



Review Article

Effectiveness of planned health education programme on knowledge related to complementary feeding among mothers

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Abstract

Complementary feeding is very old and invaluable process. Even all religion books give information on it. According to WHO, UNICEF and BPNI, exclusive breastfeeding is compulsory for an infant up to the age of six months and then initiation of complementary feeding is a must. Complementary feeding is 'master key' for the healthy growth and development of the infant. The objectives of the study were to assess existing knowledge on complementary feeding among the mothers of infants 2) To assess the effectiveness of planned health teaching programme on complementary feeding. Material and Methods: quasi experimental one group pre-test and post-test design was used. The sample for the study was n= mothers whose infants are below 5 yrs of age selected by using Random sampling technique sampling method: Mothers of infants whose children's are under 5 yrs of age were selected as per criteria and the informed consent was taken from mothers, demographical data was collected and recorded then pre-intervention knowledge was checked through structure questionnaire and recorded in Intervention phase Planned health teaching was given on complimentary feeding as an intervention and in Post intervention phase Assessment of post test knowledge was done through structure questionnaire on 7th day after pre test, to assess the post test result and the Data was analysed using paired 't' test that mean score of knowledge of mothers before intervention was 20.72 among the 60 samples and standard Deviation was 4.551, where standard error was 588 and mean score of mothers after planned health teaching is 31.52 and standard Deviation was 2.095, where standard error was. 270 and this mean difference has seen highly significant than calculated 't' value (16.47) is greater than the table value (2.662) at 59 degrees of freedom at 1 % level of significance, so the investigator concluded that there is significant increase in the knowledge after administration of planned health teaching.

Keywords: Feeding, Mothers, Infants

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1. Introduction

"Ma at whose breast humanity is nourished and whose lap civilizations are cradled"

Yashoda Maiya and Devkimata asked to toddler Lord Krishna, "who is great between us". He replied, "Mother", The great answer

and the great person 'Mother'. She gives birth, breastfeeding, complementary feeding and what not.

Complementary feeding is very old and invaluable process. Even all religion books give information on it. According to WHO, UNICEF and BPNI, exclusive breastfeeding is compulsory for an infant upto the age of six months and then initiation of complementary feeding is a must.

An, old popular word 'weaning' is replaced by 'Complementary feeding'. Weaning literally mean 'to accustom to' or 'to free from a habit'. Complementary feeding complements to breast-feeding [1] criteria for selection of food, applications of principles of nutrition, hygiene and infant psychology while preparing, feeding and monitoring the infant [2].

This process is influenced by several factors like availability, socio economic and educational status of parents, family beliefs, customs and attitudes, hygienic practices, use of available health services and marketing of market preparation [3].

A study done by Kumar D et. al. said that 36.4% children were under weight and 51.6 were stunted growth because of late weaning. Influence on weight, height and body circumferences can be seen easily [4]. Dr. Zlotking's study described that iodine, zinc and iron are essential for mental development [5] Prof. Zhoy's study pointed out that intake of micronutrients and learning have association [6] Dr. Angeline concluded in her study that improper, infant and child feeding had relation with adult eating disorders. That means for psychological development complementary feeding must be healthy [7] Complementary feeding is not mechanical process, so many interactions taken place with parents and family members. It promotes socialization. In short complementary feeding is 'master key' for the healthy growth and development of the infant [8].

Above both factors are explained through following schematic diagram.

This overall idea is given for each one has to learn and teach to other on complementary feeding for healthy infant and healthy India

Need for study

'Necessity is the mother of invention'

Operational definition

- **Evaluate**

Refers to comparison of results obtained through pre test and post test scores

- **Effectiveness**

Refers to significant gain in knowledge of mothers with regard to complementary feeding as observed the difference between pre test and post test

- **Planned teaching programme**

Refers to teaching programme prepared and used by investigator after thorough validation about complementary feeding to enhance knowledge and competencies of mothers.

