

**A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE
REGARDING DIETARY PRACTICES IN PREVENTION OF
MALNUTRITION AMONG MOTHERS OF UNDERFIVE CHILDREN AT
SELETED SETTING IN CHENNAI**



**A PROJECTWORK SUBMITTED TO SATHYABAMA INSTITUTE
OF SCIENCE AND TECHNOLOGY CHENNAI**

**IN PARTIAL FULFILMENT OF DEGREE
OF BACHELOR OF SCIENCE
IN NURSING**

2019-2023



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**BY
MS.AKSHAYA A
MS.ANITHA P**

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CERTIFIED WORK DONE BY

Ms. AKSHAYA. A

Ms. ANITHA. P

**SATHYABAMA COLLEGE OF NURSING,
SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY
CHENNAI.**

**SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF BACHELOR OF
SCIENCE IN NURSING FROM
SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CHENNAI**

2019 - 2023

RESEARCH GUIDE



DEAN



DEAN
SATHYABAMA
COLLEGE OF NURSING
Jeppiaar Nagar, Rajiv Gandhi Smriti,
Chennai - 600 119.

BONAFIDE CERTIFICATE

This is a bonafide work done by **Ms. Akshaya. A** and **Ms. Anitha. P B.sc (N)** III Year Students from Sathyabama college of Nursing, Sathyabama Institute of Science and Technology, Chennai, submitted in partial fulfillment for the Degree of Bachelor of Science in Nursing under the Sathyabama Institute of Science and Technology (Deemed to be University), Chennai.

College Seal:



Signature of the Dean:

SATHYABAMA
COLLEGE OF NURSING
Jeppiaar Nagar, Rajiv Gandhi Salai,
Chennai - 600 119.

ENDORESEMENT BY THE RESEARCH GUIDE

This is to certify the dissertation entitled **“a study to assess the knowledge and practice regarding dietary practices in prevention of malnutrition among mothers of under five children at selected setting in Chennai.”** is a bonafide research work done by **Ms. Akshaya A** and **Ms. Anitha P** in partial fulfillment of the requirement for the degree of Bachelor of Science in Nursing



SEAL AND SIGNATURE OF

THE RESEARCH GUIDE

DECLARATION

We hereby declare that the present project report entitled “**A study to assess the knowledge and practice regarding dietary practices in prevention of malnutrition among mothers of under five children at selected setting in Chennai**”. Is the outcome of the original research work undertaken and carried out by us under the guidance of Ms.J.Precilla Msc (N), Sathyabama College of Nursing, Chennai. We also declare that the material of this project report as not formed in anywhere, the basis for the award of any degree in this university or any other university.

BY

(Sathyabama college of nursing)

A. Akshaya
A. Anita

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ABSTRACT

“Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment, or the smallest act of caring, all of which have the potential to turn a life.

LEO. F. BUSCAGLIA QUOTES

STATEMENT OF THE PROBLEM :

A study to assess the knowledge and practice regarding dietary practices in prevention of malnutrition among mother's with under five children at selected setting in Chennai.

OBJECTIVES OF THE STUDY:

To assess the knowledge regarding dietary habits in prevention of malnutrition among mothers with under five children.

To assess the practice regarding dietary habits in prevention of malnutrition among mothers with under five children.

To create awareness regarding prevention of malnutrition among mothers with under five children.

HYPOTHESIS:

H 1: There will be a significant correlation between the knowledge and practices regarding dietary habits in prevention of malnutrition among mothers with under five children.

H 2: There will be a significant association between the knowledge scores regarding dietary practices in prevention of malnutrition among mothers with under five children with their selected demographic variables.

METHOD OF STUDY

Research instruments also called research tool are the devices used to collected data. The tool facilities the observation and measurement of variables. The following instruments were developed by the research for the present study.

ORGANIZATION FINDINGS:

Section I: Descriptive analysis of demographic variables.

Section II: Assessment knowledge and practice regarding dietary habits in prevention of malnutrition.

Section III: Comparison of knowledge and practice scores regarding dietary habits in prevention of malnutrition.

Section IV: Association between the selected demographic variables with the knowledge of malnutrition among mothers with under five children.

RESULTS:

The following were the results of this study.

Finding-1

The study findings revealed that 10 (33.3%) mothers had inadequate knowledge, 15 (50%) of mothers had moderately adequate knowledge, 5 (16.3%) of mothers had adequate knowledge.

Finding-2

The study findings revealed that 4 (13.3%) mothers had inadequate practice, 18 (60%) of mothers had moderately adequate practice, 8 (26.6%) of mothers had adequate practice regarding dietary habits in prevention of malnutrition.

Finding-3

The study findings revealed that association of Knowledge and practice regarding dietary habits in prevention of malnutrition among mothers with their selected demographic variables. The interpretation of data of the chi square test values were calculated. The study showed that age $\chi^2=13.026$, education $\chi^2=83.472$, occupation $\chi^2=67.53$, monthly income $\chi^2=40.52$, religion $\chi^2=12.716$, and source of health information $\chi^2=23.08$ these six demographic variables showed there is statistically significant association of knowledge of mothers regarding dietary practice in prevention of malnutrition. Other demographic variables like type of food consumption showed there was no significant association of knowledge of mothers regarding dietary practice in prevention of malnutrition.

CONCLUSION

The present study assessed the knowledge and practice regarding dietary practice in prevention of malnutrition among mothers who had inadequate knowledge. After awareness program on dietary practice regarding malnutrition there is significant improvement on the knowledge.

KEYWORDS: Assess, knowledge, Practice, Malnutrition.

CHAPTER – I

INTRODUCTION

“Children are the wealth of tomorrow, take care of them if. you wish to have a strong India”

- Jawaharlal Nehru

Children are the future of society, and mothers are the guardian of that future. So nutrition is an essential part of growth and development of children. Good nutrition aims to achieve and maintain a desirable body composition, optimal health, prevention of diseases and high potential for physical and mental work. Nutrients needed by the body for the growth, development and maintenance of life. Many common health problems are prevented by healthy diet.

The world's public health nutrition problem is malnutrition. Malnutrition essentially means bad nourishment. It concerns not enough as well as too much food, the wrong types of food or the inability to use nutrients properly to maintain health. The malnourished are unable to live a normal life, it affecting the future health and socio economic development.

BACK GROUND OF THE STUDY

Nation's health depends on healthy citizens. A healthy adult emerges from a healthy child. Children are priceless resources and if the nation neglects their health, it would become a nation of unhealthy citizens. Nutrition of under five children is of paramount importance because the foundation of our life time, health, strength and intelligence vitality is laid during this period. As all entered the new millennium, India faces the burden of diseases in which nutritional deficiencies are more common. Among the nutritional problems, PEM (Protein Energy Malnutrition) has been identified as a major health and nutritional problem in India. It is not only an important cause of childhood morbidity and mortality but also leads to permanent impairment of physical and mental growth of children who survive.

In today's world children are affected by various diseases, that are responsible for high rates of morbidity and mortality. But malnutrition is a leading problem in the under developed and developing countries among under five children. In a vast majority of children, mild to moderate

malnutrition remains undetected due to lack of awareness on the part of all concerned in medical and paramedical personnel and parents.

