# Effectiveness of Informational Booklet on Knowledge Regarding Low Cost Health Mix on Nutritional Status of Under Five Children with Malnutrition among Mothers of Selected Areas of Bagalkot

**Gundurao G. Chilapur[1], Deelip S. Natekar[2]**

*[1]PhD Scholar, Department of Community Health Nursing, [2]Principal, Shri B.V.V.Sangha's Sajjalashree Institute of Nursing Sciences, Navanagar, Bagalkot*

## Abstract

Childhood malnutrition is a major public health concern, as it is associated with significant short- and long-term morbidity and mortality. This study aims to assess the knowledge regarding low cost health mix on nutritional status of under five children and with malnutrition and effectiveness of information booklet. **Methodology:** An evaluative approach with pre-experimental one group pre-test post-test design was used for the study. A structured interview schedule was used to collect the data. The sample includes 50 mothers of under five children residing at selected areas of Bgalkot with help of convenient sampling technique. **Results:** The mean percentage of knowledge scores of the mothers of under five children in the pre-test was 31.84 % with mean and SD (15.92±1.66), whereas the mean percentage of knowledge scores in post-test was 44.48% with mean and SD (22.24±1.64). Significance of difference between the pre-test and post-test knowledge scores was found to be highly significant [t= 20.68, p<0.05]. There was a significant association found between pre-test knowledge scores of the mothers and socio demographic variables like age ($\chi^2$**=3.86; P<0.05**),, place of residence ($\chi^2$**=3.92; P<0.05**), exposure to mass media ($\chi^2$**=9.92; P<0.05**) and knowledge of low cost health mix ($\chi^2$**=3.89; P<0.05**). *Conclusion:* The study proved that information booklet was effectiveness in improving the knowledge of mothers on low cost health mix on nutritional status of under five children.

***Keywords:*** *Effectiveness, Self Instructional Booklet, Knowledge, Low Cost Mix, Under five Children, Malnutrition.*

## Background of the Study

Food means not only proteins, fats, minerals, vitamins and other nutrients- but much more; it is part of security and civilization. Nations and civilization are linked together not only by ideas, but also by bread. Hunger and malnutrition are problems everywhere and have harassed mankind and threatened peace throughout history. It is no wonder that the growing incidence of hunger and malnutrition should have come to the forefront of international concern.[1]

In India, gross malnutrition is said to kill around 5, 00,000 of our infants and children every year. This quite understandable in view of the fact that around three-fourth of our pediatric population is suffering from one or another nutritional deficiency. Around 25% of the pediatric beds are occupied by patients whose major problem is malnutrition.[2]

Children of families with lower socio-economic standing are faced with sub-optimal growth. While children in similar communities have shown to share similar levels of nutrition, child nutrition is also

differential from family to family depending on the mother's characteristic, household ethnicity and place of residence. It is expected that with improvements in socio-economic welfare, child nutrition will also improve.[3]

A supplementary food based on a blend of roasted wheat flour (30 parts), green gram flour (20 parts), groundnut (8 part) and sugar or jaggery (20 parts) has been developed by National Institute of Nutrition, Hyderabad. The food contains about 12.5 percent proteins. A daily supplement of 80g of the Hyderabad mix food (providing 300kcal and 10g of proteins) has been found to bring about significant improvement in the growth rate of pre-school children.[4] Studies have also shown that the formula advised by the National Institute of Nutrition, Hyderabad specially prepared protein mixtures provide an increase of weight after 22 days to 3 weeks or little later.[5]

The researcher's clinical experience, it was that there was a high prevalence of malnutrition among under five children at Bagalkot and so low cost mix such as Hyderabad mix is assumed to be the cheap and best supplementary food in treating the malnutrition which is introduced by National Institute of nutrition at Hyderabad, hence to decided to evaluate the effectiveness of information booklet on knowledge regarding the low cost mix for under five children with malnutrition among their mothers at selected areas of Bagalkot.

XXXIV.    Statement of the Problem:

"EFFECTIVENESS OF INFORMATIONAL BOOKLET ON KNOWLEDGE REGARDING LOW COST HEALTH MIX ON NUTRITIONAL STATUS OF UNDER FIVE CHILDREN WITH MALNUTRITION AMONG MOTHERS OF SELECTED AREAS OF BAGALKOT".

## Objective of the Study

1)  To assess the knowledge regarding low cost health mix on nutritional status of under five children with malnutrition among mothers of selected areas of Bagalkot.

2)  To evaluate the effectiveness of information booklet on knowledge regarding low cost health mix on nutritional status of under five children with malnutrition among mothers of selected areas of Bagalkot.

3)  To find the association between pre test level of knowledge with selected socio-demographic variables.

## Methodology

**Research approach:** An evaluative approach was used for the present study.

**Research design:** Pre-experimental one group pre-test, post-test design.

**Variables under the Study:**

**Dependent Variable:** Knowledge of mothers regarding low cost health mix on nutritional status of under five children.

**Independent Variable:** Information Booklet on knowledge of mothers regarding low cost health mix on nutritional status of under five children.

