

A Quasi-Experimental Study to Assess the Effectiveness of Structured Teaching Programme Regarding Diarrhea on the Knowledge among the Mothers at Selected Urban Community in Chandarwani Naka Gwalior M.P.

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INTRODUCTION

BACKGROUND OF STUDY: -

Diarrhea is the passage of loose or liquid stools more frequently than is normal for the individual. It is primarily a symptom of gastrointestinal infection. Diarrhea is a major killer's disease in under 5 children in India and thus important public health problem. The alarming suction is created by delay in initiation of treatment and in educate hydration resulting in high morbidity, Diarrheal diseases cause a heavy economic burden on a Health service as well because one third of total pediatric admissions are due to diarrheal disease and to 17% of all death indoor pediatric patient are diarrhea related. Much attention has been given over the last decade to acute diarrhea and its management by home available fluids oral rehydration salt solution and intravenous fluids, but it has not made much impact in the scenario. (Indian pediatric, March 2004). According to a conservative estimate almost 500 million children suffer from acute diarrhea annually. Of them, 5million die every year. In India alone nearly 1.5million children die due to acute diarrhea every year. Diarrhea continuous to plague the developing world, resulting in more than 3 million death children specially those who are malnourished remain to a greater risk. More than 1.5 million episodes of diarrhea have been reported in children bellow 5 years resulting in over 3 million deaths. (The Indian Journal of pediatrics, Oct.2023)

Diarrhea can also spread from person to person, aggravated by poor personal hygiene. Food is another major cause of diarrhea when it is

prepared or stored in unhygienic conditions. Water can contaminate food during irrigation, and fish and seafood from polluted water may also contribute to the disease. The chances of food contamination and cross contamination, became a higher specially in lower socio economic due to unsatisfactory environmental conditions, poor personal hygiene, poor quality and insufficient water supplies, unhygienic preparation storage and feeding foods. Water contaminated with human faeces for example from municipal sewage, septic tanks and latrines is of special concern. Animal faeces also contain microorganisms that can cause diarrhea. Since personal hygiene and environmental sanitation are of utmost importance in the prevention of diarrhea, health education in food safety must receive high

priority. For this reason, education of caretakers particularly mother in the principles of focus safety should considered as important intervention in prevention of diarrheal diseases in young children.

Key measures to reduce the number of cases of diarrhea include, access to safe drinking water, improved sanitation, Good personal and food hygiene and health education about how infections spread.

Key measures to treat diarrhea include, giving more fluids than usual, including oral rehydration salts solution, to prevent dehydration, continue feeding and consulting a health worker if there are signs of dehydration or other problems.

All people either from urban or rural community have their own beliefs and practices regarding child care

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during diarrhea cultural factors are deeply involved in all the affairs of man. Cultural beliefs and practices can act barriers to childcare and some of the practices followed by women may not be agreeable to health professionals.

In order to develop and provide effective care to children during diarrhea, mothers as well as nurses need to be aware and sensitive to the needs of children.

NEED OF THE STUDY: -

Diarrhoeal disease is the third leading cause of death in children under 5 years old and is responsible for killing around 443 832 children every year. Diarrhoea can last several days and can leave the body without the water and salts that are necessary for survival. In the past, for most people, severe dehydration and fluid loss were the main causes of diarrhoea-associated deaths. Now, other causes such as septic bacterial infections are likely to account for an increasing proportion of all diarrhoea-associated deaths. Children who are malnourished or have impaired immunity, as well as people living with HIV, are most at risk of life-threatening diarrhoea. (The World Health Report 2023, WHO, Geneva).

UNICEF/WHO Report 14 October, 2009 Diarrhoea is the second leading cause of death among children under five globally. Nearly one in five child deaths – about 1.5 million each year – is due to diarrhoea. It kills more young children than AIDS, malaria and measles combined. Today, only 39 per cent of children with diarrhoea in developing countries receive the recommended treatment, and limited trend data suggest that there has been little progress since 2000.

UNICEF Rport 14 October, 2021 Diarrhoea is a leading killer of children, accounting for approximately 9 per cent of all deaths among children under age 5 worldwide in 2021. This translates to over 1,200 young children dying each day, or about 444,000 children a year, despite the availability of a simple treatment solution. Deaths caused by diarrhoea among children under 5 are highest in South Asia and sub-Saharan Africa.