Protein energy malnutrition has been identified a major health and nutritional problem in India. It occurs particularly in children in the first year of life. It is characterized by low birth weight if the mother is malnourished. Poor growth in children and high level of mortality in children between 12 to 24 months and is estimated to be an underlying cause in 30% of death among under five children. Severe protein energy malnutrition often associated with infection contributes to high child mortality in underprivileged communities. Further early malnutrition can have lasting effects on growth and functional status. The frequency of malnutrition cannot be easily estimated from the prevalence of commonly recognized clinical syndromes of malnutrition such as marasmus and kwashiorkor.

The current concepts of malnutrition are that its clinical forms are kwashiorkor and marasmus. The incidence of protein energy malnutrition in India in preschool children is 1-2 percent. The problem exists in all the states and that nutritional marasmus is more frequent than kwashiorkor.

Malnutrition is a condition which occurs when the body does not get the required amount of nutrients for the maintenance of the positive health.

NEED FOR THE STUDY

Nutritional deficiency disorders are major public health problem in India and other developing countries. It affect vast majority numbers of population and responsible for approximately 55 percentage of childhood death.

In world wide, 150 million children are malnourished; millions of Indian children are equally deprived of their rights to survival, health, nutrition, education and safe drinking water. It is reported that 63% of children go to bed hungry and 53% suffer from chronic malnutrition .

Report UNICEF.

Globally, there are 170 million underweight children, three million of children die each year as a result of being underweight. WHO and other international agencies have recommended exclusive breast feeding in the initial six months and to continue breast feeding supplemented by other appropriate foods upto second year of life. Under nutrition is a public health problem among infants and young children, and is associated with a web of factors including insufficient food intake, incorrect feeding practices, frequent infections and literacy status of parents.

According to WHO.

In 2000, world wide it was estimated that more than 150 million under five children that is 25% of the world's children are malnourished in terms of being under weight, over 2/3 of malnourished children belong to Asia. It is now recognized that 53% deaths in under five children in developing countries are attributable to malnutrition.

The rate of malnutrition (63%) is more than double the average for sub-Saharan Africa. The UNICEF report on the progress of India's Nutrition Status reveals that India has the unfortunate distinction of having 75 million malnourished children below 5 years, ahead of just Bangladesh and Nepal.

In India, the incidence of protein energy malnutrition among preschool age children is 1-2%, the greater majority of cases of protein energy malnutrition, nearly 80% are the intermediate ones, that is mild and moderate cases which frequently go unrecognized. The problem existing in all the states and that nutritional marasmus is more frequent than kwashiorkor.

The situation in Rajasthan is worst with as many as 91% malnourished children. Bihar has 82%, Orissa 70%, Uttar Pradesh 81% and Kerala 35% children were malnourished.

In Tamil Nadu, District level data on the prevalence of mild malnutrition among 0-36 months old children in the year (2002) in Coimbatore (96.6), Cuddalore (90.5), Dharmapuri (90.5), Dindigul (94.1), Erode (95.4), Kanniyakumari (97.8) Madurai (94.3) Nagapattinam (87.7) respectively. It was also noted that children aged 12-23 months and Khmu ethnic children had a higher prevalence of stunting (65% and 66%) and under weight (45% and 40%) respectively. However it was also found that boys were more prone to be stunted and under weight. Salah E.O. et.al., (2006) 28 Conducted a cross sectional descriptive study on factors affecting prevalence of malnutrition among children under three years of age in Botswana. 400 house holds and mothers of children under three years. The results show that the level of wasting, stunting, and under weight in children under three years of age was 5.5%, 38.7% and 1.56% respectively. Malnutrition was significantly ($p < 0.01$) higher among boys than among girls.

Under weight was less prevalent among children whose parents worked in the agricultural sector than among children whose parents were involved in informal business, children brought up by single parents suffered from under weight to a significantly ($P < 0.01$) higher level than children living with both parents. The prevalence of underweight decreased significantly ($P < 0.01$) as family income increased. During the clinical experience the investigator had done the nutritional assessment for under five children and found that many of the children were

malnourished due to lack of knowledge of mothers regarding malnutrition. This probed the investigator to do the study.

STATEMENT OF THE PROBLEM

A study to assess the knowledge and practice regarding dietary practices in prevention of malnutrition among mothers with under five children at selected setting in Chennai.

OBJECTIVES

1. To assess the knowledge regarding dietary habits in prevention of malnutrition among mothers with under five children.
2. To assess the practices regarding dietary habits in prevention of malnutrition among mother with under five children.
3. To create awareness regarding prevention of malnutrition among mothers with under five children.

OPERATIONAL DEFINITIONS :

Knowledge

In this study it refers to the level of understanding of mothers about dietary practices in prevention of malnutrition which is measured by structured interview schedule and its scores.

Practice

In this study it refers to the knowledge on practice in terms of verbal response of the mothers of under five children regarding dietary practices in prevention of malnutrition which is measured by structured interview schedule and its scores.

Dietary practice

In this study it refers to assess the balanced diet which includes protein, fat, carbohydrate, vitamins and minerals consumed by the under five children.

Prevention of malnutrition

In this study it refers to avert decreased intake of balanced diet which may lead to malnutrition. Mothers with under five Children In this study it refers to women having children between the age group of 1-5 years.

HYPOTHESES

H1: There will be a significant correlation between the knowledge and practices regarding dietary habits in prevention of malnutrition among mothers with under five children.

H2: There will be a significant association between the knowledge scores regarding dietary practices in prevention of malnutrition among mothers of under five children with their selected demographic variables.

ASSUMPTION

- ' Mothers may have less knowledge regarding malnutrition.
- ' Poor dietary practices may lead to malnutrition among children.
- ' Nurses play an important role in imparting nutrition education to the mothers.

CONCEPTUAL FRAME WORK

The conceptual frame work is comprised of interrelated concept that explains a natural phenomenon.

The study is designed to assess the knowledge, attitude and practice regarding dietary practices in prevention of malnutrition among mothers with under five children.

The conceptual model for the study is based on modification made on "Nola.J.Penders health promotion model (Revised 2002)".

The theory components are as follows:

- ' Individual characteristics and experiences
- ' Behaviour specific cognition and affect
- ' Behavioural outcome

INDIVIDUAL CHARACTERISTICS AND EXPERIENCES

a) Prior related behaviour :

According to the theory, prior related behavior describes frequency of the similar behaviour in the past direct and indirect effects on the likelihood of engaging in health promoting behaviour. In this study prior related behaviour includes assessment of existing knowledge by using structured knowledge interview schedule scores as adequate, moderately adequate and inadequate knowledge regarding dietary practices in prevention of malnutrition among mothers

with under five children. Assessment of attitude by using 5 point likert scale scores as unfavorable attitude, moderately favorable attitude and favorable attitude regarding dietary practices in prevention of malnutrition among mothers with under five children and assessment of practice by using structured interview schedule scores as inadequate practice, moderately adequate practice and adequate practice regarding dietary practices in prevention of malnutrition among mothers with under five children.

b) Personal factors:

According to the theory personal factor categorized as biological, psychological and socio-cultural. These factors are predictive of a given behaviour and shaped by the nature of the target behaviour being considered.

In this study personal factors include biological factors like age, and socio cultural factors like education, occupation, type of family, number of children, income, religion and diet.

