



“The Effectiveness Of Structured Teaching Programme On knowledge regarding Prevention Of Diarrhea Among Mothers Of Infants”.

Author: Amrata Jain, Ph,D Scholar, Malwanchal University

Dr. Peter Jasper Youtham, Guide, Malwanchal University

ABSTRACT

“An Experimental Study To Evaluate The Effectiveness Of Structured Teaching Programme On knowledge regarding Prevention Of Diarrhoea Among Mothers Of Infants (0-12 Months) In A Selected hospital Jabalpur Madhya Pradesh ”. Experimental research design was used in present study with 360 mothers of infants from selected pediatric hospital at Jabalpur. Non probability purposive sampling technique was used 44 self structured knowledge questioner were used to assess the knowledge of mothers of infants regarding prevention of diarrhea. Most of the children 73% had majority immunized with rotavirus. In this experimental research design total 360 mothers of infants was taken it was divided in two groups In control group (180 mothers of infants) knowledge score majority mothers are from poor 56% are from average 25% are from very poor 16% and very few only 3.3% are from good. In experimental group 180 mothers of infants) after the administration of structured teaching programme knowledge score majority mothers are from good 53% are from average 40% are from poor 5% and very few 1.6% are from very poor knowledge score regarding prevention of diarrhoea. higher mean 31.7 in the experimental group post test knowledge score and in the pre test with a mean of 18.57.

The present study, 'z' test was used to test the significance of difference between the pre-test and post-test knowledge score of mothers of infants in the selected area of disciplining . The data presented in table shows significant Z value.this findings again highlight the effectiveness of structured teaching programme in increasing the knowledge of the respondents regarding various area of disciplining. Most of the demographic variables are associated with pre-test knowledge score

Background of the study

In low- and middle-income countries, childhood diarrhea is a serious public health issue that contributes to a high death rate in children under the age of five. The World Health Organization (WHO) defines diarrheal illness as passing three or more liquid or loose stools per day.

Diarrheal diseases have a detrimental impact on child growth and cognitive development . Diarrheal diseases are associated with an increased risk of malnutrition in children . 90% of diarrheal illnesses are found in South Asian and sub-Saharan Africa. Over the past 20 years, India has achieved significant progress in lowering newborn and child mortality, but the incidence of illnesses like pneumonia and diarrhea that may be prevented is still quite high. About 9% of children under the age of five reported having diarrhea in the two weeks before to the National Family Health Survey (NFHS)-4 in the years 2015–16. It is also noteworthy that there are considerable regional differences in the prevalence of diarrhea, ranging from 4.2% in the northeast to 13.1% in the middle part of the nation. Pneumonia and diarrheal illnesses were responsible for 50% of all under-five mortality in India. The government of India has initiated several interventions to reduce the burden of diarrheal diseases. The National Diarrheal Disease Control Program, policies for child health, and dietary programme have also been started to reduce the incidence of diarrhea-related morbidity and death in children.

Diarrhea is still one of the key health issues on a global scale. Diarrhea continues to be the primary cause of mortality and health problems for children under the age of five in low- and middle-income countries (LMICs). Evidence from Asian countries showed that early formula feeding increases the risk of childhood diarrhea. This could be due to the substitution of complementary foods for irreplaceable human milk, as well as contamination of the food and/or the bottle's nipple .

Need of the Study

The prevalence of diarrheal illness in children under the age of five is influenced by a variety of sociodemographic, environmental, and behavioural variables. Age of the children, site of residence, mother education, and financial situation of the home are significant socio-demographic determinants. Childhood diarrhea is correlated with environmental variables such access to clean water, sanitary facilities, trash removal, and housing features. Additionally, it has been discovered that behavioural variables including nursing practises, eating habits, and hand washing behaviours have a substantial role in the development of diarrhea in children under the age of five.