Percentage of deaths caused by diarrhoea in children under 5 years of age (2021)

Clinical Epidemiology and Global Health October–December 2021: It is the third most common responsible disease for under five mortality. Profound studies have revealed that under five mortality persists due to diarrhoea in India. It is, thus, clear that this disease is a major public health issue in India. A study shows that under-five mortality and infant mortality (IMR) has been reduced to 50% and 41% in

2016 from 74% and 57% in 2005. Furthermore, Kamath et al. (2018), have mentioned that among the states Uttar Pradesh and Assam have shown more prevalence of childhood diarrhoea deaths than rest of the states of India. Some more studies have shown mother's age, age of child, social class, religion, residence and wealth index have influence on childhood diarrhoeal cases in India.

So it is very important to create awareness among mothers regarding causes, prevention and management of diarrhea to reduce morbidity and mortality rate of child of this area due to diarrhea episodes. So that investigator had taken this study for awareness of mothers for reduction of prevalence of diarrhea episodes in the selected area.

Success in reducing death and illness due to diarrhea depends on acceptance of the scientific basis and benefits of these therapies by governments and the medical community. It also depends on reinforcing family knowledge of prevention and treatment of diarrhea, and providing information and support to underserved families.

STATEMENT OF PROBLEM: -

“A quasi-experimental study to assess the effectiveness of structured teaching programme regarding diarrhea on the knowledge among the mothers at selected urban community in Chandarwani Naka Gwalior M.P.”.

OBJECTIVES: -

1. To assess the knowledge regarding Diarrhea among the mothers.
2. To find association between demographic variables and pretest knowledge score.
3. To evaluate the effectiveness of structured teaching programme regarding diarrhea among the mothers.

OPERATIONAL DEFINITION: -

- **Structured teaching programme**- It is planned teaching programme for improvement of knowledge regarding diarrhoea, its prevention, causes and management through information booklet, charts and demonstration.
- **Mothers**- Mothers of selected community those who are having child under five yrs of age.
- **Diarrhoea**- Watery loose motion 4 to 5 times in a day.

HYPOTHESIS: -

1. There will be significant association between pre-test knowledge scores and selected demographic factors.
2. The mean post-test knowledge score of the mother will be significantly higher than the mean pre-test knowledge score.

ASSUMPTION: -

1. Mother will have some knowledge regarding diarrhea
2. Participants will co-operate during the study.

DELIMITATION: -

1. The study was delimited to the mothers of under five children.
2. The study was delimited to selected urban community of Gwalior.

PLAN OF THE WRITING REPORT: -

1. **Chapter I-** It has dealt with introduction, background, need of the study, statement of problem, objectives, operational definitions, assumptions, hypothesis and delimitations of the study.
2. **Chapter II-** It describes review of literature and conceptual framework.
3. **Chapter III-** It dealt with Research methodology.
4. **Chapter IV-** It explains Data analysis and interpretation.
5. **Chapter V-** It dealt w discussion, summary, conclusion, Recommendations, implications and limitations.

REVIEW OF LITERATURE:

Literature review is considered a systematic and critical review of the most important scholarly literature on a particular topic (**Wood and Haber**). The term refers to an extensive, exhaustive and systematic examination of publications relevant to the research study.

The review helped the investigator in developing a deeper understanding and insight into the problem under study. It also helped in gaining information on the trends and development in this area.

Investigator has divided Review of literature in different parts:

1. Studies related to Diarrhea
2. Studies related to planned teaching

1. Studies Related to Diarrhea: -

B. Camala (2022) conducted a study to assess the effectiveness of structured teaching on prevention and management of diarrhea among mothers of fewer than five in Thribhurani, Pondicherry Investigator used pre experimental one group pre-test and post design. 50 mothers were taken in study. There was statistically significant improvement in level of knowledge and practice of mothers. Low positive correlation was between knowledge and practice in both the pre and post-test.

Rekha (2021) conducted a comparative study to assess the knowledge and practice, of mothers with under 5 children on the management of diarrhea

among under 5 in two rural communities, Chennai M.G.R. district, non-experimental research design, 60 mothers were selected for sample and structured questionnaire used to assess knowledge and practice. The mean knowledge score of two villages is 60.28 and 30.06 respectively with a practice score of 62.77 and 69.42. There was a positive correlation between knowledge and practice with an R-value of 0.47 and 0.55 between the two villages.

2. Study Related to Planned Teaching Programme: -

Saxena, A. (2023). Conducted a study, to evaluate the effectiveness of PTP regarding cancer chemotherapy and its side effect management of knowledge attitude and practice. A evaluative research approach with one group pretest and post-test design was used and simple random technique was utilized for selecting a sample. It was found that mean post-test knowledge score (39.46) of nursing personnel were found to significantly higher than their mean pretest knowledge score (32.93) as evident from 't' value (29)=10.9 p<0.05 level. The mean post-test attitude score (49.13) of nursing personnel was found to be significantly higher than their mean pretest attitude score (48.8)'t' value (29)=6.15, p, 0.05. This suggested that PTPwas effective in modifying the nursing personnel's attitude towards the chemotherapy administration and its side effects management.