BEHAVIOURAL OUTCOME

a) Immediate competing demands and preferences:

According to this theory competing demands are those alternative behaviour over which individuals have low control because there are environmental contingencies such as work or family care responsibilities. Competing preferences are alternative behaviour over which individuals exert relatively high control, such as choice of ice cream or apple for a snack.

In this study self instructional module may influence the mothers to gain adequate knowledge and knowledge on practice regarding prevention of malnutrition among mothers with under five children.

b)Health promoting behavior:

According to this theory health promoting behavior is end point or action outcome directed towards attaining positive health outcome such as optimal well being, personal fulfillment and productive living.

In this study health promoting behavior is mothers of under five children may practice healthy dietary pattern in prevention of malnutrition.

c) Commitment of plan of action:

According to this theory Commitment of plan of action is the concept of intention and identification of a planned strategy leads to implementation of health behaviour. In this study Commitment of plan of action is the mothers of under five children develop favorable

attitude and makes decision to continue to practice healthy dietary pattern for their children to prevent malnutrition in future.

CHAPTER – II

REVIEW OF LITERATURE

Review of literature is an essential step in the research project ,it provides basic for future investigation, justifies the need for the study, throws light on the feasibility of the study, reveals constrains of data collection and relates the findings from the study to another with a hope to establish a comprehensive study of scientific knowledge in a professional discipline, from which valid theories developed

Review of literature categorised under following headings:-

Section A:- Studies related to knowledge regarding

Section B:- Studies related to practice regarding

SECTION A:- STUDIES RELATED TO KNOWLEDGE REGARDING

Conducted a study on parenting children under three years of age in a south Indian setting. 120 mothers participated in the study. All mothers had children less than three years of age. Sample included 60 from urban area and 60 mothers from rural area. The result shows that 55%of the urban mothers and 51% of the rural mothers had moderately adequate knowledge. However there was a significant association ($p<0.001$), ($p<0.05$) between urban and rural mothers respectively in practice and attitude regarding parenting. An association exists ($p<0.001$), between practice and attitude of mothers regarding parenting and nutritional status of their children in urban areas.

Goliath.,(2010)43

Conducted a study on effectiveness of structured teaching programme on protein energy malnutrition among mothers of under five children. 60 samples were selected by using convenient sampling technique. One group pre test and post test design was adopted in the study. Reliability of the instrument was $r=0.83$. The over all mean of 28.64($SD\pm 14.08$) in the pre test score and over all mean of 67.24($SD\pm 10.4$) in the post test score. It was found in the post test score that there was a significant improvement in the level of knowledge of respondents regarding protein energy malnutrition after structured teaching programme was administered. The paired 't' test value is 26.08 which is statistically significant improvement at $P < 0.001$ level. Chi-square($X^2=2.99$), Occupation($X^2=11.05$), Monthly family income($X^2=10.92$), Religion($X^2=.218$), Type of family($X^2=0.35$), Total number of under five children($X^2=3.83$) and Source of health information($X^2=4.79$) and knowledge level.

Muthumari P.,(2010)23

Conducted a descriptive study on mother's knowledge of protein energy malnutrition among mothers of under five children at Chidambaram. 30 mothers of under five children were selected using simple random sampling technique. 26.67% of mothers had inadequate knowledge 53.33% of mothers had moderately adequate knowledge and 20% of mothers had adequate knowledge regarding protein energy malnutrition. There is significant association between mothers education level and knowledge on protein energy malnutrition.

Subash J., et.al.,(2009)17

Conducted a cross sectional study on evaluation of nutritional knowledge of mothers about their children. 30 mothers having children studied had a mean age of 28.5 yrs. 23 (76.67%) of the mothers were illiterate. Regarding parity 60% had less than 5 children, 5 (16.6%) had 5 and 7(23.3%) more than 5 children. 80(76.19%) infants received gutti as first feed while colostrum was given to 25 (23.80%). 28 (93.3%) mothers did breast feeding, 10 (33.3%) gave cow's milk along with breast milk and 11(36.6%) formula milk along with breast milk. Early weaning was noted in 12(11.4%) infants 41(39%) infants were weaned in 4-6 months and delayed weaning was noted in 52 (49.5%) infants. Boiled water was used by 14 (46.6%) mothers and filtered water by

4(13.3%) while 12(40%) mothers used tap water. Food was purchased by husbands in 100% cases on demand of house wives. 18 (60%) women have done child spacing.

Khattak A.M., et.al.,(2007)33

SECTION B:- STUDIES RELATED TO PRACTICE REGARDING

Conducted a study on parenting children under three years of age in a south Indian setting. 120 mothers participated in the study. All mothers had children less than three years of age. Sample included 60 from urban area and 60 mothers from rural area. The result shows that regarding practice, most of the urban mothers (70%) followed adequate practice compared to rural area mothers (36.7%). However there was a significant association ($p < 0.001$), ($p < 0.05$) between urban and rural mothers respectively in practice and attitude regarding parenting. An association exists ($p < 0.001$), between practice and attitude of mothers regarding parenting and nutritional status of their children in urban areas.

Goliath.,(2010)43

Conducted a cross sectional study on nutritional status of kamar tribal children in Chhattisgarh in India .Assessment of the nutritional status among 309 Kamar children (161 boys and 148 girls) aged 4-12 years. 24 hour dietary recall method was used to assess dietary intakes of children. height and weight were recorded and children were classified by WHO criterion (Z-Score) using nutritional indices that is weight for age, height for age and weight for height more than 90% of children (both boys and girls) in the age group of 4-6 years suffered by under weight ($< -2SD$ weight for age) which was comparatively lower in 7-9 and 10-12 years age group children . 84.51 % of boys suffered by stunting ($< -2SD$ height for age) which was much higher than girls (47.54%) in 4-6 years of age group. Similarly 80% of 4-6 years age group children were affected by wasting ($< -2SD$ weight for height).

Devi

P.Y.,et.al.,(2007)36

Conducted a study on Influence of parents' eating behaviors and child feeding practices on children's weight status. The objective is to investigate the effects of mothers' and fathers' eating behaviors, child feeding practices, and BMI on percentage body fat and BMI in their children. One hundred forty-three mothers and 68 fathers returned questionnaires, representing parents of 148 children 3 to 5 years old (78 boys). Children's weight was related to mothers' BMI, but not fathers'. Girls had a greater BMI if either parent reported being overweight as a child, and both girls and boys were likely to be overweight if their mothers believed they had risky eating habits (fussiness, eating too much, etc.).

Johannsen D.L., et.al.,(2006)38

Conducted a study on malnutrition among children aged 6 months to 2 years from a resettlement colony of Delhi. Nutritional status of 1661 children who attended the Well Baby Clinic of Urban health centre, Gokulpuri..A total of 1009 (60.7%) of the subjects were malnourished. Colostrum was given by 712(42.9%) as against 949(57.1%) who had not given. 64.8% of those who were not exclusively breast fed for the first four months of life were malnourished as compared to 35.2% of those who were exclusively breast fed till four months of age and the difference is statistically significant.($p < 0.05$). Similarly, significant association was found between practice of commercial formula feeding and malnourishment. As high as 1425 (85.8%) of the subjects were given diluted top milk. Only 335 (20.2%) had used a katori and spoon to feed the children. Over half of the subjects were given solid/semi-solid food by the age of 6-7months.

