

DISSERTATION ON
“A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING
STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF
MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL
WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR
CHILDREN, EGMORE, CHENNAI-08”

M.Sc (NURSING) DEGREE EXAMINATION
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MADRAS MEDICAL COLLEGE, CHENNAI-600 003



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CHENNAI- 600 032

In partial fulfillment of the requirement for the award of the degree of
MASTER OF SCIENCE IN NURSING

OCTOBER - 2019

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This is to certify that this dissertation titled, **“A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08”** is a bonafide work done by **Ms. SANTHIYA**, M.Sc Nursing-II Year Student, College of Nursing, Madras Medical College, Chennai-03 submitted to The Tamil Nadu Dr.M.G.R. Medical University, Chennai-32 in partial fulfillment of the university rules and regulations towards the award of the degree of **MASTER OF SCIENCE IN NURSING, BRANCH-II CHILD HEALTH NURSING**, under our guidance and supervision during academic year from 2017-2019.

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ABSTRACT

Children are the future of society and mothers are the guardian of that future. First and foremost, health, safety and nutrition for the young child is written as the basic needs on behalf of young children everywhere. Ultimately, it is the children who benefit from having parents to understand and know how to protect and promote their safety and well being by knowing regarding nutrition. Nutrition is the source of provision of energy to cells and organisms and the material necessary to support life. Many common health problems can be prevented or alleviated with a healthy diet.

TITLE: “A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08”

OBJECTIVES: To assess the Pretest knowledge of mothers of toddlers regarding prevention of malnutrition. To evaluate the effectiveness of structured teaching programme on prevention of malnutrition among mothers of toddler. To compare the pre test and post test knowledge of mothers of toddler regarding prevention of malnutrition. To find out the association between the post test knowledge score of mothers with selected demographic variables.

MATERIALS AND METHODS: This study was conducted with 60 samples (mothers of toddler) in quantitative approach using pre experimental one group pre test and post test design by Non probability convenient sampling technique and the pre existing knowledge was assessed by using Semi-structured questionnaire. After the pre test, teaching strategy was given regarding prevention of malnutrition. After 7 days, post test was conducted by using same tool.

RESULTS: The finding of the study revealed that there is a statistical significance in knowledge on prevention of malnutrition which shows the effectiveness of structured teaching programme with calculated paired 't' test.

CONCLUSION: The knowledge of the mothers regarding prevention of malnutrition improved significantly after they had undergone the teaching strategy found to be effective in improving the knowledge on prevention of malnutrition among mothers.

INDEX

CHAPTER NO	CONTENT	PAGE NO.
I	INTRODUCTION	1
	1.1 Background of the study	3
	1.2 Need for the Study	6
	1.3 Statement of the Problem	9
	1.4 Objectives of the Study	9
	1.5 Operational Definition	10
	1.6 Assumption	11
	1.7 Hypothesis	11
	1.8 Limitation	11
	1.9 Conceptual Framework	12
II	REVIEW OF LITERATURE	14
III	RESEARCH METHOLOGY	
	3.1 Research Approach	28
	3.2 Study Design	28
	3.3 Duration of the Study	28
	3.4 Study Setting	29
	3.5 Study Population	29
	3.6 Sample	29
	3.7 Sample Size	29
	3.8 Sample Criterion	30
	3.8.1 Inclusion Criteria	
	3.8.2 Exclusion Criteria	
	3.9 Sampling Technique	30
	3.10 Research Variables	30
	3.11 Development and Description of the Tool	30
	3.11.1 Development of the Tool	30

CHAPTER. NO	CONTENT	PG.NO
III	3.11.2 Description of the Tool	31
	3.12 Content validity	31
	3.13 Reliability of the Tool	32
	3.14 Protection of Human Subjects	32
	3.15 Pilot Study	32
	3.16 Data collection procedure	32
IV	ANALYSIS AND INTERPRETATION OF DATA	33
V	DISCUSSION	51
VI	SUMMARY,IMPLICATION,LIMITATION, RECOMMENDATION & CONCLUSION	
	6.1 Summary of the Study	58
	6.2 Findings of the Study	58
	6.3 Implication of the Study	61
	6.4 Limitation	63
	6.5 Recommendation	63
	6.6 Conclusion	64
	REFERENCES	
	ANNEXURES	

