planned teaching program regarding hand washing practices with residence of the subjects.

Table No.4 Correlation of effectiveness of planned teaching program regarding hand washing practices with mother's occupation of the subjects. N=30

	Pre test	Post test	t-value	p-value	Effective-ness (%)	p-value
Busi-ness	5.54 ± 1.03	10.54 ± 1.69	13.1101	<0.0001, HS	92.5	
House wife	5.8 ± 0.77	10.46 ± 1.30	11.7132	<0.0001, HS	84.23	F=3.64
Labourer	3	9	-	<0.0001, HS	200	P=0.025, S
Service	7.33 ± 1.52	12.67 ± 2.51	4.0000	0.0572, NS	75.13	

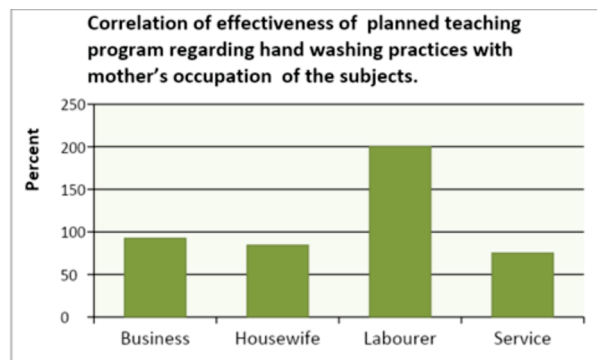


Figure no.4 Correlation of effectiveness of planned teaching program regarding hand washing practices with mother's occupation of the subjects.

Inference:-Table no. 4 and figure no 4 deals with Correlation of effectiveness of planned teaching program regarding hand washing practices with mother's occupation of the subjects

The mean of pre test score of mothers with business as a profession is $5.54 + 1.03$. After plan teaching program the post test score is $10.54 + 1.69$. After applying t test their difference is highly significant ($p = <0.0001$, $t = 13.1101$). The percentage of effectiveness is 92.5%.

The mean of pre test score of mothers as a housewife is $5.8 + 0.7$. After planned teaching program the mean post test score is $10.46 + 1.30$. After applying t test the difference is highly significant. [$t = 11.713$, $p = <0.0001$ HS]. The percentage of effectiveness is 84.23%.

The mean of pre test score of mothers with a service as a profession is $7.33 + 1.52$. after a planned teaching program the post test score is $12.67 + 2.51$. after applying t test their difference is not significant, [$t = 4$, $p = 0.0572$]. The percentage of effectiveness 75.13%.

Anova f -value is 3.64, and p value shows the difference is significant. (P-0.025).

There is significant Correlation of effectiveness of planned teaching program regarding hand washing practices with mother's occupation of the subjects.

Table No.5 Correlation of effectiveness of planned teaching program regarding hand washing practices with Father's occupation of the subjects. N=30

Fathers occupation	Pre test	Post test	t-value	p-value	Effective-ness (%)	p-value
Business	5.6 ± 1.09	10.35 ± 1.72	14.6865	<0.0001, HS	89.56	
Unemployed	-	-	-	-	-	F=3.79
Labourer	5.0 ± 1.0	11.67 ± 1.15	7.5593	0.0171, S	139.44	0.0355, S
Service	6.57 ± 1.13	11.14 ± 1.57	10.6667	<0.0001, HS	70.97	

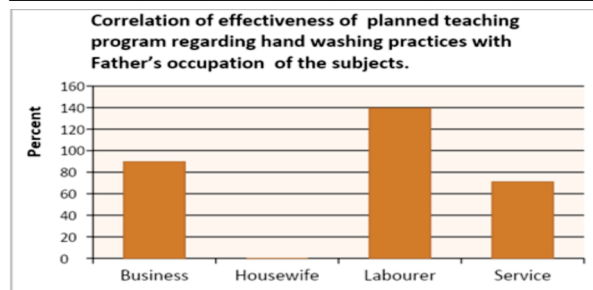


Figure no 5 Correlation of effectiveness of planned teaching program regarding hand washing practices with Father's occupation of the subjects.

Inference: Table no. 5 and figure no. 5 deals with Correlation of effectiveness of planned teaching program regarding hand washing practices with Father's occupation of the subjects.