Khokhar A.,et.al.,(2003)37

Conducted a cross sectional study on nutritional status and feeding practices of children attending immunization centers at Udupi district. The sample size consists of 90 children between 6 months to 3 years. Out of 90 children 74.4% were males and 51.1% belonged to age group of 6-12 months. Mothers of 37.8% of children were just literate. Out of 90 children 10 were having mild stunting 3 were having moderate stunting and 2 were having severe stunting. 31% of children had mild wasting, 6% had moderate wasting and 4% of children had severe wasting.

D'Souza A., et.al.,(2003)22

Conducted a study on Relation between mothers' child-feeding practices and children's adiposity. The objective was to evaluate the relation between mothers' child-feeding practices and children's adiposity in a sample of boys and girls from 2 ethnic groups. A total of 74 white (25 boys and 49 girls) and 46 African American (22 boys and 24 girls) children and their mothers participated in this study. Two subscales of the Child Feeding Questionnaire, pressure to eat and concern for child's weight, explained 15% of the variance in total fat mass in both African American and white boys and girls ($P < 0.001$) after correction for total lean mass and energy intake (which explained 5% of the variance in total fat mass)

Spruijt-Metz D., et.al.,(2002)39

Conducted a cross sectional study on dietary practices and xerophthalmia in under five in Jimma town, south west Ethiopia. Eight hundred and thirty one randomly selected children between the ages of six and 59 months formed the study population. Only eighty per cent of the children were getting green vegetables, fruits or carrots once weekly or more. The major reasons given for not including vegetables, fruits and carrots in the diet were “cannot afford” (39%), “not available” (33%), and “child too young” (16%). Out of 628 children examined, four (0.6%) were found to have xerophthalmia; three (0.48%) classified as XIB and one (0.16%) as X2. vitamin A deficiency is found to be a significant public health problem in young children in Jim.

Getaneh T.,et.al.,(2000)40

CHAPTER III

RESEARCH METHODOLOGY

This chapter deals with the methodology adopted for the study. It includes research approach, research design, setting, criteria for sample selection, sample and sampling techniques, instrument and scoring procedure, data collection procedure and plan for data analysis.

RESEARCH APPROACH

A descriptive approach was selected for this study.

RESEARCH DESIGN

Non Experimental Descriptive survey design was adopted for this study.

SETTINGS

The study was conducted in at selected setting in semancherri slum area.

POPULATION

The population of the study was mothers of under five children.

SAMPLE:

The samples of the study are mothers with under five children who living in semancherri slum area.

CRITERIA FOR THE SELECTION OF SAMPLE

Inclusion criteria

- Mothers who are available at the time of data collection.
- Mothers who are willing to participate in the study.

Exclusion criteria

- A mother with commutation disability.
- Mothers with acutely ill children.

SAMPLE SIZE

Sample size was 30.

SAMPLING TECHNIQUE

The non probability convenient sampling technique was used for the study.

DESCRIPTION OF INSTRUMENT

The instrument consists of three parts.

Part – I

It Consists of demographic variables such as age, educational status, occupation, type of family, total number of under five children, income, religion, source of health information and type of food consumption.

Part – II

Structured interview schedule to assess the knowledge of the mothers with under five children regarding dietary practices in prevention of malnutrition which consist of 30 multiple choice questions. The Questions are related to dietary practices in prevention of malnutrition which includes protein, carbohydrates, vitamin A, vitamin D, iron, calcium, iodine, zinc and complications of malnutrition.

Part – III

Structured interview schedule to assess the knowledge on practice of mothers with under five children regarding dietary practices in prevention of Malnutrition which consists of 15 “yes” or “No” questions.

SCORING PROCEDURE

Part – II

Structured knowledge questionnaire consists of 30 multiple choice Questions. Each question consists of four options. Each Question has one correct answer. A score of one (1) was given to each correct response. A score of zero (0) was given to wrong response. The total score was 30. The scores were interpreted as follows.

PART-III

The structured interview knowledge on practice Questionnaire consists of 15 Questions. Each Question has two options “Yes” or” No”. For the “Yes” response one Score was given.

For the “No” response zero Score was given. Mother’s practice was assessed by the following criteria.

VALIDITY AND RELIABILITY OF THE TOOL VALIDITY

The tool was evaluated by the four experts in the field of pediatric nursing and one expert in the field of Medicine. The tool was modified according to the suggestions and recommendations by the Experts and finalized.

RELIABILITY

The reliability of the structured interview schedule to assess the knowledge was established by testing for stability and internal consistency, stability was assessed by test retest method where Karl Pearson correlation of coefficient formula was used. The value was found to be reliable ($r=0.9$). Internal consistency was assessed by split half method where spearman’s brown prophecy formula was used. The value was found to be reliable ($R=0.9$).

The reliability of five point likert scale was established by stability and internal consistency. Stability was assessed by test retest method, Karl Pearson’s formula was used. The value was found to be reliable ($r=0.9$). The internal consistency was assessed by cronbach’s alpha method. The value was found to be reliable ($\alpha =0.7$). The reliability of structured interview schedule to assess knowledge on practice was established by stability and internal consistency, stability was assessed by test retest method where Karl Pearson correlation of coefficient formula was used. The value was found to be reliable ($r=0.9$). Internal consistency was assessed by split half method where spearman’s brown prophecy was used. The value was found to be reliable ($R=0.8$).

DATA COLLECTION PROCEDURE

The data collection was done at selected setting in chennai. Before conducting the study written consent was taken from the medical officer. The data was collected for a period of five weeks from 200 samples. The purpose of the study was explained to the subjects prior to the study and verbal consent was obtained from those under five children’s mothers. The samples were interviewed by the researcher those who met the inclusion criteria were selected by using non probability convenient sampling technique. The structured interview schedule

was used to assess the knowledge and practice and 5 point likert scale was used to assess the attitude of the mothers of under five children regarding dietary practices in prevention of malnutrition. The data was collected for a period of 1 hour and 30 minutes for one mother. The investigator collected data from 5-6 mothers of under five children per day. Then the self instructional module on dietary practice in prevention of malnutrition was given. The data was analyzed by using statistical measurements and tabulated.

DATA ANALYSIS AND STATISTICAL METHODS USED

The statistical methods used for data analysis were frequency, percentage, mean and standard deviation, Karl Pearson Coefficient Correlation and ‘chi square’ test.

PROTECTION OF HUMAN SUBJECTS

The research proposal was approved by the dissertation committee prior to conducting study. The written consent was taken from the medical officer before the study. Verbal consent was obtained from the mothers to assess the knowledge, attitude and practice regarding malnutrition. Confidentiality was maintained.

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the description of sample characteristics , analysis and interpretation of the data collected from 200 mothers of under five children in selected setting in semancheri slum area. The collected data were calculated, tabulated and interpreted by using descriptive and inferential statistics. The data was organized on the basis of objectives of the study, under the following headings.

ORGANIZATION OF THE DATA

The data has been tabulated and organized as follows.

Section A - Description of demographic variables

Section B - Assess the knowledge regarding dietary habits in prevention of malnutrition among mothers with under five children

Section C - Assess the practice regarding dietary habits in prevention of malnutrition among mothers with under five children

Section D - Association of knowledge regarding dietary habits in prevention of malnutrition among mothers of under five children with their selected variables.

