



A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED PLANNED TEACHING ON KNOWLEDGE REGARDING SELECTED WATER BORNE DISEASES AND ITS PREVENTIVE MEASURES AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED URBAN AREA AT CHOOLAI IN CHENNAI

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ABSTRACT

Computer assisted education services are recently developing trend in giving health education , and useful in raising standard of community health, Mothers are considered as a best setting for the positive health and prevention of diseases in children, awakening health consciousness in which the child grows and develops. The main objective of the study is to assess the posttest knowledge on selected water borne diseases and its prevention and to evaluate the effectiveness of Computer assisted teaching regarding knowledge of Water borne disease and its prevention. A quasi experimental design with simple random sampling technique, 100 samples was analyzed by descriptive and inferential statistics. The Results shows that the overall mean score of pre-test was 7.38 with the SD 2.15, whereas in post-test it was 11.84 with the SD 1.57. The t-test value was 23.16 which is statistically significant at $P=0.001$. After Computer Assisted Planned Teaching mothers are gained 31.9% of the knowledge than pretest.

KEY WORDS: Water borne disease, computer teaching, underfive mothers, prevention



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INTRODUCTION

The World Health Organization says that every year more than 3.4 million people die as a result of water related diseases, making it the leading cause of disease and death around the world. Most of the victims are young children. Waterborne infections are among the most emerging and re-emerging infectious diseases throughout the world. Waterborne diseases are

infectious diseases spread primarily through contaminated water. Though these diseases are spread either directly or through flies or filth, water is the chief medium for spread of these diseases and hence they are termed as waterborne diseases.. Water contamination is caused by sewage and industrial effluents, surface runoff and many anthropogenic activities that alter the physical (color, taste, and smell) and chemical characteristics of water.¹

The following are the details of cases and deaths due to the ADD/Cholera in Tamil Nadu.

Year	Acute Diarrhoeal Diseases			Cholera		
	Cases	Deaths	Fatal Rate	Case	Deaths	Fatal Rate
May 2013	18025	1	0.01	8	0	0
June 2013	16316	4	0.02	20	0	0
July 2013	16617	3	0.02	40	0	0
Aug 2013	18523	2	0.01	23	0	0

The three water borne diseases which are commonly spread in our state are Cholera, Typhoid and Hepatitis A

MATERIALS AND METHDOLOGY

A quasi experimental design was used for this study. Samples were selected using simple random sampling technique. 100 mothers of underfive children were participated. The Independent Variable is Computer Assisted Planned teaching ,Dependent Variable is

Knowledge Levels of the Mother . The sample was selected according to the inclusion and exclusion criteria. The tools for the study had two sections A and B. section A has Demographic variables and Section B has knowledge related questions. Data was analyzed by descriptive and inferential statistics.

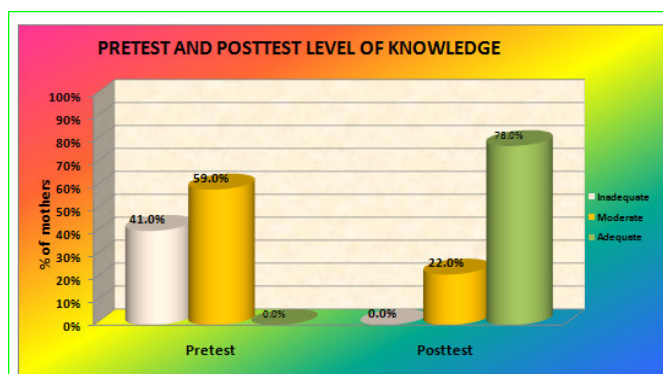
RESULTS

Pretest and posttest level of knowledge

Level of knowledge	Pretest		Post test		Chisquare test
	No. of mothers	%	No. of mothers	%	
Inadequate	41	41.0%	0	0.0%	$\chi^2=88.46$ P=0.001*** Significant
Moderate	59	59.0%	22	22.0%	
Adequate	0	0.0%	78	78.0%	
Total	100	100.0%	100	100.0%	

The above table shows the comparison of Pre-test and Posttest knowledge regarding selected water borne diseases and its prevention among mothers of under five children .In pretest before Computer assisted planned teaching 41.0% of the mothers had inadequate knowledge , 59.0% of them had moderately adequate

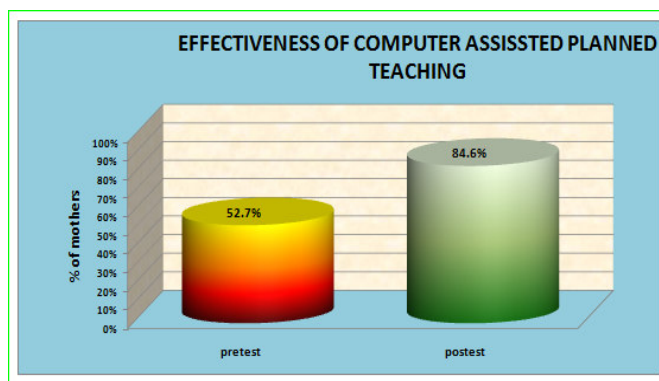
knowledge and none of them had adequate knowledge. In posttest none of the mothers had inadequate knowledge, 22.0% of them had moderately adequate knowledge and 78% of them had adequate knowledge .which should highly significant ($P \leq 0.001$) and it was analyzed by using chi square test.



Effectiveness of the study

	Maximum score	Mean knowledge score	% of score	Gain score
Pretest	14	7.38	52.7%	31.9%
Posttest	14	11.84	84.6%	

The above table evaluate the effectiveness of Computer assisted teaching regarding knowledge of Water borne disease and its prevention among mothers of under five children. On an average, After Computer Assisted Planned Teaching, mothers are gained 31.9% of the knowledge than pretest.

**Association between demographic variables and gain in knowledge level**

In the post test knowledge score has significant association with the age of the mother ($\chi^2=8.53$) ($P=0.04$), Family income ($\chi^2=7.76$) ($P=0.05$) and Educational status ($\chi^2=9.71$) ($P=0.02$). Statistical significance was calculated using chi square test.

DISCUSSION

In pretest, mothers are having only 7.38 knowledge score and after intervention in posttest, mothers are having 11.84 score. Difference is 4.46. The difference between pretest and posttest knowledge score is large and it is statistically significant. The pretest mean score is (52.7%) and post test mean knowledge score is (84.6%) On an average, mothers are gained 31.9% of the knowledge than pretest, thereby there is an increased level of knowledge among mothers which is statistically significant ($t=23.16$) $p=0.001$). A previous study in assessing the knowledge level of mothers of under five children regarding water borne disease conducted by D.kanimozhi (2005), reveals that many of the mothers are having inadequate knowledge in pretest, and after structure teaching programme the mothers gained about 43.4% of knowledge on prevention of water borne diseases. This study shows the effectiveness of the structure teaching programme. my research is as effective as the above mention

study. Through this study the mothers of under five children gained more knowledge regarding water borne diseases and its preventive measures. This study also reveals that advanced methods of teaching can create a marked improvement in knowledge, practice and attitudes among mothers. There should be a comprehensive mass awareness and education programme to the mothers to know more about water borne diseases and its preventive measures.

CONCLUSION

Mothers of under five children's are having decreased level of knowledge, regarding water borne diseases, its causes, and its preventive measures and also they don't know the effective way of maintaining their water hygiene and practices regarding good toileting and environmental sanitation. This study shows a significant knowledge gain among the mothers of under five children regarding computer assisted planned teaching on water borne diseases.

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