Singh S. (2023) Conducted a study regarding effect of structured teaching programme on knowledge and practices related to hand washing technique among food handlers. A descriptive co-relational approach was adapted to assess knowledge and observe the hand washing practices of food handlers before and after structured teaching programme. Purposive sampling technique was used for selection for sample, a structured questionnaire comprising sixteen multiple-choice questions was used and a checklist was prepared for observing the hand washing practices. The data obtained was analyzed using both descriptive and inferential statistics and diagrams. It was found that pre-test mean knowledge score was 43.7% and post-test mean knowledge score was 83.1%. Pretests mean hand washing practices score was 49.3% and post-test mean hand washing practice score was 92%. It was concluded that structured teaching had been significantly effective in increasing their knowledge and practices score.

RESEARCH METHODOLOGY:

This Chapter deals with the methodology selected by the investigator to research problem. Research methodology is a way to systematically solve the research problem. It may be understood as a science

of studying how research is done scientifically. (**Polit and Hungler 1999**)

The present study is aimed to assess the effectiveness of structured teaching programme regarding diarrhea on the knowledge among the mothers at selected urban community Chandrawani Naka Gwalior, M.P.

VARIABLES UNDER STUDY: -

Variables are the conditions or characteristics that the experimenter manipulates, controls or observes. Three types of variables were identified in these studies.

1. Independent variables.
2. Dependent variable.

1. Independent variables - The independent variable is manipulated by the researcher. It is the intervention or treatment that the researcher performs to see the resulting change in the dependent variable. The independent variable is existing knowledge of mother regarding diarrhea.

In the present study the intervention is the structured teaching through lesson plan and booklet administered to mother by the investigator.

2. Dependent variables- The dependent variable usually is the variables that the researcher is interested in understanding, explaining or predicting. It is the outcome variable, which is measured or observed following the intervention of the independent variable. In the present study, increase in knowledge of mother regarding diarrhea is the dependent variable.

SETTING OF THE STUDY: -

Setting are the more specific places where data collection will occur or indicates the physical location and condition in which the data collection to place in a study. The study was conducted at Study Place Name with Address.

POPULATION: -

Population includes "all possible elements that could be included in research". In the present study target population is mother of under-fives child and accessible population is mothers of under-fives child at selected urban community in Ghosipura, Lashkar, Gwalior, M.P.

SAMPLE AND SAMPLING SIZE: -

The group of the people selected from the population to participate in the study should mention in number. The sample size should be such that generalizability in possibility or sample is the process of selecting a portion of the population to represent the entire population.

In the present study, the samples are mother those who have under-fives child at selected urban community in Ghosipura and sample size is 30.

SAMPLING TECHNIQUE: -

Sampling is a type of non-probability sampling method in which the researcher selects participants for the study on the basis of the personal judgment. (**Polit and Hungler 1999**).

Researcher used purposive sampling technique and selected 30 mothers of under-fives child.

SAMPLING SELECTION CRITERIA: -

Inclusion criteria of the present study were-

1. Mothers of under-fives child.
2. Mothers who are available at selected urban Ghosipura, Lashkar, Gwalior, M.P.
3. Mothers who could speak and respond in Hindi or English.

Exclusion criteria of the present study were- Mothers-

1. Mothers who has child above five years.
2. Mothers who were sick at the time of data collection.

DATA COLLECTION INSTRUMENT: -

Data collection tools are the procedures or instrument used by the researcher to observe or measure the key variables in the research problem.

In present study structured interview schedule used to collect data.

- Pre-test was conducted by administration of structured interview to measure the knowledge of mother regarding the diarrhea on first day.
- Implementation or administration of structured planned teaching through lesson plan and booklet on first day.
- Post test was conducted using the same tool on the seventh day.

CONTENT VALIDITY OF THE TOOL: -

Content Validity is the extent to which a measuring instrument provides adequate coverage of the topic under study.

The booklet, lesson plan and structured interview schedule submitted to five experts along with the blue print and criteria checklist and answer key to establish the content validity. The experts were three from pediatric nursing speciality and two were pediatrician. There was 100% agreement on all items but suggestion was given to modify some points.