SECTION A: DESCRIPTION OF THE DEMOGRAPHIC VARIABLES

TABLE : Frequency and percentage distribution of the demographic variables of the mothers with under five children.

n=30

S.N O	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1	Age • 18-22yrs • 23-27yrs • 28-32yrs • 33-38yrs	3 17 8 2	10% 56.6% 26.6% 6.6%
2	Education • Illiterate • Primary school • High school • Graduate and above	5 3 15 7	16.6% 10% 50% 23.3%
3	Occupation • House wife • Self employed • Government employed • Coolie	19 4 2 5	63.3% 13.3% 6.6% 16.6%
4	Type of family • Nuclear • Joint	21 9	70% 30%
5	Number of the under five children • One • Two • Three and above	18 10 2	60% 33.3% 6.6%

6	Monthly income - Rs. 5000 & below - Rs. 5001 – Rs 8000 - RS. 8001 – 10,000 - Rs. 10,001 and above	7 12 10 1	23.3% 40% 33.3% 3.3%
7	Religion - Hindu - Muslim - Christian - Others	16 4 10 0	53.3% 13.3% 33.3% 0%
8	Source of health information - New paper / magazine - Radio / television - Friends / relatives - Health professional / social worker	3 19 7 1	10% 63.3% 23.3% 3.3%
9	Type of food consumption - Vegetarian - Non-vegetarian - Eggetarian	6 22 2	20% 73.3% 6.6%

The table 1: shows the description of demographic variables.

According the to the age group, mothers with under five children 18-22 years were 3 (10%), 23-27 years were 17 (56.6%), 28-32 years Were 8 (26.6%), and 33-38 years were 2 (6.6%).

With regard to education, mothers with under five children were illiterate 5 (16.6%), had primary school education 3

(10%), had high school education and 15 (50%), mothers were Graduates 7 (23.3%).

According to their occupation majority of 19 (63.3%) mothers with under five children were house wife, 4 (13.3%) mothers were self employed, 2 (6.6%) mothers were Government employed and 5 (16.6%) mothers were collie.

With regard to type of family, 21 (70%) mothers with under five children were living in nuclear family and majority of 9 (30%) mothers were living in joint family.

According to the number of under five children majority of 18 (60%) mothers had only one child, 10 (33.3%) mothers had 2 children and 2 (6.6%) mother had 3 children.

With regard to monthly income 7 (23.3%) family's monthly income is Rs. 5000 and below, 12 (40%) family's monthly income is between Rs 5001-Rs.8000, 10 (33.3%) family's monthly income is between Rs 8001- Rs. 10,000, 1 (3.3%) family's income is Rs. 10,001 and above.

According to their religion majority of the mothers with under five children who belonged to Hindu religion were 16 (53.3%), mothers who belonged to Muslim religion were 4 (13.3%) and mothers who belonged to Christian religion were 10 (33.3%).

Regarding source of health information 3 (10%) mothers with under five children gained knowledge through magazine, 19 (63.3%) mothers gained knowledge through television, 7 (23.3%) mothers gained knowledge through friends, 1 (3.3%) mothers gained knowledge through health professionals. With regard to type of food consumption (20%) mothers with under five children were vegetarian, 22 (73.3%) mothers were non-vegetarian and 2 (6.6%) of mothers were egg vegetarian.

SECTION B: ASSESS THE KNOWLEDGE REGARDING DIETARY HABITS IN PREVENTION OF MALNUTRITION AMONG MOTHERS WITH UNDER FIVE CHILDREN.

TABLE 2: frequency and percentage distribution knowledge regarding dietary habits in prevention of malnutrition among mothers with under five children.

n=30

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE
Adequate	5	16.3%
Moderately adequate	15	50%
Inadequate	10	33.3%
TOTAL	30	99.6%

Table 2: showed that knowledge regarding dietary practices in prevention of malnutrition of 30 mothers in which 5 (16.3%) of the mothers had adequate knowledge, 15 (50%) of the mothers had moderately adequate knowledge and 10 (33.3%) of the mothers had inadequate knowledge.

SECTION C: ASSESS THE PRACTICE REGARDING DIETARY HABITES IN PREVENTION OF MALNUTRITION AMONG MOTHER WITH UNDER FIVE CHILDREN.

TABLE 3: Frequency and percentage distribution of practice regarding dietary habits in prevention of malnutrition among under five children.

n=30

LEVEL OF PRACTICE	FREQUENCY	PERCENTAGE
Inadequate practice	4	13.3%
Moderately adequate practice	18	60%
Adequate practice	8	26.6%
TOTAL	30	99.9%

Table 5: showed the practice of 30 mothers in which 4 (13.3%) of mothers had inadequate Practice, 18 (60%) of mothers had moderately adequate practice, and 8 (26.6%) of mothers had adequate practice regarding dietary practice in prevention of malnutrition.

SECTION D: ASSOCIATION OF KNOWLEDGE SCORES REGARDING DIETARY PRACTICES IN PREVENTION OF MALNUTRITION AMONG MOTHERS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES.

TABLE 4: Association of knowledge scores regarding dietary practices in prevention of malnutrition among mothers with their selected demographic variables.

n=30

S.N O	DEMOGRAPHIC VARIABLES	LEVEL OF KNOWLEDGE						Chi square value	Table value
		INADEQUA TE		MODERATE LY		ADEQUAT E			
1	Age:								
a	18-22yrs	1	3.3%	0	0%	2	6.6%	13.26 (df=6)	5.99 1 (S)
b	23-27yrs	10	33.3%	6	20%	1	3.3%		
c	28-32yrs	6	20%	2	6.6%	0	0%		
d	33-38yrs	1	3.3%	1	3.3%	0	0%		

2	Education								
a	Illiterate	3	10%	1	3.3%	1	3.3%	83.7	9.48
b	Primary school	2	6.6%	1	3.3%	0	0%	2	8
c	High school	10	33.3%	3	10%	2	6.6%	(df=	(S)
d	Graduate& above	4	13.3%	2	6.6%	1	3.3%	6)	
3	Occupation								
a	House wife	10	33.3%	7	23.3%	2	6.6%		
b	Self employed	2	6.6%	1	3.3%	1	3.3%		

c	Government employed Coolie	1	3.3%	1	3.3%	0	0%	67.5	9.48
d		2	6.6%	2	6.6%	1	3.3%	3	8
								(df=	(S)
								6)	
4	Type of family								
a	Nuclear	10	33.3%	10	33.3%	1	3.3%	3.68	5.99
b	Joint	5	16.6%	3	10%	1	3.3%	(df=	1
								2)	(NS)
5	No.of under 5 children								
a	One	12	40%	5	16.6%	1	3.3%	4.63	9.48
b	Two	7	23.3%	2	6.6%	1	3.3%	(df=	8
c	Three & above	1	3.3%	1	3.3%	0	0%	4)	(NS)
6	Monthly income								
a	Rs.5000&below	4	13.3%	2	6.6%	1	3.3%	40.5	5.99
b	Rs.5001-Rs.8000	10	33.3%	2	6.6%	0	0%	2	1
c	Rs.8001Rs.10,000	7	23.3%	2	6.6%	1	3.3%	(df=	(S)
d	Rs.10,001&above	1	3.3%	0	0%	0	0%	6)	