The mean of pre test score of father with business as a occupation is $5.6 + 0.9$. after planned teaching program the score is $10.35 + 1.72$. after applying t test their difference is highly significant [$t = 14.6865$, $p = <0.0001$]. The percentage of effectiveness is 89.56%.

The mean of pre test score of father as labourer is $5.0 + 1.$, after planned teaching program the score is $11.67 + 1.15$. after applying t test their difference is significant [$t = 7.5593$, $p = 0.0171$]

The mean of pre test score of father with service as an occupation is $6.57 + 1.13$, after planned teaching program the score is $11.14 + 1.57$. After applying t test their difference is highly significant [$t = 10.6667$, $p = <0.0001$]. The percentage of effectiveness is 70.97%.

The annova f value is 3.79 and p value shows the difference is significant ($p = 0.0355$).

Table No.6 Correlation of effectiveness of planned teaching program regarding hand washing practices with Father's Education of the subjects N=30

	Pre test	Post test	t-value	p-value	Effective-ness (%)	p-value
Illiterate	3	9	-	-	200	
Primary	5.64 ± 0.74	10.71 ± 1.38	12.7205	<0.0001, HS	93.14	F=5.89
Secondary	6.06 ± 1.28	10.73 ± 1.94	12.0813	<0.0001, HS	80.16	P=0.0075, HS
Graduate	-	-	-	-	-	-

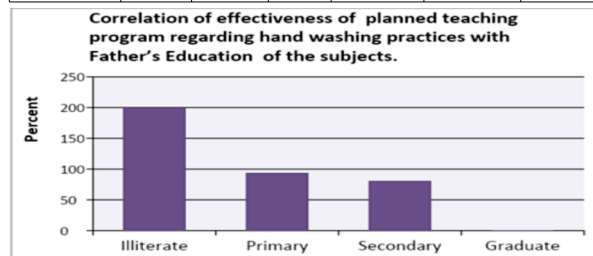


Figure no. 6 Correlation of effectiveness of planned teaching program regarding hand washing practices with Father's Education of the subjects.

teaching program regarding hand washing practices with Father's Education of the subjects

Inference: Table no. 6 and figure no.6 deals with Correlation of effectiveness of planned teaching program regarding hand washing practices with Father's occupation of the subjects.

The mean pre test score of fathers with primary education is 5.64+0.74,After planned teaching program the score is 10.71+1.94..after applying t test their difference is highly significant[t= 12.7205,p=,0.0001 HS].The percentage of effectiveness is 93.14%.

The mean pre test score of fathers with secondary education is 6.06+1.28, after planned teaching program the score is 10.73+1.94. after applying t test their difference is highly significant [t=12.0813, p=<0.0001, HS].The percentage of effectiveness is 80.16%.

The anova F value and p value shows the difference between pre test and post test is highly significant.There is highly significant Correlation of effectiveness of planned teaching program regarding hand washing practices with Father's occupation of the subjects.

Table No.7 Correlation of effectiveness of planned teaching program regarding hand washing practices with Mother's Education of the subjects. N=30

	Pre test	Post test	t-value	p-value	Effective-ness (%)	p-value
Illiterate	3	9	-	-	200	
Primary	5.71 ± 1.06	10.35 ± 1.44	11.5884	<0.0001, HS	86.33	F=3.34
Secondary	6.0 ± 1.15	11.0 ± 1.95	11.4018	<0.0001, HS	85.72	P=0.0347, S
Graduate	6.0	11.5 ± 0.70	11.0000	0.0577, NS	91.66	

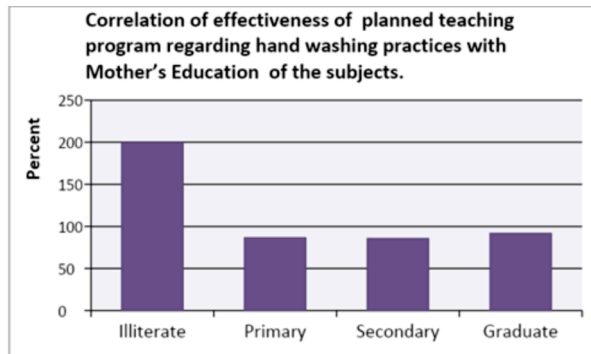


Figure no.7 Correlation of effectiveness of planned teaching program regarding hand washing practices with Mother's Education of the subjects.