Objectives of the Study

- To develop and conduct the structured teaching programme on prevention of diarrhea among mothers of infants .
- To assess the knowledge of mothers of infants regarding prevention of diarrhea before the administration of structured teaching programme .
- To assess the knowledge of mothers of infants regarding prevention of diarrhea after the administration of structured teaching programme .
- To evaluate the effectiveness of structured teaching programme on prevention of diarrhea among mothers of infants .
- To compare the experimental group and control group knowledge score of mothers of infant regarding prevention of diarrhea.
- To find out association pretest knowledge score of both the groups

(experimental group and control group)mothers of infant regarding prevention of diarrhea with selected demographic variables of mothers and infants .

Hypothesis :-

H₁:There will be a significant difference between pre-test and post-test

knowledge regarding prevention of diarrhoea among mothers of infants .

- **H₂**:There will be a significant association between pre-test and post-test

knowledge regarding prevention of diarrhoea among mothers of infants with their selected demographic variables .

Methods and material

Experimental research design was used in present study with 360 mothers of infants from selected pediatric hospital at Jabalpur. Non probability purposive sampling technique was used 44 self structured knowledge questioner were used to assess the knowledge of mothers of infants regarding prevention of diarrhea.

Results

Out of 360 majority 50% Mother of infants were in the age group of 21-25 years, 9% Mother of infants were in the age group of >31 years having lowest frequency . Educational Status of mothers of infants was, 54% were middle class, 30% were primary level, 16% were up to higher secondary, over all most of the mothers of infants 54% had education status up to middle class . Occupation of mothers of infant was, 68% mothers were non working, 32% mothers were working, most of the mothers of infants 68% had non working .family type of mothers of infants was,76% were nuclear family, 24% were joint family . Most of the mothers of infants 76 % had nuclear family type. socioeconomic status of mothers of infants was, 71% were 5000-7000rs Per month income, 16% were 8000-10000rs Per month income, 13% were 1000-4000rs Per month income . Most of the mothers of infants 71 % had 5000-7000rs Per month income . mother's previous knowledge about diarrhea was, 61% knowledge through T.V, 23% were through other source, 16% were through news paper . Most of the mothers of infants 61% had majority previous knowledge through

T.V . hygienic status of mothers was, 53% were unhygienic status ,47% were hygienic status . Most of the mothers of infants 53 % had majority unhygienic status . Age of the child was, 58% children were age group of 9-12months , 20% children were age group of 6-9months, 16% children were age group of 3-6months , 6% children were age group of 0-3months . Most of the children 58% had majority age group of 9-12months . Sex Of The Childs was, 55% were female childs, 45% were male childs. Most of the children 55% had majority female childs. Under five years Childs in the house was, 53% were two or more under five years Childs in the house,47% were one under five years Childs in the house . Most of the children 53% had majority under five years. Birth order Of The Childs was, 61% were Second and above birth order, 39% were first child, Most of the children 61% had majority Second and above birth order. Immunization status of Childs was, 73% children were not immunized with rotavirus. 27% children were immunized with rotavirus . Most of the children 73% had majority immunized with rotavirus. In this experimental research design total 360 mothers of infants was taken it was divided in two groups In control group (180 mothers of infants) knowledge score majority mothers are from poor 56% are from average 25% are from very poor 16% and very few only 3.3% are from good. In experimental group 180 mothers of infants) after the administration of structured teaching programme knowledge score majority mothers are from good 53% are from average 40% are from poor5% and very few 1.6% are from very poor knowledge score regarding prevention of diarrhoea. higher mean 31.7 in the experimental group post test knowledge score and in the pre test with a mean of 18.57.

The present study, 'z' test was used to test the significance of difference between the pre-test and post-test knowledge score of mothers of infants in the selected area of disciplining . The data presented in table shows significant Z value.this findings again highlight the effectiveness of structured teaching programme in increasing the knowledge of the respondents regarding various area of disciplining. Most of the demographic variables are associated with pre-test knowledge score .