7	Religion								
a	Hindu	12	40%	3	10%	1	3.3%	12.7	9.48
b	Muslim	2	6.6%	2	6.6%	0	0%	1(df=	8
c	Christian	8	26.6%	1	3.3%	1	3.3%	6)	(S)
8	Source of health information								
a	Newspaper/magazine	2	6.6%	1	3.3%	0	0%	23.2	5.99
b	Radio/Television	15	50%	2	6.6%	2	6.6%	8	1
c	Friends/Relatives	5	16.6%	2	6.6%	0	0 %	(df=	(S)
d	Healthprofessional/social worker	1	3.3%	0	0%	0	0 %	6)	
9	Type of food consumption								
a	Vegetarian	4	13.3%	1	3.3%	1	3.3%	5.76	9.48
b	Non-vegetarian	18	60%	2	6.6%	2	6.6%	(df=	8
c	eggectarin	1	3.3%	1	3.3%	0	0%	4)	(NS)

Ns – not significant S – significant P<0.05level

Table 7 showed that Chi- square values were calculated to find out the association of knowledge of mothers with age, education, occupation, type of family, number of under 5 children, monthly income, religion, source of the health information and type of food consumption regarding dietary practice in prevention of malnutrition.

The demographic variables age ($X^2=13.026$), education ($X^2=83.472$), occupation ($X^2=67.53$), monthly income ($X^2=40.52$), religion ($X^2=12.716$) and source of health information($X^2=23.028$) was associated with knowledge of mothers with under five children. Other demographic variables such as type of family, number of

under five children and type of food consumption had no association with knowledge regarding dietary practices in prevention of malnutrition.

CHAPTER – V

DISCUSSION

The discussion chapter deals with sample characteristics and objectives of the study. The aim of this present study was to evaluate the knowledge and practice regarding dietary practices in prevention of malnutrition among mothers with underfive children .

Description of demographic variables

According to the age group, mothers with under five children 18-22 years were 3(10%), 23-27 years 17(56.6%), 28-32 years were 8(26.6%) and 33-38 years were 2 (6.6%).

With regard to education the data showed that 5 (16.6%) mothers of under five children were illiterate, 3(10%) had primary school education, 15(50%) had high school education and 7 (23.3%) mothers were graduates.

According to occupation majority of 19 (63.3%) mothers of under five children were house wife, 4 (13.3%) mothers were self employed, 2(6.6%) mothers were Government employed and 5(16.6%) mothers were collie.

With regard to type of family, 21(70%) mothers of under five children were living in nuclear family and majority of 9(30%) mothers were living in joint family.

According to the number of under five children majority of 18 (60%) mothers of under five children had only one child, 10(33.3%) mothers had 2 children and 2 (6.6%) mother had 3 children under the age of five.

With regard to monthly income 7 (23.3%) mothers family monthly income is Rs. 5000 and below, 12(40%) Rs 5001-Rs.8000 group,10 (33.3%) belongs to Rs 8001- Rs. 10,000 income group, 1 (3.3%) belongs to Rs. 10,001 and above.

According to their religion majority of the mothers with under five children belonged to Hindu were 16 (53.3%), mothers who belonged to Muslim were 4 (13.3%) and 10(33.3%) were Christians.

Regarding source of health information 3 (10%) mothers of under five children gained knowledge through magazine, 19 (63.3%) mothers gained knowledge through television, 7 (23.3%) mothers gained knowledge through friends, 1 (3.3%) mothers gained knowledge though health professionals.

With regard to type of food consumption 6 (20%) mothers of under five children were vegetarian, 22 (73.3%) mothers were nonvegetarian and 2 (6.6%) of mothers were eggectarian.

The findings of the study were discussed according to the objectives follow as:

1. Assess the knowledge regarding dietary habits in prevention of malnutrition among mothers with under five children.
2. Assess the practice regarding dietary habits in prevention of malnutrition among mothers with under five children
3. Association of knowledge scores regarding dietary practice in prevention of malnutrition among mothers with their selected demographic variables.

The First objective: Assess the knowledge regarding dietary practices in prevention of malnutrition among mothers with under five children.

Data analysis showed that the knowledge of 30 mothers in which 5 (16.3%) of the mothers had adequate knowledge, 15(50%) of the mothers had moderately adequate knowledge and 10 (33.3%) of the mothers had inadequate knowledge. The data on area wise knowledge regarding dietary practices in prevention of malnutrition among mothers with under five children. The area wise analysis reveals that mean score(1.13 ± 0.67) which is of 0.56% of the total score was for the area of definition, mean score (1.73 ± 0.91) which is 0.86% of the total score was for the area of causes, mean score (2.41 ± 1.00) which is of 1.20% of the total score was for the area of healthy dietary habits, mean score(9.17 ± 3.87) which is of 4.58% of the total score was for the area of nutrient deficiency diseases and nutrient rich diet, mean score (0.53 ± 0.5) which is of 0.26% of the total score was for the area of prevention, Mean score (0.31 ± 0.46) which is of 0.15% of the total score was for the area of complication.

The study findings are consistent with the findings of Subash.J., et.al., (2009) 17 30 mothers of under five children were selected using simple random sampling technique 33.3% of mothers had inadequate knowledge, 50% of mothers had moderately adequate knowledge and 16.3% of mothers had adequate knowledge regarding protein energy malnutrition.

The second objective: Assess the practice regarding dietary practices in prevention of malnutrition among mothers with under five children.

The data showed that the practice of 30 mothers in which 4(13.3%) of mother had inadequate practice, 18 (60%) of mothers had moderately adequate practice, and 8 (26.6%) of mother had adequate practice.

The study findings are consistent with the findings of Goliath.,(2010)⁴³ 120 mothers participated in the study. All mothers had children less than three years of age. Sample was taken in chemancheri slum area .The result shows that regarding practice, most of the mothers have adequate practice 26% and moderately adequate practice 60% and inadequate practice in 13.3%.

The third objective: Association of knowledge regarding dietary practice in prevention malnutrition among mothers with their selected demographic variables.

Data analysis showed that the chi-square values were calculated. The study showed that age ($\chi^2 = 13.026$), education($\chi^2 = 83.472$), occupation($\chi^2 = 67.53$), monthly income($\chi^2 = 40.52$), religion($\chi^2 = 12.716$) and source of health information($\chi^2 = 23.08$) these six demographic variables showed there in statistically significant association of knowledge of mothers regarding dietary practice in prevention of malnutrition. Other demographic variables like type of family, no of under five children, and types of food consumption showed there was no significant association of knowledge of mother regarding dietary practice in prevention of malnutrition.

The study findings are consistent with the findings of Peter R.,et.al.,(2010)¹⁸conducted a study regarding malnutrition among children aged 1-5 years in a selected urban slum in Hyderabad. A significant association($\chi^2=4.496$), $p<0.05$) was a found between age and underweight.

The study findings are consistent with the findings of phengxay M.,et.al., (2008)²⁷,which reveals that furthermore restricted intake of meat,vegetables during illness and low maternal education were main risk factors for mild malnutrition in the study area.

The study findings are consistent with the findings of Salah E.O.,et.al., (2006)²⁸ which shows the prevalence of underweight decreased significantly ($P<0.01$) as family income increased.