LIST OF TABLES

TABLE NO	TITLE	PAGE NO
1.1	Statistics of Malnutrition at Institute of Child Health and Hospital for Children, Egmore, Chennai for the Year 2014 – 2018	4
3.1	Scoring Interpretation of knowledge score	31
4.1	Description of demographic variables of mothers	36
4.2	Pretest Percentage of Knowledge on prevention of malnutrition among mothers.	38
4.3	Pre test level of knowledge	39
4.4	Knowledge score interpretation	39
4.5	Post test Percentage of Knowledge on prevention of malnutrition among mothers	40
4.6	Post test level of knowledge	41
4.7	Comparison of Pre test And Post test Level of Knowledge Score	42
4.8	Comparison of Pretest and Post test Knowledge Score	43
4.9	Comparison of over all Knowledge score before and after teaching strategy	44
4.10	Each Domain wise Pretest and Post-test Percentage of Knowledge	45
4.11	Effectiveness of teaching strategy	46
4.12	Association between post test level of knowledge and demographic variables	47
4.13	Association between mothers knowledge gain score and their demographic variables	49

LIST OF FIGURES

FIGURE NO	DESCRIPTION
1.1	WHO statistics of Malnutrition
1.2	UNICEF statistics of Malnutrition
1.3	Role of Paediatric Nurse
1.4	Conceptual framework based on Modified Kings Goal Attainment Theory
3.1	Schematic representation of the Research Methodology
4.1	Cylindrical diagram shows distribution of sample age group
4.2	Pie diagram showing distribution of sample according to sex of the child
4.3	Bar diagram shows distribution of sample according to educational status of the mother
4.4	Bar diagram shows distribution of sample according to mother education status
4.5	Bar diagram shows distribution of sample according to mother occupational status
4.6	Bar diagram shows distribution of sample according to educational status of father
4.7	Cylindrical diagram shows distribution of sample according father occupational status
4.8	Cylindrical diagram shows distribution of sample according to monthly income
4.9	Bar diagram shows distribution of sample according to type of family
4.10	Bar diagram shows distribution of sample according to number of children in the family
4.10	Pie diagram shows distribution of sample according to maternal illness during pregnancy.
4.11	Bar diagram shows distribution of sample according to initiation of weaning
4.12	Pie diagram shows distribution of sample according to hospitalization during last six month
4.13	Cylindrical diagram shows distribution of sample according to exclusive breast feeding.

4.14	Pre test level of knowledge score
4.15	Post test level of knowledge score
4.16	Percentage of Pre test and Post test level of knowledge
4.17	plot compares the student's pre test and post test knowledge score
4.18	Pretest and Post test Percentage of Knowledge Score
4.19	Multiple bar diagram shows association between the posttest level of knowledge score and educational qualification of mother
4.20	Multiple bar diagram shows association between the posttest level of knowledge score and type of family.
4.21	Multiple bar diagram shows association between the posttest level of knowledge score and number of children in the family
4.22	Multiple cylindrical diagram shows association between the posttest level of knowledge score and maternal illness during pregnancy.

LIST OF ANNEXURES

APPENDIX NO	ANNEXURE
1.	Certificate approval by Institutional Ethics Committee
2.	Letter seeking permission to conduct the study
3.	Certificate of content validity by Experts
4.	Study tools English and Tamil Section A- Socio Demographic data of mothers Section B- knowledge about prevention of malnutrition
5.	Teaching strategy on prevention of malnutrition.
6.	Informed consent English and Tamil form
7.	Certificate for English and Tamil editing
8.	Photos

LIST OF ABBREVIATION

ABBREVIATION	EXPANSION
WHO	World Health Organisation
UNICEF	United Nation International Children Emergency Fund
DF	Degree of Freedom
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
NICU	Neonatal Intensive Care Unit
SICU	Surgical Intensive Care Unit
ICH &HC	Institute of Child Health and Hospital for Children
NS	Non Significance
P	Significance
SD	Standard Deviation
CI	Confidence Interval

CHAPTER-I

INTRODUCTION



CHAPTER-I

INTRODUCTION

Children are the precious possession of the family, community, and country. A child is precious and beautiful source of joy and happiness, focus of love and care, subject of dreams for the future.

Children are the future of society and mothers are the guardian of that future. First and foremost, health, safety and nutrition for the young child is written as the basic needs on behalf of young children everywhere. Ultimately, it is the children who benefit from having parents to understand and know how to protect and promote their safety and well being by knowing regarding nutrition. Nutrition is the source of provision of energy to cells and organisms and the material necessary to support life. Many common health problems can be prevented or alleviated with a healthy diet.

