ORIGINAL RESEARCH PAPER
Volume-9 | Issue-3 | March-2020 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

COMPARATIVE STUDY ON THE EFFECTIVENESS OF VIDEO- ASSISTED TEACHING VERSUS DEMONSTRATION ON HAND WASHING TECHNIQUES IN TERMS OF KNOWLEDGE AND COMPLIANCE AMONG PRIMARY SCHOOL CHILDREN (6-12YR)

Nursing

Kavita Lecturer, Child Health Nursing, Shri Baba Mastnath University, Rohtak, Haryana

Rashmi* Assistant Professor, Child Health Nursing, Sgt University, Gurugram, Harya
*Corresponding Author

ABSTRACT

One of the basic and most effective ways of preventing the spread of infection is by proper hand hygiene which involves an active process of practically performing hand washing, antiseptic hand-wash, and alcohol-based hand rub. There are various ways infection is spread and considering the active population of students in a given unit the spread of infection is higher if preventive measures are not enforced. The present study was done to assess the knowledge and practice of primary school children, to administer the video and demonstration on hand washing techniques to evaluate the effectiveness of video assisted teaching and demonstration on hand washing techniques among the primary school children. Evaluative research approach and two groups pre-test post test design was adopted to find out the effectiveness of video and demonstration on hand washing techniques. The total sample was 100 primary school children aged 6-12 years .Convenient sampling technique was used to select the sample. Data was collected through structured questionnaire. Video and demonstration was developed and distributed to enhance the knowledge and practice of primary school children on hand washing techniques. Result shows the increased need for awareness about correct hand washing techniques

KEYWORDS

Knowledge & Compliance, Video-assisted Teaching, Demonstration, Hand Washing Techniques, Primary School Children.

INTRODUCTION

The importance of hands in the transmission of hospital infection has been well demonstrated and hand hygiene reduces the prevalence of infections[1]. Hand washing with soap is important for primary school children in the improvement of health and disease prevention such as diarrhea and gastrointestinal infections, which in turn reduces absenteeism due to illness. Poor hand washing among children is the major cause of leading illnesses in India. Most childhood illnesses, diseases and deaths are caused by the use of unsafe water for drinking and poor hand washing. **According to WHO 2012** data, diarrheal disease alone amounts to an estimated 3.6 % of the total global burden of disease and is responsible for the deaths of 1.5 million people every year. It is estimated that 58% of that burden, or 842 000 deaths per year, is attributable to unsafe water supply, sanitation and hygiene and includes problems, water availability and quality, unhygienic feeding practices, improper use of latrines, early discontinuation of breast feeding, child's age, maternal education and household income.[2]

Diarrhea remains an important cause of morbidity and mortality among children globally, it accounts for 2 million deaths per year. Those who practiced hand washing after toilet and before cooking was 96 (93.2%). Proportion of mothers using boiled water for drinking was 99 (96.1%); bottle feeding 77(74.8%); and practiced sanitary waste disposal methods 93(90.3%).[3]

One of the basic and most effective ways of preventing the spread of infection is by proper hand hygiene which involves an active process of practically performing hand washing, antiseptic hand-wash, and alcohol-based hand rub (CDC 2002). There are various ways infection is spread and considering the active population of students in a given unit the spread of infection is higher if preventive measures are not enforced. Hence students need to be encouraged and re-educated about the importance to maintain a high hand hygiene status so as to prevent any spread of infection and thereby not being a mode of spread in the university. Infection prevention and proper hand hygiene should be stressed upon so as to prevent universities being a point of outbreak and spread of infection in outbreak cases. (CDC, 2002.)[4]

II. STATEMENT OF PROBLEM

A comparative study to assess the effectiveness of video- assisted teaching with demonstration on hand washing techniques in terms of knowledge and compliance among primary school children in a selected school of Jhajjar, Haryana.

III. OBJECTIVES OF THE STUDY

- To evaluate the effectiveness of video assisted teaching on hand washing techniques among experimental group 1.
- To evaluate the effectiveness of demonstration on hand washing techniques among experimental group 2.
- To compare the effectiveness of interventions among experim ental group 1 & experimental group 2.