The study findings are consistent with the findings of Mallik S.,et.al.,(2006)³² It has been observed that extent of malnutrition was significantly more among Muslim compared to Hindus and children whose mothers were illiterate. Hence therefore H2: There will be a significant association between the knowledge scores regarding dietary practices in prevention of malnutrition among mothers of under five children with their selected demographic variables was accepted.

CHAPTER – VI

SUMMARY, CONCLUSION, IMPLICATION , RECOMMENDATIONS AND LIMITATIONS

This chapter deals with

- Summary of the study
- Conclusion
- Implication of nursing
- Recommendations ➤ Limitations

SUMMARY OF THE STUDY

The study was focused to assess the knowledge and practice regarding dietary practices in prevention of malnutrition among mothers with under five children in selected setting at semancheri slum area.

Conceptual frame work adopted for the study was Modified Pender's Health Promotion Model (Revised 2002). The design used for the present study was Non experimental descriptive survey design. The sample size was 30 mothers with under five children. The samples were selected by convenient sampling technique and assessed for knowledge and practice regarding dietary practices in prevention of malnutrition.

The collected data were analysed by using descriptive and inferential statistics. The level of knowledge and practice was assessed by frequency, percentage, correlation and chi-square test was used to find out the association between knowledge scores regarding dietary practices in prevention of malnutrition among mothers with under five children with their selected demographic variables.

The major findings are summarized as follow

- ✚ Majority of the mothers belonged to the age group between 23-27 yrs were 17(56.6%).
- ✚ Majority of the mother were high school 15(50%).
- ✚ Majority of Mothers were house wife 19(63.3%)
- ✚ Majority of the mothers lived in nuclear family 21(70%)

- ✚ Majority of the mothers had only one child under five year of age 18(60%)
- ✚ Majority of the family's monthly income Rs.55001-Rs.8000 12 (40%).
- ✚ Majority of the mothers belong to Hindu religion 16(53.3%).
- ✚ Majority of the mothers got health information through television 19(63.3%).
- ✚ Majority of the mothers were non –vegetarian 22(73.3%)
- ✚ 5(16.3%) of mothers had adequate knowledge 15(50%) had moderately adequate knowledge and 10(33.3%) had inadequate knowledge regarding dietary practices in prevention of malnutrition.
- ✚ 4(13.3%) of mother had inadequate practice, 18(60%) had moderately adequate practice and 8(26.6%) had adequate practice regarding dietary practice in prevention of malnutrition.
- ✚ There was a significant positive correlation between knowledge and practice regarding dietary practice in prevention of malnutrition ($r=0.59$) $p<0.05$.
- ✚ There was a significant association between age, education, occupation, monthly income, religion, sources of health information, except type of family, number of under five children and type of food consumption.

CONCLUSION

The present study assessed the knowledge, attitude and practice, regarding dietary practices in prevention of malnutrition among mothers with under five children. The study reveals that the knowledge score was moderately adequate for 15(50%). In practice 18(60 %) were having moderately adequate practice. The mean knowledge and practice scores are 15.29 (SD± 5.47) and 68.2 (SD± 7.47). There was a significant correlation between knowledge and practice regarding dietary practice in prevention of malnutrition ($r=0.59$) $p<0.05$. The study findings revealed that mothers of under five children need to be given information on dietary practices in prevention of malnutrition to improve their knowledge and practice, further the self instructional module may disseminate the knowledge to other mothers.

IMPLICATIONS FOR NURSING NURSING SERVICES

- ✚ Mothers were in the best position to pass the information to other women. So self instructional module given by the health personnel will help to improve their knowledge.
- ✚ Nursing service department can arrange health education programmes in the out patient department for teaching the mothers on prevention of malnutrition.
- ✚ Nurses as a change agent can introduce various preventive measures to prevent malnutrition among under five children.

NURSING EDUCATION

- ✚ Imparting the concepts of preventive aspects of malnutrition to nursing students.
- ✚ Nursing students must be encouraged to utilize knowledge on preventive measures to give health education in hospital and community.

NURSING ADMINISTRATION

- ✚ Administrators in both private and government sectors should take initiative action to update the knowledge of nursing personnel regarding dietary practice in prevention of malnutrition by in-service education.
- ✚ Nurse administrators can organize in-service education programme in prevention of malnutrition in all the health sectors.
- ✚ To organize awareness camp on special days.

NURSING RESEARCH

- ✚ The study findings can be effectively utilized by the emerging researchers for their reference purpose.
- ✚ The findings of the study help to expand the scientific body of professional knowledge upon which further researchers can be conducted.

RECOMMENDATIONS

- ✚ A comparative study can be conducted to assess the knowledge and practice regarding dietary practices in prevention of malnutrition between the literate mothers and illiterate mothers of under five children.
- ✚ A study can be done in semancheri slum area. Similar study can be replicated on large samples there by findings can be generalized to a large population.

LIMITATIONS

- ❖ It is time consuming for the mothers to spend more time in the out patient department for data collection.

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ANNEXURE

ANNEXURE II

Letter seeking expert's opinion and suggestion for the content Validity of the tool used for the study.

From:

Reg no: 39904003 and 39904004

III-year bsc nursing,

Sathyabama college of nursing,

Chennai.

To:

Forwarded through ,

Sathyabama college of nursing ,Chennai.

Sub: Expert opinion for content validation of research tool.

Respected Sir / Madam,

I Reg. No. 39904003 and 39904004 a nursing student in Sathyabama college of nursing, anticipate Your valuable self; if you would accept to validate my research tool on the topic "A STUDY

TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING DIETARY PRACTICES IN PREVENTION OF MALNUTRITION AMONG MOTHERS WITH UNDER FIVE CHILDREN

AT SELECTED SETTING IN CHENNAI". It would be highly appreciable if you would kindly affirm your acceptance to endorse your Valuable suggestions on this topic. I had attached the details of the study along with the research tool.

Thanking

you

Date;

yours faithfully Place:

Chennai

39904003 and 39904004

ANNEXURE – III

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool of Reg No. 39904003 and 39904004 IIIrd year BSc Nursing student who is undertaking, “ **A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING DIETARY PRACTICES IN PREVENTION OF MALNUTRITION AMONG MOTHERS WITH UNDER FIVE CHILDREN AT SELECTED SETTING IN CHENNAI.**”

Signature and seal of the Expert:

Name:

Designation:

PART – I
DEMOGRAPHIC DATA OF THE MOTHER

1. Age of the mother in years

- a. 18-22 years
- b. 23-27 years
- c. 28-32 years
- d. 33-38 years

2. Educational status

- a. No formal education
- b. Primary school
- c. High school
- d. Graduate and above

3. Occupation

- a. House wife
- b. Self employee
- c. Government employee
- d. Private employee
- e. coolie

4. Type of family

- a. Nuclear
- b. Joint

5. Total Number of under five children

- a. 1

b. 2

c. 3 and above

6. Monthly income of the family

a. Below Rs.5000

b. Rs.5001-Rs.8000

c. Rs.8001-10000

d. Above Rs, 10,001

7. Religion

a. Hindu

b. Muslim

c. Christian

d. others

8. Source of health information

a. Newspaper/ magazine

b. Radio / television

c. Friends/ Relatives

d. Health professional/ social worker

9. Type of food consumption

a. Vegetarian

b. Non- Vegetarian

c. Eggetarian

PART– II

**TO ASSESS THE KNOWLEDGE REGARDING DIETARY
PRACTICES IN PREVENTION OF MALNUTRITION**

1. What is dietary practice?

- a. Poor diet
- b. A regulated daily allowance
- c. The costly diet
- d. The excessive intake of diet