**Significant increase in the level of knowledge in experimental groups
post test**

Knowledge score	MEAN	MEAN (%)	Std. Error of Mean	D.F.	Z-Test	Significance
Pre -test	18.57	36.90%	0.22	359	-56.4	P<0.05
Post -test	31.7	63.00%				



Conclusion

After the through analysis , study leads to the subsequent conclusion:

TABLE -13

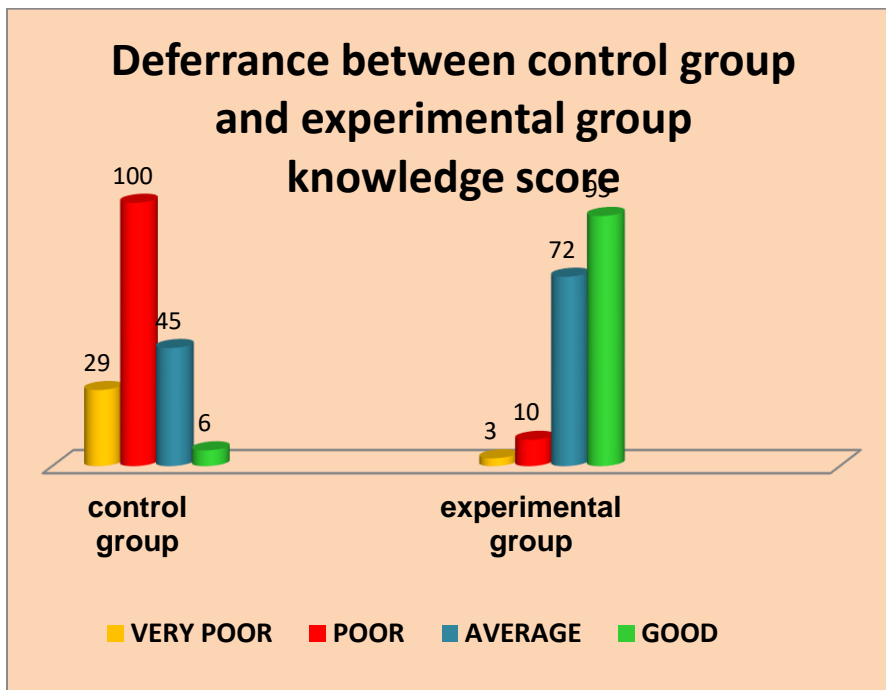
LEVEL OF KNOWLEDGE	RANGE OF SCORE	CONTROL GROUP		EXPERIMENTAL GROUP			
		PRE TEST		PRE TEST		POST TEST	
		Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
VERY POOR	0--11	29	16%	22	12%	3	1.60%
POOR	12--22	100	56%	104	57%	10	5.40%
AVERAGE	23--33	45	25%	51	28%	72	40%
GOOD	34--44	6	3.30%	3	1.60%	95	53%
TOTAL		180	100%	180	100%	180	100%

Frequency and Percentage Distribution of Control Group and Experimental Group knowledge Score.

data presented in table 13 shows that 5.4% mothers of infants has poor knowledge regarding prevention of diarrhea while 53% were found good in knowledge after the implementation of structured teaching programme, there is significant increase in knowledge of mothers of infants regarding prevention of diarrhea which was calculated by Z test and the result was -56.7 .There was significant association between knowledge on prevention of diarrhea and selected demographic variables

In control group knowledge score majority mothers are from poor 56% are from average 25% are from very poor 16% and very few only 3.3% are from good.

In experimental group after the administration of structured teaching programme knowledge score majority mothers are from good 53%, are from average 40%, are from poor5% and very few 1.6% are from very poor.



Reference;-

1. WHO. Diarrhoeal disease. World Health Organization. 2018; <https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease>.
2. UNICEF. Monitoring the situation of children and women. 2019; <https://data.unicef.org/topic/child-health/diarrhoeal-disease/>.
3. Bowen A, Agboatwalla M, Luby S, Tobery T, Ayers T, Hoekstra RM. Association between intensive handwashing promotion and child development in Karachi, Pakistan: a cluster randomized controlled trial. *Arch Pediatr Adolesc Med.* 2012;166(11).
4. Troeger C, Blacker BF, Khalil IA, Rao PC, Cao S, Zimsen SR, Albertson SB, Stanaway JD, Deshpande A, Abebe Z, Alvis-Guzman N. Estimates of the global, regional, and national morbidity, mortality, and aetiologies of diarrhoea in 195 countries: a systematic analysis for the global burden of disease study 2016. *Lancet Infect Dis.* 2018;18(11):1211–28.
5. IIPS ICF. National Family Health Survey (NFHS-4), 2015–16: International Institute for Population Science; 2017. <http://rchiips.org/NFHS/NFHS-4Reports/India.pdf>.
6. Million Death Study Collaborators. Causes of neonatal and child mortality in India: a nationally representative mortality survey. *Lancet.* 2010;376(9755):1853–60.
7. Ministry of Women & Child Development. Integrated Child Development Scheme (ICDS). Government of India; <https://icds-wcd.nic.in/icds.aspx>.
8. Bhan MK. Accelerated progress to reduce under-5 mortality in India. *Lancet Glob Health.* 2013;1:e172–3.
9. 2. Million Death Study Collaborators. Bassani DG, Kumar R, Awasthi S, Morris SK, Paul VK, et al. Causes of neonatal and child mortality in India: A nationally representative mortality survey. *Lancet.* 2010;376:1853–60.