Nutrition is nourishment or energy that is obtained from food consumed or the process of the proper amount nourishment and energy. Malnutrition results from imbalance between the body needs and the intake of nutrients, which can lead to syndromes of deficiency, dependency, toxicity or obesity. Malnutrition include under nutrition in which nutrients are under supplied. Under nutrition can results from improper intake, absorption, abnormal systemic loss of nutrients due to diarrhea, hemorrhage, infection and it is associated with poverty and social.

One cannot visualize good health without nutritious food and balanced diet. Children are the precious possession of the family, community, and country. Malnutrition is one of the largest factors suppressing India's growth. Malnutrition is wide spread in rural, tribal and urban areas and it is a significant health problem described as a silent killer, silent emergency, invisible enemy affecting those who cannot express their voice.

Malnutrition and infection are the two most important factors that affect the growth of children. In most of the cases of childhood infections, the cause can be traced to insufficient intake or absorptions which render the human system vulnerable to infection. The magnitude of the problem of malnutrition among children under five years of age is high throughout India.

A toddler is a 12 to 36 months old child. The toddler period is a time of great cognitive, emotional and social development. Nutrition starts in the womb in each life cycle. Infant, child, adult and elderly. The period of first two years of life is considered to be a critical period because growth and development occurs very rapidly during this period. Poor nutrition during this period can cause malnutrition which means it cannot be recovered, even if the nutritional need is fulfilled. Infant and toddler with malnourishment will have a higher risk of death. Even though they survive they have weak physique and low mental development, poor nutrition is the cause of high infant mortality rate.

A child's nutrition foundation is established in the 36 months of life. The World Health Organization defined nutrition as the intake of food considered in relation to the body's dietary needs, malnutrition occurs in the form of undernutrition and overnutrition. Infants and young children grow rapidly and require relatively more nutrition per kg body weight than adults.

Infants and young children who are malnourished are most often found in environments where improving the quality and quantity of food intake is particularly problematic. To prevent occurrence and to overcome the effects of chronic malnutrition, these children need attention both during and early rehabilitation phase and over the longer term. Deficiencies in nutrition inflict long-term damage to both individuals and society. Compared with their better-fed peers, nutrition-deficient individuals are more likely to have infectious diseases such as pneumonia and tuberculosis, which lead to a higher mortality rate.

World's greatest resource for a healthy future lies in the children of today. Today children are tomorrow's citizen and leaders. The resources spent on the care, upkeep and health of the young ones from investment for the future. The most glaring nutritional disorder in India is protein energy malnutrition, deficiency of Vitamin B-complex, Vitamin A, Vitamin D, Iron and Calcium is commonly occurs in inadequately fed infants and children. Inadequate food intake is the most common cause of malnutrition worldwide. Prevention of malnutrition in children starts with an emphasis on prenatal nutrition and good prenatal education to mother regarding malnutrition care. Mother is the one who take care of the child. It is very important that she should need to have knowledge regarding nutrition which they need and the ways to prevent malnutrition in child. Healthy eating and physical activity are essential for growth and development in childhood.

1.1 BACKGROUND OF THE STUDY:

Malnutrition is the major global health problem in children. Children are particularly vulnerable, since adequate nutrition is essential to ensure healthy growth and development. Malnutrition is one of the main causes of death in children under five age and one of the most common factors threatening children life and health.

Nutrition of the under five children is the greatest importance, because of the foundation of our life time health, strength, intelligent and vitality laid during this period, our country faces the burden of disease in which nutritional deficiencies are the most common. The prevalence of underweight children in India among the highest in the world. Knowledge of mothers has an important role in the maintenance of nutritional status in children.

According to World Health Organization data, globally 52 million children's are affected from wasting, 17 million children's are affected from severely wasting, 155 million children's are affected from stunting and 41 million children's are affected from overweight.