- **Mother :**

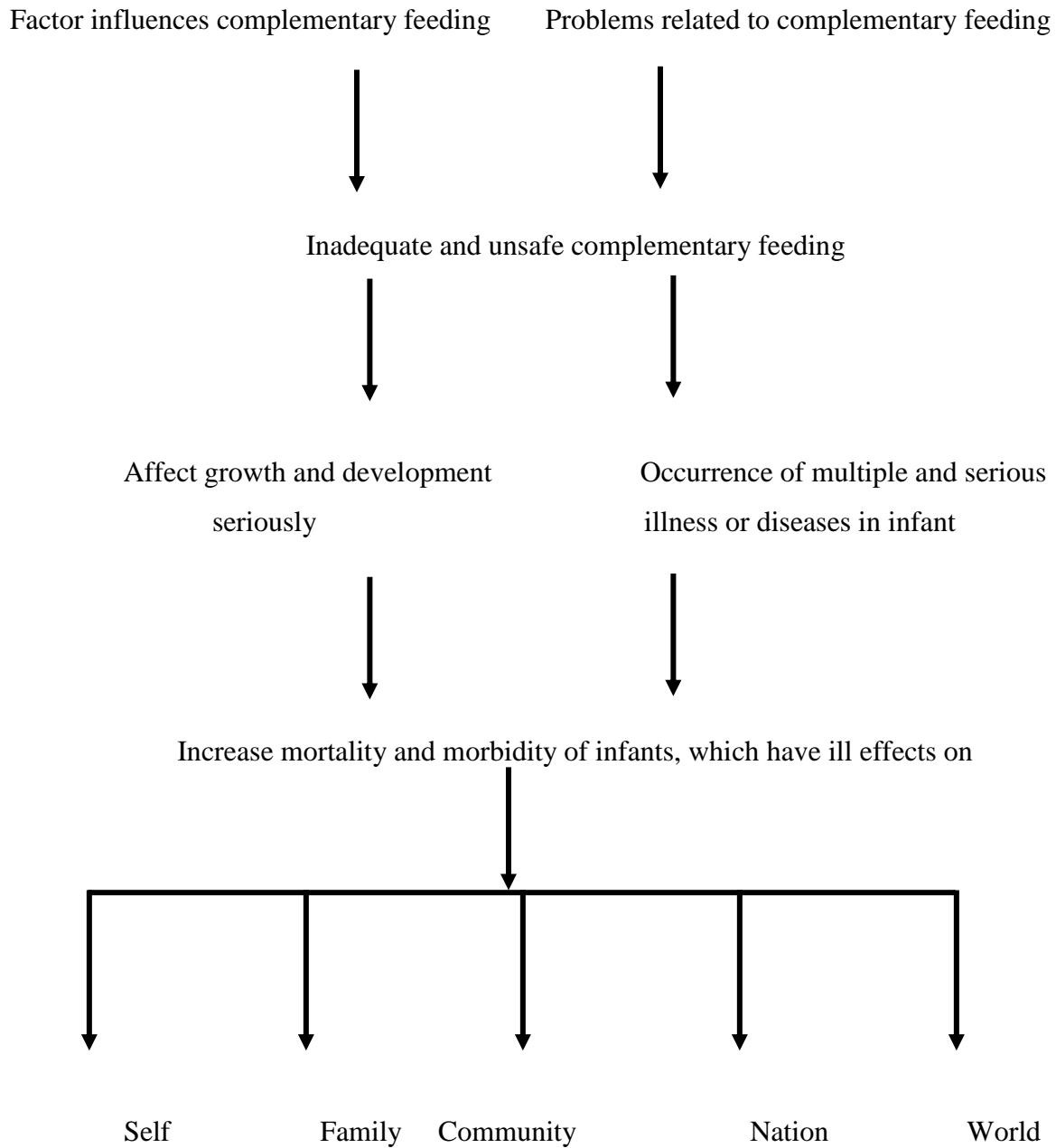
Refers to a woman who permanently resides in study area and has a child of age between 0-1 years

- **Knowledge :**

Refers to correct responses received from mothers regarding various aspects of complementary feeding such as advantages principles, phases selection, phases, preparation, time to start, food hygiene and technique of feeding

- **Complementary feeding:**

Refers to a systematic process of introduction of suitable foods at the age of 4-6 months addition to mothers milk in order to provide needed nutrients to the body.



