

*Effectiveness of Video-Assisted Teaching Program
 Regarding Knowledge of 5fs of
 Disease Transmission and its Prevention
 among Primary School Teachers*

Ekta M. Patel*¹, Jacklin J. Makwan²

*¹Asst.Professor and HOD- Community Health Nursing, Pioneer Nursing College, Vadodara, Gujarat
 Gujarat, India – 390019; E-mail:ekta318@yahoo.com*

²Post Graduate Student, Community Health Nursing, Pioneer Nursing College, Vadodara, Gujarat

*Corresponding Author: Ekta M. Patel

Abstract:

BACKGROUND OF THE STUDY: Teachers are having a crucial role to facilitate optimistic health among children. Infectious disease transmission of organisms causing disease occurs mostly through contamination of food, fluid, and finger. Very small amounts of faeces can carry enough organisms to establish infection. Seemingly sparkling clear water may be dangerously polluted. Contaminated food may smell, look and taste normal and yet harbour infective organisms. Clean-looking hands may carry and transmit enough micro-organisms to spread disease. The famous f-diagram, demonstrates the major transmission routes of faecal-oral diseases. It illustrates the different routes that the microbes of diarrhea take from faeces, through the environment, to a new person. It is important for teachers to have basic knowledge regarding Infectious disease transmission of organisms causing disease occurs mostly through contamination of food, fluid, and finger so that they can impart this information to students in most effective way. The study was conducted to evaluate effectiveness of video assisted teaching Programme regarding 5Fs of Disease Transmission and Prevention among primary school teachers.

METHODOLOGY: Quasi Experimental approach was used with one group pre-test and post-test design. The Investigator used convenient Sampling technique for selecting the 50 samples. In the view of the nature of the problem and the accomplishment of the objectives of the study, a video assisted teaching programme regarding 5Fs of Disease Transmission and Prevention was prepared for the samples. A Structured Knowledge Questionnaire was prepared to assess the knowledge of the Samples. Validity and Reliability of tool was checked before data collection.

RESULTS: The collected data was tabulated and analysed by using descriptive and inferential statistics. The data demonstrated that the mean pre-test knowledge score was 20.05 while mean post-test knowledge score was 37.08 Hence the difference of mean between pre & post-test knowledge score was 16.18 The Standard Deviation

(SD) of pre-test was 6.91 and post-test was 4.60 respectively. The calculated 'value is 14.2 at 49 degrees of freedom with 0.05 level of significance.

CONCLUSION: The video assisted teaching programme was an effective strategy to improve the knowledge regarding 5Fs of Disease Transmission and prevention among Primary School Teachers of government primary schools of Rural Area of Vadodara.

Keywords:

Coronavirus Disease 2019 (COVID-19), Vaccination, health system factors, Intensive care units (ICU), oxygen and personal protective equipment (PPE)

1. Background of the study

Communicable disease continues to be a major health problem in India, especially among children. A communicable disease is an illness caused by an infectious agent or toxic product and is transmitted by direct or agent or toxic products and is transmitted by direct or indirect contact between the reservoir host and the susceptible individual. The transmission can occur from man to man, animal to animal or from the environment (through air, dust, soil, water, food etc.) to man.⁶

Faecal-oral transmission of organisms causing disease occurs mostly through faecal contamination of food, water, and hands which is not at all apparent. Very small amounts of faeces can carry enough organisms to establish infection. Seemingly sparkling clear water may be dangerously polluted. Contaminated food may smell, look and taste normal and yet harbor infective organisms.⁹

Infectious disease transmission of organisms causing disease occurs mostly through contamination of food, fluid, and finger. Very small amounts of faeces can carry enough organisms to establish infection. Seemingly sparkling clear water may be dangerously polluted. Contaminated food may smell, look and taste normal and yet harbour infective organisms. Clean-looking hands may carry and transmit enough micro-organisms to spread disease.⁵

In India, the assumption is that 1,280 cases of diarrhea disease are reported within an area in one year, amongst a total of 17,900 children.¹⁸ Young children, whose immune systems are naive to the viruses, are the most vulnerable to cold, though adults still catch an average of 2-3 per year.¹⁸

2. Material and Methods

Community based cross-sectional study was done over a period of 2 months in selected rural areas of Vadodara, Gujarat, India. Using Quasi experimental- one group pre-test post –test research design. Approval of Institutional Ethics Committee was obtained prior to the conduction of the study. Study subject were 50 Primary school teachers working in government primary schools. With the help of probability simple random sampling technique Investigator had selected the samples. Pilot-tested questionnaire measuring the knowledge was administered to each study participant followed by administration of video- assisted teaching program and post-test. The subjects were explained about the need

of the study and informed consent was taken. Privacy and confidentiality of collected information were ensured throughout the process. Data were analyzed by using descriptive and inferential Statistics.

3. Results:

Regarding Demographic characteristics of participants, the majority of study participants (50%) belonged to 41-50 years of age, 44% were hindu, 38% were with B.A.B. ED, 32(64%) with work experience 11-15 years, 94% participants were having no information regarding 5 Fs of diseases transmission.