2. Which age group is commonly affected by malnutrition due to Poor dietary intake?

- a. 0-1years
- b. 1-3 years
- c. 0-3years
- d. 3-5 years

3. What are the direct causes of malnutrition?

- a. Insufficient food containing lack of calorie and Nutrients
- b. Excess intake of fats
- c. Insufficient intake of fats
- d. Excess intake of carbohydrate

4. What are the factors that affect the growth and development of Under five children?

- a. Lack of protein and carbohydrate in the diet
- b. Lake of vitamins and minerals in the diet
- c. Lack of fat and vitamins in the diet
- d. Lack of fat and minerals in the diet

5. What type of diet should be given to the under five children?

- a. Protein, fat, calorie, vitamin rich diet
- b. Protein, calorie, vitamins, mineral rich diet
- c. Protein, fat, calorie, mineral rich diet
- d. Calorie, fat, vitamins, minerals rich diet

6. What disease is caused due to calorie deficiency?

- a. Delayed mile stones
- b. Stunted growth
- c. Delayed intellectual development
- d. Delayed motor development

7. What are the calorie rich diets?

- a. Carrot, cabbage, milk
- b. Milk, pulses, meat
- c. Fish, Egg, vegetables
- d. Rice, wheat, mutton

8. What are the cereal foods that are cheap of cost and can be given to the child?

- a. Egg, cow's milk, soya beans
- b. Ragi, rice, wheat
- c. Soya beans, dhal, groundnut
- d. Maize, horse gram, green gram

9. What disease is caused due to protein deficiency?

- a. Urinary tract infection
- b. Respiratory infection
- c. Malnutrition
- d. Diarrhea

10. What are the protein rich diets?

- a. Milk, pulses, egg
- b. yam, potato , rice
- c. Raggi, jaggery, dates
- d. Bringal,tomato,cabbage

11. What disease is caused due to vitamin A deficiency?

- a. Rickets
- b. Protein energy malnutrition
- c. Goitre
- d. Night blindness

12. What are the diet sources to be taken to prevent the night Blindness?

- a. Egg, liver, papaya, pumpkin, carrot, mango

- b. Mango, apple, orange, grapes, custard apple
- c. Cabbage, carrot, cauliflower, drumstick, peas
- d. Apple, cabbage, grapes, bringal, ladies finger

13. What are the preventive measures of eye disorders in children? a. Vitamin A prophylaxis

- b. BCG vaccine
- c. Polio prophylaxis
- d. Measles vaccine

14. What disease is caused due to vitamin D deficiency?

- a. Malnutrition
- b. Rickets
- c. Protein energy malnutrition
- d. Dwarfism

15. What are the diet sources to be taken to prevent the rickets? a. Fish,egg,milk

- b. Green leafy vegetable, curd, mango
- c. pumpkin, fruits, potato
- d. Soya beans, cucumbers, pumpkin

16. Which is the free source which helps in prevention of vitamin D Deficiency?

- a. Early morning Sunlight
- b. Mid morning sunlight
- c. Noon sunlight
- d. Evening sunlight

17. What disease is caused due to iron deficiency? a. Goiter

- b. Rickets
- c. Anemia
- d. Night blindness

18. What are the diet sources to be taken to prevent iron deficiency anemia?

- a. Raggi, drumstick leaves, jaggery
- b. Milk, curd, potato
- c. Onion, radish, yam
- d. Cabbage, cauliflower, bottle guard

19. Which is the cheapest and healthiest diet that can be included in the diet daily?

- a. Green leaves
- b. Bringal
- c. Carrot
- d. Cabbage

20. What are the functions of calcium?

- a. It helps in formation of teeth and bones
- b. It helps in formation of blood cells and nerves
- c. It helps in formation of blood vessels and capillaries
- d. It helps in formation of tissues and cartilage

21. What are the dietary sources of calcium?

- a. Milk, ragi, drum stick leaves
- b. Egg, meat, green leafy vegetables
- c. Apple, custard apple, carrot
- d. Cabbage, Bringal and peas

22. What is the disease caused due to iodine deficiency?

- a. Night blindness
- b. Goiter
- c. Rickets
- d. Protein energy malnutrition

23. What are the diet sources to be taken to prevent goiter?

- a. Iodized salt prepared from sea water, sea fish
- b. Common salt, cabbage
- c. Cauliflower, radish
- d. Bitter guard, carrot

24. What is the disease caused due to zinc deficiency?

- a. Diarrhea
- b. Protein energy malnutrition
- c. Dwarfism
- d. Rickets

25. What type of diet is taken by 1 year old child?

- a. Liquid diet
- b. Semisolid diet
- c. Normal diet
- d. Carbohydrate diet

26. What should be added in the diet daily to increase the calorie? a. Potato or carrot

- b. Ghee or oil
- c. Tomato or beans
- d. Cabbage or cauliflowers

27. How should the mother wash the vegetables before cooking to minimize the loss of nutrients?

- a. Vegetables should be peeled and then washed
- b. Vegetables should be washed first and then peeled
- c. Vegetables should be cut to pieces and then washed
- d. Vegetables should be scraped and then washed

28. What is the cultural influence leading to malnutrition?

- a. False beliefs regarding food
- b. Poverty
- c. Over population
- d. Poor maternal health

29. What are the preventive measures of malnutrition through specific promotion?

- a. Immunization and food fortification
- b. Health education and family environment
- c. Low cost weaning and family diet
- d. Family planning and spacing

30. What are the complications of malnutrition?

- a. Hypoglycemia, diarrhoea, congestive cardiac failure
- b. Constipation, respiratory tract infection, urinary tract infection
- c. Appendicitis, pneumonia, infection,
- d. Bronchitis, hyperthermia, throat infection

PART III
PRACTICE QUESTIONNAIRE

- 1. Do you send your child to balwadi regularly ?**
 - a) Yes
 - b) No
- 2. Do you include all types of vegetables in the diet of your child ?**
 - a) Yes
 - b) No
- 3. Do you provide germinated pulses to your child regularly?**
 - a) Yes
 - b) No
- 4. Do you provide junk food items to your child?**
 - a) Yes
 - b) No
- 5. Do you provide milk once in a day to your child ?**
 - a) Yes
 - b) No
- 6. Do you provide all seasonal fruits regularly to your child?**
 - a) Yes
 - b) No
- 7. Have you given immunization to you child up to age ?**
 - a) Yes
 - b) No
- 8. When ever your child becomes sick do you take to hospital immediately?**
 - a) Yes
 - b) No
- 9. Does your child frequently get respiratory infections and diarrhea ?**
 - a) Yes

b) No

10. Have given vitamin A drops to your child up to age ?

a) Yes

b) No

11. Do you give weekly three times egg to your child?

a) Yes

b) No

12. Do you encourage children to choose water as their beverage and avoid encouraging use of sweetened carbonate beverages ?

a) Yes

b) No

13. Do you limit the amount of snacks ?

a) Yes

b) No

14. Do you provide snacks that are high in nutrients in relation to calories?

a) Yes

b) No

15. Do you provide salad made of fresh fruits and vegetables?

a) Yes

b) No