Assumptions

1. Mothers of infants have some knowledge on complementary feeding.
2. There will be increase in the knowledge after giving planned health teaching on complementary feeding among the Mothers of infants.

Inclusion criteria

- Mothers of infants, who are
 - Willing to participate in research study
 - Understand and able to speak Marathi

Exclusion criteria

- Mothers of infants, who are not willing to give consent.

Hypothesis

H₀ There will be no significant gain in knowledge on complementary feeding among the Mothers of infants.

H₁ There will be significant gain in knowledge score of mothers of infants on complementary feeding after administration of planned teaching programme.

Variables:

A variable is any phenomenon or characteristics or attitude under study. They are the measurable characteristics of concepts and consist of a logical group of attitudes.

In present study following variables were used.

Dependent variables:

The response, behavior or outcome that researcher wishes to predict or explain.

- Dependent variable in this study is Knowledge of mothers of infants on complementary feeding

Independent variable:

The treatment or experimental variable that is manipulated or varied by the researcher to create an effect on dependant variable.

Independent variable in this study is planned health teaching on complementary feeding.

Study Setting:

The place where study will be conducted.

Setting for Present research study is at Bharati hospital Pediatric O.P.D, pediatric ward, PICU and Maternity ward.

Population

Population is entire collection of people, Animal, Plants Or Things from which we may collect data.

The population for present study comprises, Mothers of infants from Bharati hospital Sangli

Sample size

60 mothers of infants.

Sampling technique

Sampling is process of selection of representative units of the population for study in research. In the present study Random sampling technique is planned.

Tool

A tool is written device that a researcher uses to collect the data. Purpose of tool development was to collect relevant data / information for proposed study. In present study self structured Questionnaire was used as tool

Components of tool

Tool had two parts

❖ **Section One** -consisted of socio demographic data of mothers of infants. e. g Age, Education, Religion, Income.

❖ **Section Two:** Consisted of self structured Questionnaire on knowledge of mothers of infants on complementary feeding.

Validity -The content validity of the tool enclosed, baseline data and observation table as a tool was submitted to 18 experts in Nursing, Medical, fields for validity. After obtaining their opinion, the tool was modified wherever necessary with the guide suggestions.

Reliability- The reliability was done with test and retest method.

❖ **Data Collection was done in following Steps:**

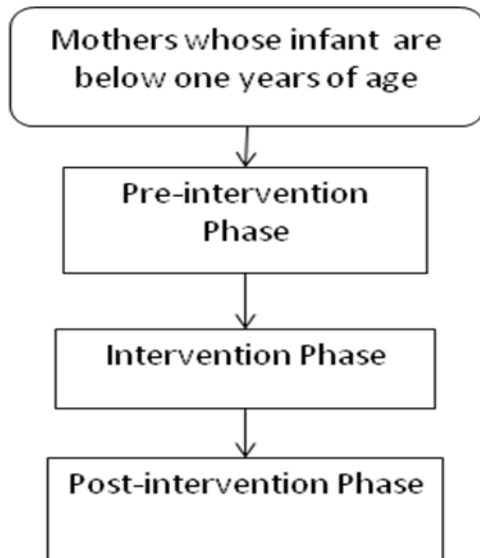
a) Pre-intervention Phase:- Mothers of infants whose children are under 1 yrs of age were selected as per criteria and the informed consent was taken from mothers, demographical data was collected and recorded then pre-intervention knowledge was checked through structure questionnaire and recorded .

b) Intervention phase: Planned health teaching was given on complimentary feeding as an intervention

a) Post intervention phase:

❖ Assessment of post test knowledge was done through structure questionnaire on 7th day after pre test, to assess the post test result.