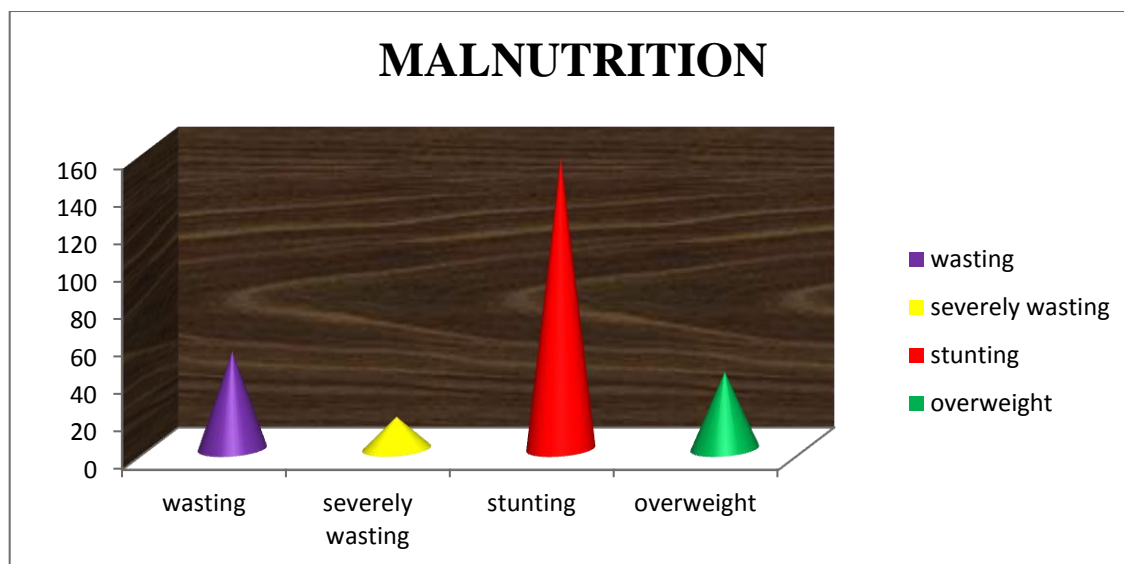
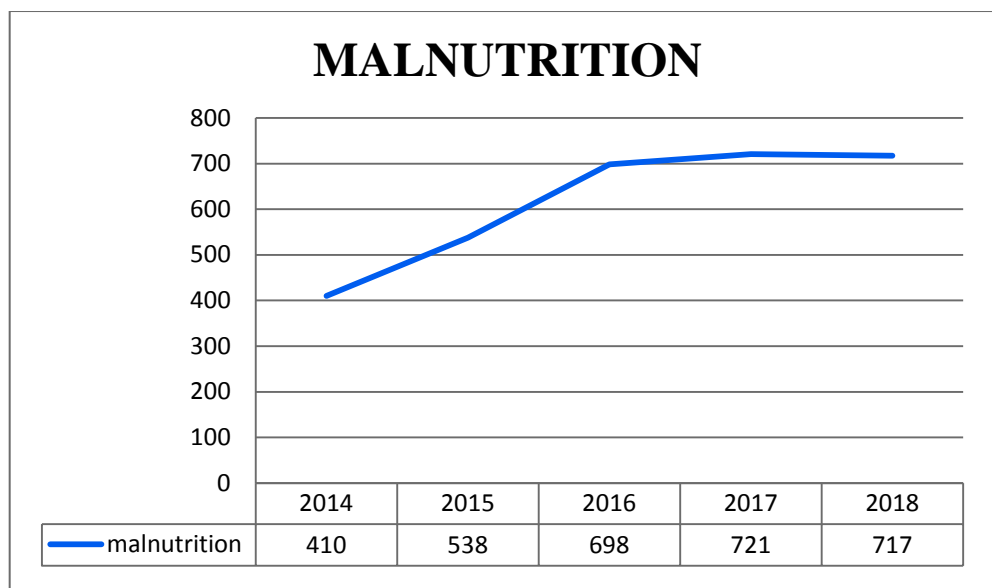


Fig 1.1.WHO Statistics of Malnutrition

According to Institute of Child Health and Hospital for Children (ICH) Egmore, Chennai-08, The table shows that the statistics of children affected by malnutrition from (2014-2018)

Years	Number of children affected by malnutrition
2014	410
2015	538
2016	698
2017	721
2018	717



The prevalence of malnutrition among children in developing countries is very high. As a step towards reducing the prevalence of malnutrition, **Sasika Yadav et al., (2016)** was conducted a study on knowledge and practice regarding prevention of malnutrition. The study researcher concludes that there is a significant association between knowledge and educational status of mother. The enhancement of knowledge is greatly required on the following areas like exclusive breast feed, continuous feeding of breast milk and good dietary practices. Hence the mothers need continuous education regarding prevention of malnutrition.