Inference:- Table no.7 and figure no. 7 deals with Correlation of effectiveness of planned teaching program regarding hand washing practices with Mother's Education of the subjects

The mean pre test score of mother with primary education is 5.71+1.06.After planned teaching program the post test score is 10.35+1.44.After applying the t test the difference is highly significant [t=11.5884, p=<0.0001,HS].The percentage of effectiveness is 86.33%.

The mean pre test score of mother with secondary education is 6.0+1.15. After planned teaching program the post test score is 11.0+1.95.After applying the t test t the difference is highly significant[t= 11.4018, p=<0.0001,HS].The percentage of effectiveness is 85.72%.

The mean pre test score of mother with graduate education is

6.0.After planned teaching program the post test score is 11.5+0.70. After applying the t test the difference is not significant [t=11.000, p=0.0577, NS].The percentage of effectiveness is 91.66.

The anova F value and p value shows the difference between pre test and post test score is significant (F=3.34, p=0.0347).

There is significant Correlation of effectiveness of planned teaching program regarding hand washing practices with Mother's Education of the subjects

DISCUSSION

We the group are conducted research on a study to assess the effectiveness of planned teaching programme regarding hand washing practices among student's shops selected primary schools in Nagpur city. The objective Achieve are discussed below

- **To assess hand washing practices among primary school students.**

30 students in a primary school were taken as a sample by non-probability convenient sampling technique to assess the hand washing practices among them in a selected primary schools of Nagpur city

Written consent was taken before administering observation checklist

The tool was observation checklist with 16 hand washing steps.

Mean pre-test core among students before applying teaching was found 5.76.

- **To evaluate the effectiveness of planned teaching programme on hand washing practices of primary school students.**

The planned teaching program consists of all necessary information regarding hand washing and their steps are demonstrated in front of students after conducting the protest. It was found that a plan teaching programme was effective as the main score was increased from 5.76 to 10.67.

The net effectiveness of planned teaching programme regarding hand washing practices among students is 90.21%.

- **To correlate the study findings with selected demographic variables**

There is no any correlation between effectiveness of planned teaching programme and Gender of the subject.

There is significant correlation of effectiveness of planned teaching programme regarding hand washing practices with mother's occupation of the subject. (P=0.025)

The association between planned teaching programme regarding hand washing practices and father's occupation of the subject was significant (P=0.0355 S)

There is a highly significant correlation of effectiveness of planned teaching programme regarding hand washing practices with father's education of the subject (P=0.0075 HS)

There is a significant correlation of effectiveness of planned teaching programme regarding hand washing practices with mother's education of the subject (0.0347 S).

CONCLUSION

The study was evaluated by p-value, t-test and it revealed that there is highly significant different between pre-test and post-test score with the planned teaching. We conclude from the study that age, gender, education, affect the knowledge

regarding hand washing practices from the study we found that there is need for proper guidance and counselling of school children regarding the hand washing practices.

RECOMMENDATIONS

- This study can be done as long-term project.
- The replication of study can be done using different sample size.
- A similar study can be conducted on sample with different demographic variables.
- A similar study can be conducted by using different research design.

RESEARCH ABSTRACT

Globally greater than 3.5 million children. Younger than 5 years mainly concentrated in developing countries die from diarrhoea and acute lower respiratory tract infection hand washing has achieved the reputation of being a convenient mean of preventing communicable diseases. Pre experimental study was carried out on 4th class primary school going students in selected schools of Nagpur city. Pre test was conducted within the help of school teacher concerned and scored the hand washing practices on observation checklist. Observational checklist tool is validated by experts than planned teaching programme was carried out next day of Pre test score. After 7 days of Pre test score and post test was conducted in same manner as score on observation checklist. Demographic data also collected from individual student it includes gender, mother's occupation, father's occupation, mother's education, mother's education, residential status was whole analysed by using P value and T test.

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