❖ **Quasi-Experimental one group design**



Result and Discussion

Table I: Comparison of mean scores of knowledge before and after Administration of planned health teaching

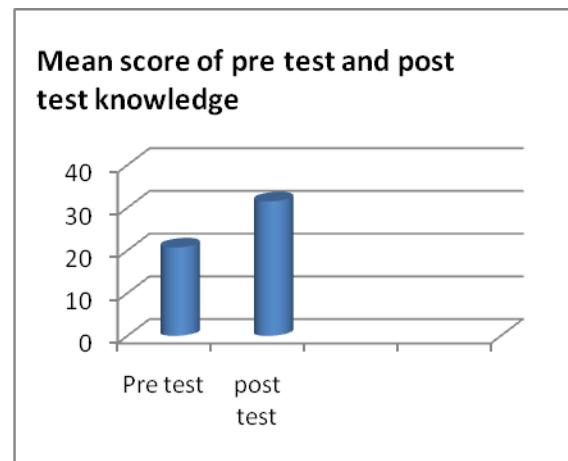
	Mean	N	SD	SEM	Significance
Pre test	20.72	60	4.551	.588	Highly significant
Post test	31.52	60	2.095	.270	

SD: Standard deviation, **SEM:** Standard error of mean

T: 16047 P value: .000

Comparison of among Pre test and Post test knowledge

Figure 1: Comparison of mean scores of knowledge before and after administration of planned health teaching.



The above table shows that mean score of knowledge of mothers before intervention was 20.72 among the 60 samples and standard deviation was 4.551, where standard error was .588 and mean score of mothers after planned health teaching is 31.52 and standard deviation was 2.095, where standard error was .270 and this mean difference has seen highly significant than calculated 't' value(16.47) is greater than the table value(2.662) at 59 degrees of freedom at 1 % level of significance, so the investigator

concluded that there is significant increase in the knowledge after administration of planned health teaching.

Discussions of the findings

The findings of present study have been discussed with reference to the objectives and hypothesis. A finding of the study shows the effectiveness of planned teaching programme on knowledge related to complimentary feeding among the mothers of infants of Bharati hospital sangli. Complimentary feeding is a crucial process for each infant, it is not only meeting nutritional need but also essential for normal total growth development of infant .the mother needs to be known legible and competent while taking care of infant.

Therefore the study was undertaken to find out the effectiveness and feasibility of planned teaching programme on complimentary feeding in order to use it vastly.

“A study to evaluate the effectiveness of planned health teaching programme on knowledge related to complementary feeding among the mothers of infants in Bharati hospital, Sangli. Was conducted by Mrs. Aparna Kale, Mrs. Manisha Kulkarni in child health nursing During the Year 2011 to 2012.

This study supports the conceptual framework which was based on Ludwig von Bertalanffy, as according to this theory there is input, throughput and output. Input was given in the form of planned health teaching programme and change in knowledge after planned health teaching programme is in the form output.

❖ The purpose of the present study was To assess the effectiveness of planned health teaching programme on complementary feeding .The quasi-experimental research design was used for the study, which consisted of one group with pre test and post test and which is divided into a) Pre-intervention

Phase:-Mothers of infants whose childrens are under 5 yrs of age were selected as per criteria and the informed consent was taken from mothers ,demographical data was collected and recorded then pre-intervention knowledge was checked through structure questionnaire and recorded b)Intervention phase:-Planned health teaching was given on complimentary feeding as an intervention c) Post intervention phase:-Assessment of post test knowledge was done through structure questionnaire on 7th day after pre test, to assess the post test result.

The content validity of tool was done, and the reliability of tool was done by carl pearson's coefficient of correlation and browns prophecy formulae. The pilot study was conducted on 10 samples and the feasibility of the study was established from sangalwadi in sangli district, conducted from 02/08/11 to 09/08/11. The reliability was $r' = 0.98$ and test and retest method was applied on pre test and post test result and the reliability $r' = 0.84$ It was found that the tool has no major flaws and was used for the final study.

Based on the objectives and the hypothesis the collected data was analyzed by using descriptive and inferential statistics, and the 't' test was used to find the significance Statistically mean score findings showed that that there is significant increase in the knowledge after administration of planned health teaching. Hence the investigator accepted the null hypotheses, as there is no statistical significant difference in the mean score of weight of low birth weight in MCT oil group and Shatavari Ghee Group scores.

Nursing Implications

The findings of the study has following implications on nursing

Nursing practice

For PTP on nutrition education, the pre requisites are

Assess the knowledge of group, and those factor affecting or helping for desire, behavior, suitable teaching technique, A.V. aids and important one is groups attitude and beliefs.

Guiding counseling and reinforcement are important activities to keep the group in continuation of practice

Recent information or practices must be introduced to the group as well as those people, who influence the group.