10. Shah D, Choudhury P, Gupta P, Mathew JL, Gera T, Gogia S, et al. Promoting appropriate management of diarrhea: A systematic review of literature for advocacy and action: UNICEF-PHFI series on newborn and child health, India. *Indian Pediatr.* 2012;49:627–49.
11. Bajait C, Thawani V. Role of zinc in pediatric diarrhea. *Indian J Pharmacol.* 2011;43:232–5.
12. International Institute for Population Sciences (2014) (IIPS) and Macro International. National Family Health Survey (NFHS-3), 2005-06: India. Available from: <http://www.rchiips.org/NFHS/report.shtml> .
13. UNICEF, WHO. Diarrhoea: Why children are still dying and what can be done, Unicef-WHO. New York: UNICEF/WHO 2009. doi, 10, pp.S0140–6736.
14. Peterson KM, Diedrich E, Lavigne J. Strategies for Combating Waterborne Diarrheal Diseases in the Developing World. 2008.
15. Chopra M, Binkin NJ, Mason E, Wolfheim C. Integrated management of childhood illness: what have we learned and how can it be improved? *Arch Dis Child.* 2012;97(4):350–4.
16. WHO and UNICEF (2009) Diarrhoea: Why Children Are Still Dying and What Can Be Done.
17. World Health Organization (WHO) *Diarrhoea : why children are still dying and what can be done.* WHO Library Cataloging-in- Publication Data . The United Nations Children’s Fund (UNICEF); 2009.
18. Black R., Fontaine O., Lamberti L., et al. Drivers of the reduction in childhood diarrhea mortality 1980-2015 and interventions to eliminate preventable diarrhea deaths by 2030. *Journal of Global Health* . 2019;9(2):1–9. doi: 10.7189/jogh.09.020801.
19. Troeger C., Forouzanfar M., Rao P. C., et al. Estimates of global, regional, and national morbidity, mortality, and aetiologies of diarrhoeal diseases: a systematic analysis for the global burden of disease study 2015. *The Lancet Infectious Diseases* . 2017;17(9):909–948. doi: 10.1016/S1473-3099(17)30276-1.
20. Nguyen P., Binns C. W., Ha A. V., et al. Prolacteal and early formula feeding increase risk of infant hospitalisation: a prospective cohort study. *Archives of Disease in Childhood* . 2020;105(2):122–126. doi: 10.1136/archdischild-2019-316937.
21. Rahmartani L. D., Carson C., Quigley M. A. Prevalence of prolacteal feeding and associated risk factors in Indonesia: Evidence from the 2017 Indonesia Demographic Health Survey. *PLoS One* . 2020;15(12):p. e0243097.
22. Melese B, Paulos W, Astawesegn FH, Gelgelu TB. Prevalence of diarrheal diseases and associated factors among under-five children in Dale District, Sidama zone, southern Ethiopia: a cross-sectional study. *BMC Public Health.* 2019;19(1):1235.
23. Mohammed S, Tamiru D. The burden of diarrheal diseases among children under five years of age in Arba Minch District, southern Ethiopia, and associated risk factors: a cross-sectional study. *Int Sch Res Notices.* 2014;2014(Article ID 654901):6. <https://doi.org/10.1155/2014/654901>.