**Socio-demographic Variables:** age, place of residence, exposure to mass media, knowledge of low cost mix.

**Setting of the Study:** The present study was conducted at selected areas of Bagalkot.

**Population:** The population for this study was mothers of under five children at selected areas Bagalkot.

**Sample size:** The sample for the present study composed of 50 mothers of under five children.

**Criteria for Selection of Sample:**

**Inclusive criteria:** The study includes the mothers;

1.  Who are willing to participate in study.

2.  Who are having under five children.

3.  Who all are able to co-operate during the study.

**Exclusive criteria:** The study excludes the mothers;

1.  Who are not interested to participate in study.

2.  Who are not present at the time of study.

3.  Who are ill at the time of study and unable to provide data.

**Sampling Technique:** Convenient sampling technique.

Description of the final Tool: **The structured interview schedule was used for this study which consists of two parts:**

·    PART I: Items related to socio-demographic data of mothers.

·    PART II:        Knowledge        Questionnaire regarding low cost mix.

**Scoring of the Items:** The maximum obtainable scores were 30. To find out the association between the selected socio-demographic variables and knowledge scores, respondents are categorized in to five groups.

| Category | Score |
|---|---|
| Adequate | 21-30 |
| Average | 11 - 20 |
| Inadequate | 0 - 10 |

**Data collection procedure:** Pretest was administered on day one. Then information booklet was administered on the same day after one hour of pre-test. On the 8th day after the administration of information booklet the post test was conducted using the same interview schedule.

**Plan of Data Analysis:** The data obtained was analyzed in terms of achieving the objectives of the study using descriptive and inferential statistics.

## Results

Part I: Level of pre-test knowledge of the mothers regarding low cost mix.

**Table 1: Percentage wise distribution of study subjects according to levels of knowledge in pre test.**

**N=50**

| Level of knowledge | Range of scores | Number of respondents | Percentage (%) |
|---|---|---|---|
| Inadequate | 0 - 10 | 00 | 00 |
| Average | 11 - 20 | 50 | 100 |
| Adequate | 21 - 30 | 00 | 00 |
| Total | 0-30 | 50 | 100 |

Assessment of the level of knowledge of the mothers reveals that all (100%) of the mothers had average knowledge**.**

Part II: Significance of the difference between the pre-test and post-test knowledge scores of the mothers.

**Table 2: Significance of the difference between the pre-test and post-test knowledge scores of the mothers.**

| Knowledge area | Test | Mean | SD | Paired t-value |
|---|---|---|---|---|
| Low cost mix | Pre test | 15.92 | 1.66 | 20.68* |
| | Post test | 22.24 | 1.64 | |

**\*Significant ($p<0.05$)**

Findings reveal that the difference between mean pre-test (15.92±1.66) and post-test (22.24±1.64) knowledge scores of mothers found to be statistically significant at 0.05 level of significance [t= 20.68, p<0.05].

Part III: Association between the pre-test knowledge scores of mothers of under five children regarding low cost mix and selected socio - demographic variables.

**Table 3: Association between the pre-test knowledge scores of staff nurses regarding Blood components transfusion and its complications and selected socio - demographic variables.**

| Sl. No | Socio-demographic variables | Df | Chi-square value | Table value | Level of significance | |
|---|---|---|---|---|---|---|
| 1. | Age | 1 | 3.86 | 3.84 | P<0.05 | S |
| 2. | Place of residence | 1 | 3.92 | 3.84 | P<0.05 | S |
| 3. | Exposure to mass media | 1 | 9.92 | 3.84 | P<0.05 | S |
| 4. | Knowledge on low cost health mix | 1 | 3.89 | 3.84 | P<0.05 | S |

**Df – Degree of freedom        *Significant        NS – Not significant**

Findings of the study revealed that there is significant association found between pre-test knowledge scores of the mothers with selected socio demographic variables such as like age ($\chi^2$=3.86; P<0.05),, place of residence ($\chi^2$=3.92; P<0.05), exposure to mass media ($\chi^2$=9.92; P<0.05) and knowledge of low cost health mix ($\chi^2$=3.89; P<0.05).

## Discussion

The findings of the study were discussed according to the objectives which were stated. The present study has showed that the difference between mean pre-test (15.92±1.66) and post-test (22.24±1.64) knowledge scores of mothers found to be statistically significant at 0.05 level of significance [t= 20.68, p<0.05].

These findings were supported, by the study conducted to find the effectiveness of structured teaching program on knowledge regarding Hyderabad mix among 50 mothers of under five children Kalburgi, where the overall pretest mean knowledge score was 23.45(sd=5.76), post test mean score was (sd=6.48) with paired t-value of 49.57.[6]

## Conclusion

From the present study it was found that information booklet was very self learning method. The investigator as a nurse felt the need that mothers of under five children should be educated regarding the use nutritional supplementation for the under five children in order prevent the morbidity and mortality among the under five children.

**Conflict of Interest:** Author has no conflict of interest.

**Ethical Clearance:** Ethical clearance was obtained from Institutional Ethical Clearance Committee, BVVS Sajjalashree Institute of Nursing Sciences, Bagalkot.

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