Nurse must keep in mind, while teaching and demonstrating any healthy habits. The practice is not mechanical, but it has psychosocial and economical impact also.

Periodical supervise and evaluate the practices

Nursing education

Breast-feeding promotion has achieved optimum level and coverage in people but knowledge and practices of complementary feeding are poor as per WHO, UNICEF.

- The scientific and update information must be included in diploma and degree syllabus.

- Education about complementary feeding is most essential for pregnant and lactating mother as well as all members of society. So plan health education for them.

- Demonstration, role play, workshop along with use of suitable and effective A.V. aids make the greater impact of nutrition education programme

- Mass media like radio, television and newspaper are best and fastest means to reach to people

Nursing administration

- Nutritional or any health programme must be based on need, analyzed information and known resources.

Nurse administrator must plan, conduct and evaluate the programme, which was done for community as well as health professionals.

Nurse administrate should take efforts to guide and provide competent information and A.V. aids to health professionals to conduct health education programme effectively and efficiently.

Nurse administrator will find out effective strategy for complementary feeding services.

Nursing research

Nursing students must be motivated and guided to conduct research studies

Present tool will be used by other or modified it for re-use.

College or university must make compulsory clause/clue/requirement of conduct research study.

Limitations

Generalization of the result (as study was related to only rural area and small samples).

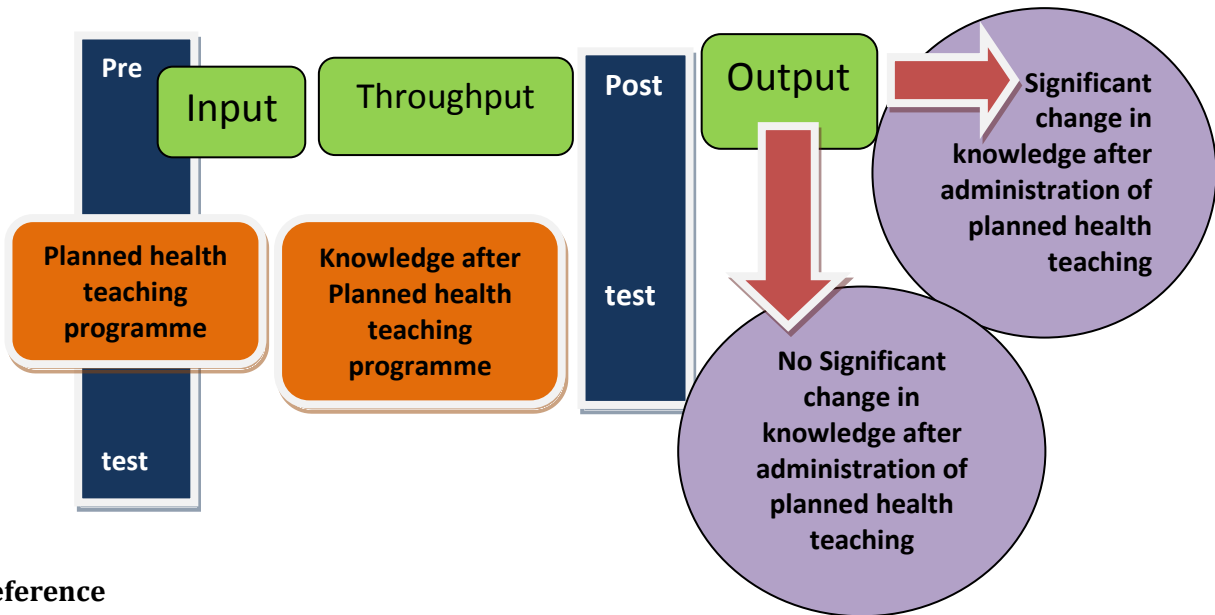
There was no comparison group so effects of extraneous variables were not limited/controlled.

Limitation of sources available.

Recommendations

Based on study following recommendations are suggested to conduct

1. A Comparative study can be conducted in rural and urban area on complementary feeding.
2. A study to evaluate the effectiveness of homemade and commercial foods of complementary feeding
3. A comparative study of PTP on complementary feeding imparted by health professional and other specific group of community



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