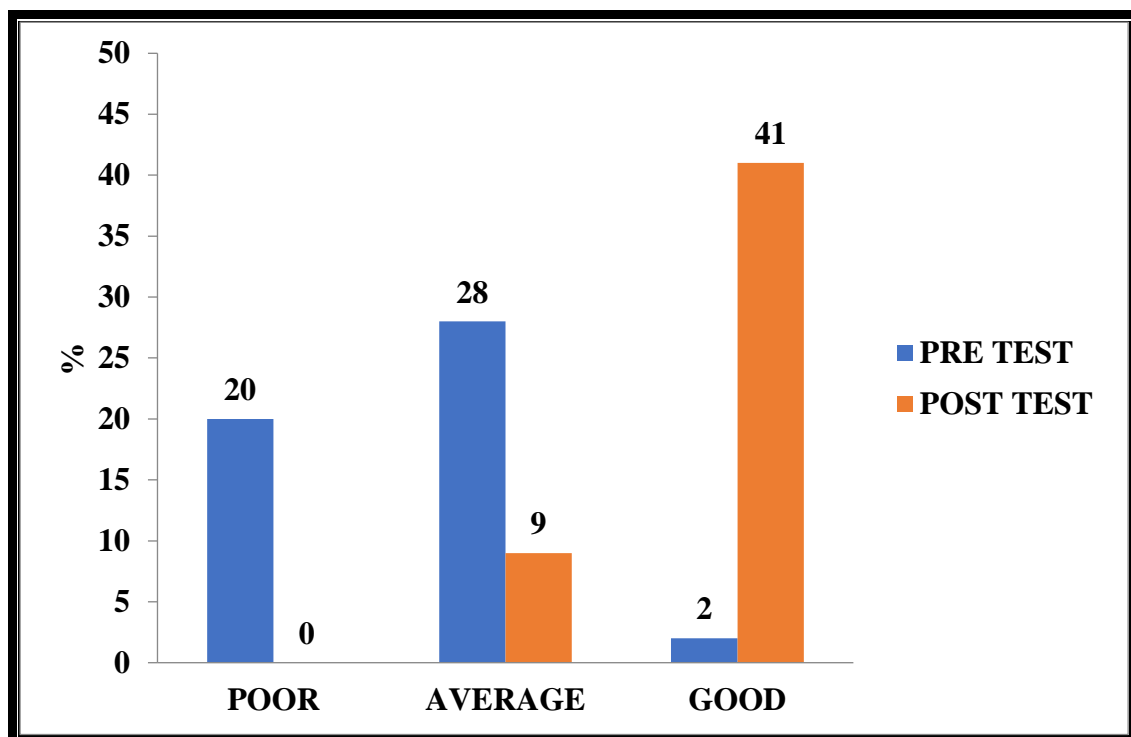


Figure.1: Distribution of Samples According to Grading of Pre-Test and Post-Test Knowledge Score

Above fig.1, shows that in pre-test majority of the respondents (56%) were having average knowledge and only few (2%) had good knowledge. Whereas in post-test 41(82%) has attained good level of knowledge.

Table.1 shows that mean pre-test knowledge score was 20.5 while mean post-test knowledge score was 37.08 Hence the difference of mean between pre & post-test knowledge score was 16.58 The Standard Deviation (SD) of pre-test was 6.91 and post-test was 4.60 respectively. The calculated ‘t’ value is 14.2 at 49 degrees of freedom with 0.05 level of significance.

Table.1: Mean Score, Mean Difference, SD & ‘t’ Value of Pre & Post -test Knowledge Score of Samples

Knowledge	Mean	Mean Difference	SD	Calculated ‘t’ test	Tabulated ‘t’ Value
Pre-Test	20.5	16.18	6.91	14.2	2.02
Post-Test	37.08		4.60		

Note: * $t = p < 0.05$ $df = 49$; $[N = 50]$

The calculated value was more than the table value. Hence the video-assisted teaching program was effective and null hypothesis H_{01} was rejected and the research hypothesis H_1 was accepted. Thus, the increased mean Knowledge score in the post-test phase indicates that the video-assisted teaching program was effective.

Table.2: Association of variable of Primary School teacher Respondents with pre-test Knowledge Score

SR NO	Variable		Knowledge				Calculated value of χ^2	Tabulated value of χ^2	D.F.	Inference
			Poor	Average	Good	Total				
1.	Age in Year	21-30	00	00	00	00	11.08	9.49	4	S
		31-40	01	02	00	03				
		41-50	01	11	13	25				
		>50	00	15	07	22				
3.	Year of experience	0-5	00	00	00	00	14.51	9.49	4	S
		6 TO 10	02	03	02	07				
		11TO 15	00	17	15	32				
		15ABOVE	00	08	03	11				
4.	Education status	B.A. B.ED.	01	11	07	19	13.095	9.49	4	S
		B.Sc. B.ED.	01	00	01	02				
		M.Sc M.ED.	00	00	00	00				
		M.A.MED	00	00	00	00				
		Other (PTC)	00	17	12	29				
5.	Previous Information	Yes	01	00	02	03	9.220	5.99	2	S
		No	01	28	18	47				
		Mass Media	00	01	01	02				

Above table.2 shows that there is a significant association of knowledge score with demographic variables i.e., Age, Years of working experience, Education status and presence of previous information.

4. Discussion:

The prominent finding in our study shows that video assisted teaching programme was effective to improve knowledge regarding 5 F'S of diseases transmission; consistent with baseline and control findings from intervention studies conducted by Dr.M.Sreelatha et al. The results of the present study revealed a significant association Found with age, years of experience, education status were in consistent with findings of a study conducted by Annamreddi Leelavathi, et al.

5. Conclusion:

The overall findings of the study revealed that the Knowledge deficit exist among primary school teachers regarding 5Fs of disease transmission and prevention. The video assisted teaching programme was found to be effective in enhancing the Knowledge of the samples regarding Usage of 5Fs of disease transmission and prevention. Samples gained significant Knowledge; The findings indicate that the video assisted teaching Programme developed by the investigator was effective in enhancing the Knowledge of the samples.

Declaration:

Conflict of Interest: The authors declare that there is no conflict of interests regarding the publication of this manuscript.

Source of Funding: Researchers have used own finance to complete research study.

Ethical Clearance: Approval of Institutional Ethics Committee was obtained prior to the conduction of the study. Privacy and confidentiality of collected information were ensured throughout the process.

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