Parents and caregivers know the importance of nutrition to a child's physical and mental development to grow and develop, so this study aims to impart the knowledge about malnutrition in mothers to prevent and reduce the risk factors of malnutrition in toddler children. Today healthier children are tomorrow's healthier citizen.

1.2 NEED FOR THE STUDY:

Major health and social problem in children is malnutrition, which many people are suffering, particularly children. it is a results from imbalance between the body's needs and the intake of nutrients, which can lead to syndromes of deficiency, dependency, toxicity or obesity. Malnutrition includes under nutrition in which nutrients are inadequately supplied.

Inadequate nutrition in the first 3 years of a child's life can also leads to stunted growth, which is associated with impaired cognitive ability and reduced school and work performance, nearly half of all deaths in children toddlers are attributed to under nutrition, translating into loss of about 3 million young lives in a year. Under nutrition makes children at greater risk of dying from common infections increase the frequency and severity of such infections. The risk of under nutrition is also greater at certain times in a person's life, i.e., infancy early childhood, adolescence, pregnancy and lactation, and old age.

According to UNICEF data, 149 million children's are affected globally in 2018, nearly 2 out of five stunted children living in south Asia while another two out of five in south Saharan Africa.

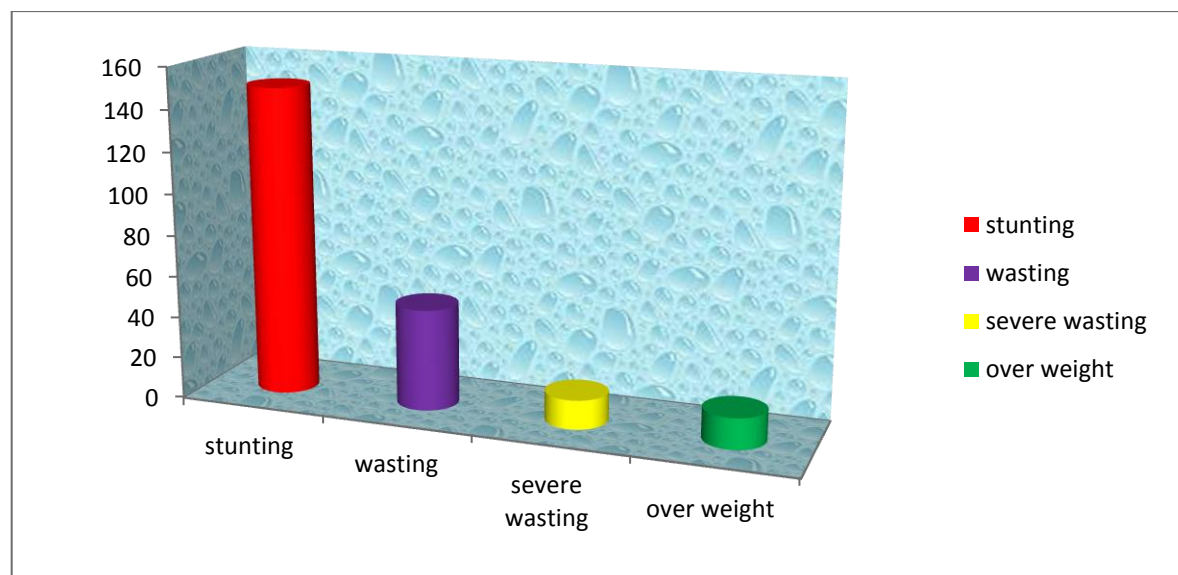


Fig 1.2 UNICEF Statistics of Malnutrition.

GLOBAL HUNGER INDEX (2017) reported that India scored 31.4 and was placed in high end of serious category. More than 20% of Indian Children under the age of five have lower weight in relation to their height and about 33% are too short in relation to their age

Tamil Nadu: Inspite of higher education qualifications has a prominent child malnutrition problem. A National Family Health Survey reveals that 23% of children here are underweight, while 25% of Chennai children show moderately stunted growth. Madhya Pradesh: statistical report shows that Madhya Pradesh is the highest numbers of malnourished children in india- 74.1% of them under 5 suffer from anemia, and 60% have to deal with malnutrition. Jharkhand and Bihar, Jharkhand is the India's second highest number of malnourished children (56.5%). This is followed by Bihar, at 55.9%. Uttar Pradesh most of the children in Uttar Pradesh are stunted due to malnutrition

Proper nutrition is very important to stay healthy and fit: people who are well nourished are more likely to be healthy, productive and able to learn. Nutritional benefit for families and communities and the world as a whole.