MATERIALS AND METHODS:

RESEARCH APPROACH:

Quantitative research approach was used for the present study.

RESEARCH DESIGNS:

The design selected for the present study was two group pre-test post design.

SAMPLE AND SAMPLE SIZE:

The sample size for this present study was 100 primary school children (6-12 yrs).

SAMPLING TECHNIQUES:

Convenient Sampling Technique was used in the present study.

DESCRIPTION OF TOOL:

The following tool was used for the data collection:

SECTION-A: socio demographic variables

SECTION-B:

Structured multiple choice questions to assess the knowledge on hand washing techniques

SECTION-C:

Observation checklist to assess the practice of primary school children on hand washing techniques

HYPOTHESIS:

(H_1): There will be significant difference between pretest and post-test knowledge & compliance score of primary school children regarding hand washing techniques as per standardized WHO checklist & knowledge questionnaire on hand washing.

RESULTS

Table 1: Frequency and percentage distribution of demographic variables of primary school children (6-12 year)

N= 50+ 50

S No	Demographic Variables	Video-assisted Teaching Experimental Group 1	Demonstration Experimental Group 2		

1.		F	%	F	%	Total	%
Age in year							
a)	6-7 Year	13	26%	5	10%	18	18%
b)	8-9 year	17	34%	10	20%	37	37%
c)	10-11 year	17	34%	18	WS36%	35	35%
d)	12 year	3	6%	17	34%	20	20%
2.Religion							
a)	Hindu	38	76%	2	4%	42	42%
b)	Muslim	10	20%	19	38%	29	29%
c)	Sikh	0	0%	29	58%	0	0%
d)	Ishai	2	4%	0	0%	2	2%
3.Father's Education							
a)	Illiterate	31	62%	14	28%	45	45%
b)	Primary school	4	8%	6	12%	10	10%
c)	Middle school	10	20%	16	32%	26	26%
d)	Graduate & Above	5	10%	14	28%	19	19%
4.Father's Occupation							
a)	Labour	4	8%	32	64%	36	36%
b)	Government servant	15	30%	8	16%	23	23%
c)	Business man	30	60%	0	0%	30	30%
d)	Personnel work	1	2%	10	20%	11	11%
5.Mother's Education							
a)	Illiterate	18	36%	23	46%	41	41%
b)	Primary school	6	12%	12	24%	18	18%
c)	Middle school	17	34%	13	26%	30	30%
d)	Graduate work	9	18%	2	4%	11	11%
6.Mother's occupation							
a)	Labour	15	30%	5	10%	20	20%
b)	Private work	10	20%	20	40%	30	30%
c)	Government job	25	50%	20	40%	45	45%
d)	Self business	0	0%	5	10%	5	5%

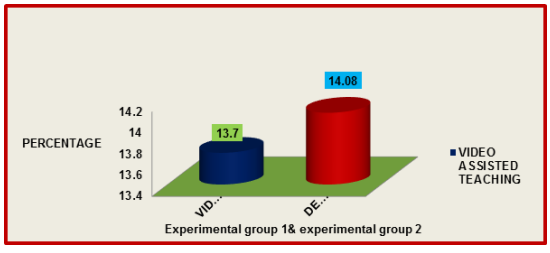
Table: 2. Pretest and post-test knowledge level among primary school children (6-12 year) (Experimental group 1) and (Experimental group

N= 50+50

Experimental Group 1	**Video Assisted Teaching**					**Demonstration**			
		Pretest		**Post-Test**		**Pretest**		**Post-Test**	
Level 0f Knowledge	**SCORE**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Poor	**0-5**	**23**	**46%**	**0**	**0%**	**34**	**68%**	**0**	**0%**
Average	**6-10**	**24**	**48%**	**2**	**4%**	**16**	**32%**	**3**	**6%**
Good	**11-15**	**3**	**6%**	**48**	**96%**	**0**	**0%**	**47**	**94%**
Experimental Group 2	**Video Assisted Teaching**					**Demonstration**			
LEVEL OF KNOWLEDGE	**SCORE**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Poor	**0-4**	**50**	**100%**	**0**	**0%**	**50**	**100%**	**0**	**0%**
Average	**5-8**	**0**	**0%**	**3**	**6%**	**0**	**0%**	**2**	**4%**
Good	**9-12**	**0**	**0%**	**47**	**94%**	**0**	**0%**	**48**	**96%**