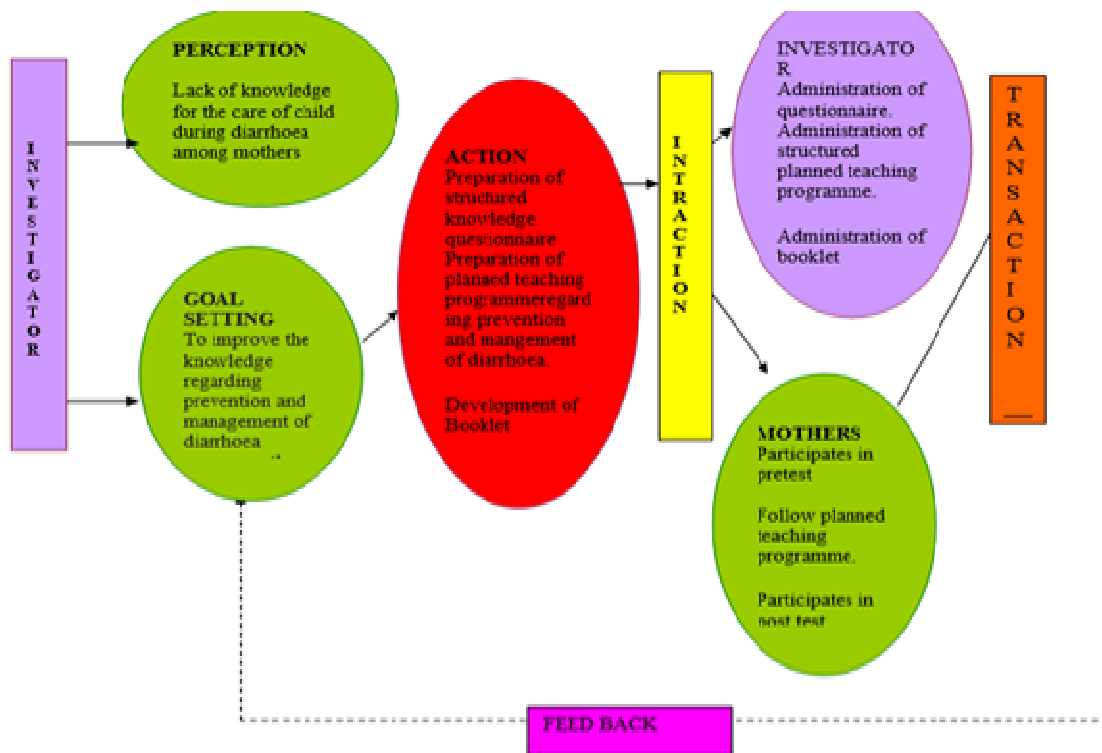


Fig No 1 Conceptual Framework Based on Modified Imogene Kings Goal Attainment Modal (1981)

PILOT STUDY: -

A Pilot study is a small-scale version or trial run for the major study. Its function is to obtain information of improving the project or for assessing its feasibility. The principle focus is assessment of the adequacy of measurement.

Pilot study was conducted on one of the selected Ghosipura, Lashkar, Gwalior, M.P. The investigator obtained written permission from the concerned authority prior to the study.

The purpose of the study was explained to the respondents and confidentiality was assured. Tool was administered to six mothers who fulfilled the sample criteria. The time taken to complete the questionnaire was 30-35 minutes.

After giving planned teaching through lesson plan and booklet, booklet was given to the mothers on the seventh day post test was conducted with the same tool to assess the gain in knowledge scores. The tool, lesson plan and booklet were found to be feasible and practicable. Data analysis was done using descriptive and inferential statistics. No further changes were made in the tool, lesson plan and information booklet after the pilot study.

PLAN FOR ANALYSIS: -

Data analysis is the systematic organization and synthesis of research data and testing of research hypothesis using those data. (Polit and Hungler 2023).

- The present study plans to analyze the data based on the objectives. The data obtained from 30 respondents would be analyzed by using descriptive and inferential statistics as follows: -
 - Baseline Performa would be analyzed using descriptive statistics i.e. frequency and percentage.
 - Knowledge assessment regarding effectiveness of planned teaching programmes by using descriptive statistics (frequency, percentages mean) and inferential statistics (paired and unpaired t – test).
 - To find association between pretest and post-test knowledge and selected demographic variables using chi-square test.

DISCUSSION: -

In this chapter major findings of the study are discussed in the line with objectives, hypothesis review of literature in relation to similar studies conducted by other researchers and conceptual frame work.

The main aim of this study was to evaluate the effectiveness of structured teaching programme through lesson plan and booklet regarding diarrhea among mothers.

SUMMARY: -

The summary of the study includes, objectives, assumption hypothesis etc. Research has adopted various strategies to improve the knowledge of

mother on diarrhea. Structured teaching programme through lesson plan and booklet is one method in which is adopted to impart knowledge to mother regarding diarrhea.