A group of leading economists, the Copenhagen Consensus, has consistently confirmed that taking action on under nutrition is the single most important, cost-effective means of advancing human well-being. Millennium Development Goals accelerate towards the achievement of save lives and should be a top global priority. Adequate nutrition helps give every child the best start in life.

Ansuya et al.,(2018) has conducted a Cross sectional study on mothers knowledge on malnutrition majority (31.8%) of the mothers educational qualification was lower primary an 32.6% of them have completed high school. Majority of the mother belongs to poor socioeconomic status, 16% were from the middle socio economic status and 1% from below poverty line family. About 65.4% of mothers were having average knowledge about

malnutrition, 31.58% of mothers had poor knowledge and only 1% were having adequate knowledge.

Based on the Role of paediatric nurse model, Paediatric nurse provides resources for young children and their families to promote growth and development of a child. Promoting positive nutrition and life style changes are considered as role of nurse. It justifies that there is a need to developing programmes to promote healthy nutritional habits among children which can be done through educating mothers.

ROLE OF PAEDIATRIC NURSE

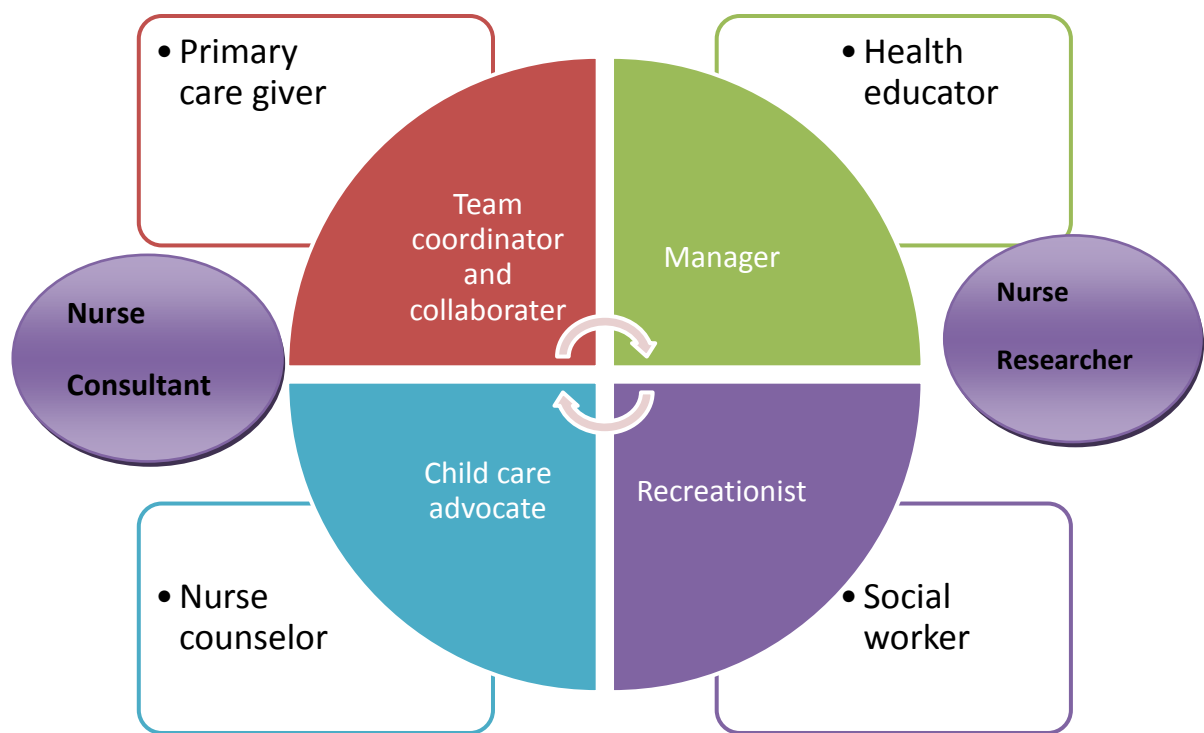


Fig 1.3 Role of paediatric nurse

Nurses overwhelmingly express as their concern to providing care to the children and families. As a nurse researcher to educate the parents about the positive nutrition and lifestyle changes will promote the nutritional status of the child.