Table2 **(Experimental Group 1)**Depicts that majority (48%) of the primary school children were having Average knowledge score regarding hand washing techniques in the pretest. **Experimental Group 2:** Depicts that majority (100%) of the primary school children were having poor knowledge score regarding hand washing techniques in the pretest.

Fig1: Comparison between experimental group1 (video assisted teaching) & experimental group 2 (demonstration)



Bar graph showing that demonstration teaching method is more effective than video assisted teaching for Hand washing techniques among primary school children with mean difference 13.7 in pre-test and 14.08 in post tests of Experimental group 1 & 2.

RECOMMENDATIONS:

Based on the above research findings the recommendations are as follows:

- Similar study can be undertaken on a large sample for making a more valid generalization.
- Study can be conducted on different samples.
- A comparative study can be conducted to assess effectiveness of Video Assisted Teaching (VAT) & Demonstration with other instructional method.
- A correlation study can be conducted to analysis of knowledge & practice of hand washing techniques among primary school children

DISCUSSION

In present study the comparison of pre test and post knowledge score was done to assess the effectiveness of demonstration in terms of gain in knowledge scores **among primary school children aged 6-12 years. K. Soumya , et al (2012)** conducted a similar comparative study to assess the effect of class demonstration on knowledge and practice among nursing students. Self structured questionnaire regarding IV procedure for assessment of knowledge and checklist for assessing practice were used as tool. Thirty students were given classroom demonstration and 30 students received video assisted demonstration regarding hand washing techniques. Results showed

that there is no significant difference in the effectiveness of classroom demonstration on knowledge and practice of the respondents[4].

P. Priyanka, A.Sachin et al. (2016) conducted a cross sectional descriptive study of hand washing on knowledge and practices among primary school children in Mumbai, Maharashtra, India. More than half (54%)of the study population reported a history of illnesses in the past one month, out of which 81.4% reported absenteeism due to illness. Around 34% children were unaware about health related consequences of not washing hands. When asked about the important times when hands ought to be washed, only 18% mentioned after toilet use. Of the 2283 students, a very small percentage of respondents (0.7%) reportedly practiced five steps of hand washing; only 1% practiced four steps of hand washing. Forgetfulness was cited as the primary reason for missing washing hands before eating food (88%) and after toilet use (84%).[5]

CONCLUSIONS

The present study concludes that there was a significant difference in knowledge and practice score before and after interventions on hand washing techniques after video- assisted teaching as well as after demonstration among primary school children (6-12 years). But the significant of difference was more in case of demonstration. Hence it was concluded that demonstration was more effective then the Video assisted teaching (VAT) for hand washing techniques.

SOURCE OF FUNDING

The funding for the study was self.

CONFLICT OF INTEREST: Nil.

REFERENCES:

1. B. Ravichandran et al. Hand hygiene knowledge, attitude and practice among postgraduates. International journal of currenct microbiology and applied science. Vol.8, no.1.2019
2. WHO; 'Improved hand hygiene to prevent health care associated infections'. URL; http:// www. who. int/ gpsc/tools/ faqs/ evidence_hand_hygiene/en/2014.
3. https://www.who.int/water_sanitation_health/diseases-risks/en/
4. Soumya K "Effect of Classroom Demonstration and Video Demonstration on knowledge and practice among students. " The Nursing Journal of India Feb 2012, 38-40.
5. Priyanka P. Gawai, Sachin A. Taware, Ameeta S. Chatterjee, Harshad P. Thakur. A cross sectional descriptive study of hand washing knowledge and practices among primary school children in Mumbai, Maharashtra, India. Vol 3, No 10 (2016). Available from URL: https://www.ijcmph.com/index.php/ijcmph/issue/view/5. International journal of community medicine and public health.