Introduction to diarrhea includes causes, transmission, sign and symptom, management and prevention of diarrhea. Need of education on diarrhea is to increase the knowledge of women regarding prevention, management of child from diarrhea. Health promotion to bring on positive health prevention of complication of diarrhea among children under-fives and mortality and morbidity of child under-fives can be minimized.

The study made use of a pre-experimental approach with one group pretest-posttest design. The population of the study consisted of mothers of under-fives at selected urban community in Gwalior. Purposive sampling technique was utilized to select 30 mothers based on certain predetermine criteria.

CONCLUSION: -

Conclusions drawn from present study was as follows-

- Structured teaching through lesson plan and booklet is an effective method
- Pretest mean knowledge score of mother on diarrhea was (16.86) i.e. 56.20% and post-test mean knowledge score was (24.67) 82.22%.
- There is no significant association between age, education, family income, type of latrine, type of house and family planning with the pretest knowledge score.

IMPLICATIONS OF THE STUDY: -

The findings of the present study have several implications in the field of Nursing education, nursing practices, Nursing administration and Nursing research.

Nursing education-

Prevention is better than cure. The health care delivery system at present is giving more emphasis on preventive rather than curative aspect. The study also implies that mothers have to be given proper care for child during diarrhea episode to ensure safe childhood and healthy child. The effectiveness of structured teaching programme through lesson plan and booklet is an informational aid to mothers for prevention of complications due to diarrhea. The study helps to raise awareness among nurses and nurse educator and trained them to acquire knowledge and understood the importance of prevention and management of diarrhea among under-fives child and to plan out teaching programme at hospitals OPD's or in community settings. The nursing curriculum has to emphasis on childcare for prevention of complication

and safe childhood and to reduce mortality and morbidity rate.

LIMITATIONS OF THE STUDY: -

1. The findings of the study cannot be generalized because of the small sample size (30) and purposive sampling technique.
2. A structured interview schedule was used for data collection, which restricted the amount of information that could not be obtained from the mothers
3. No attempt was made to measure the retention of knowledge after the post-test i.e. Feedback due to time shortage.

RECOMMENDATIONS: -

On the basis of the findings of the study following recommendations have been made for further study.

1. The study can be replicated on a larger sample; therefore, findings can be generalized for a larger population.
2. A comparative study may be conducted to find out the effectiveness between information booklets and planned teaching programme regarding the same topic.
3. A similar study can be replicated with a control group.
4. Similar study could be undertaken using other teaching strategies.

BIBLIOGRAPHY

JOURNAL:-

- [1] Bairiwa, K. (2002). Effectiveness of information booklet on cancer risk factors. *The Nursing journal of India*, LXXXIII (10), 227-228.
- [2] Chatterjee, P. (2002). Effectiveness of planned teaching programme on the knowledge of GNM students regarding Breast cancer and Breast self examination. *The Nursing journal of India*, LXXXIII (4), 93-94.
- [3] Clara, J. (2004). Effectiveness of structured teaching on self care of pregnancy induced hypertension among primipara mothers. *Communicating Research* Omayal Achi College of Nursing. 39-40.
- [4] Camala, B (2004) evalatutive study to assess effectiveness of structured teaching on prevention and management of diarrhoea among mothers of fewer than fives. *Nursing Research*. Omayal Achi College of Nursing..32
- [5] George, M. (2002). Planned teaching programme on menstrual hygiene. *The Nursing Journal of India*. 3 (1), 6-7..

- [6] Kaur, N. (1998). Planned teaching on early ambulation for undergoing preoperative abdominal surgery patients. *Nurses of India*. (7), 6-8.
- [7] Noronha, J. (1998). Teaching primigravidwomen about warning signs in pregnancy using a specially designed information booklet. *The Indian Journal of Nursing and Midwifery*. 1(3), 27-31.
- [8] Rekha(2004). Comprative study the knowledge and practice of mothers on management of diarrhoea. *Nursing Research*. Omayal Achi College of Nursing. 123-124.
- [9] Sarkar, P. (2004). Assess the effectiveness of structured teaching programme on self-administration of insulin. *Asian Journal of Cardiovascular Nursing*. 12(20), 8-10
- [10] Saxena, A. (2006). Evaluate the effectiveness of PTP regarding cancer chemotherapy and its side effect. *The Nursing Journal of India*. XCVII (5), 109-110.
- [11] Singh, S. (2004). Structured teaching programme on knowledge & practices related to hand washing technique among food handlers. *The Nursing Journal of India*. XCV (6), 125-126.