A Child malnutrition study finds that early prevention is best, Preventing infants and young children from becoming undernourished is much more effective than treating children who are already malnourished.

Nurses have a pivotal and essential role in the nutritional care of children and have a duty of care to screening the children and educate the mother regarding preventive measures to improve the nutritional status of the child, Educating regarding prevention of malnutrition have found to be a valuable measure in enhancing the nutritional status of the child

1.3. STATEMENT OF THE PROBLEM

“A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARD AT ICH,CHENNAI -08”

1.4. OBJECTIVES OF THE STUDY

1. To assess the Pretest knowledge of mothers of toddlers regarding prevention of malnutrition.
2. To evaluate the effectiveness of structured teaching programme on prevention of malnutrition among mothers of toddler.
3. To compare the pre test and post test knowledge of mothers of toddler regarding prevention of malnutrition.
4. To find out the association between the post test knowledge score of mothers with selected demographic variables.

1.5. OPERATIONAL DEFINITIONS

ASSESS:

It refers to statistical measurement on knowledge regarding prevention of malnutrition among mothers of toddler Children by using self-administered questionnaire.

EFFECTIVENESS:

It refers to gain in knowledge regarding prevention of malnutrition among mothers of toddler.

TEACHING STRATEGY:

It refers to systematically organized plan of teaching on knowledge regarding assessing and prevention of malnutrition among which include food and water sanitation, prevention of infection, promotion of breast feeding, low cost weaning food, prevention of worm infestation among mothers of toddler in Institute of Child Health and Hospital for Children.

KNOWLEDGE:

It refers to level of understanding of mothers of toddler regarding prevention of malnutrition in Institute of Child Health and Hospital for Children.

MOTHERS:

It refers to the female who are married having at least one toddler (1-3) years

TODDLER:

It refers to A toddler is a child 12 to 36 months old, toddler period is a great time for cognitive emotional and social development.

PREVENTION:

It refers to in the present study Prevention refers to an action taken prior to the onset of disease, which removes the possibility that a disease will ever occur.

MALNUTRITION:

It refers to unbalanced intake of nutrients, caused by not having enough to eat, not eating enough for the right things, or being unable to use the food that one does eat

1.6. ASSUMPTION;

The study assumes that

- 1) Mothers will have some knowledge regarding the prevention of malnutrition prior to the administration of teaching strategy.
- 2) Administration of Structured teaching strategy will enhance the knowledge of mothers regarding prevention of malnutrition.

1.7. HYPOTHESES

H₁: Teaching strategy will be effective in providing the knowledge of mothers regarding prevention of malnutrition in mothers of Toddler

H₂: There will be significant association between pretest knowledge of mother of toddlers with their selected demographic variables.

1.8. DELIMITATION;

The study is delimited to a period of four weeks

The study is delimited to mothers of toddlers

The study is delimited within hospital premises

1.9. CONCEPTUAL FRAMEWORK

Conceptual framework is a set of abstract and general concepts of the propositions that integrate those concepts into a meaningful configuration. The **GOAL ATTAINMENT THEORY** was developed by **IMOGENE KING** in the early 1960s. The theory describes a dynamic, interpersonal relationship in which a person grows and develops to attain certain life goals. If accurate perceptual interaction is present between the mother and investigator transactions will occur, the goal will be attained and satisfaction will occur.

There are 6 major components:

PERCEPTION

It refers to mother's representation of reality. It is non observable but it can be interfered. Hence the investigator has the perception for the assessment of demographic variables and pre test assessment about the level of knowledge regarding prevention of malnutrition among mothers of Toddlers.

JUDGEMENT

The investigator found that mothers have inadequate knowledge regarding care prevention of malnutrition thus decide to give education to mothers, to improve their knowledge about malnutrition.

ACTION

Action refers to the matter, energy and information that enter into the system through its boundary. Action involves preparation of structured teaching programme on prevention of malnutrition.

REACTION

The investigator reaction is to set goal which is increasing the knowledge prevention of malnutrition.

INTERACTION

Interaction refers to the processing where the system transforms the energy matter.

Interaction involves in introducing of structured teaching programme through lecture method by using AV aids such as Flash card and care prevention of malnutrition Information booklet.

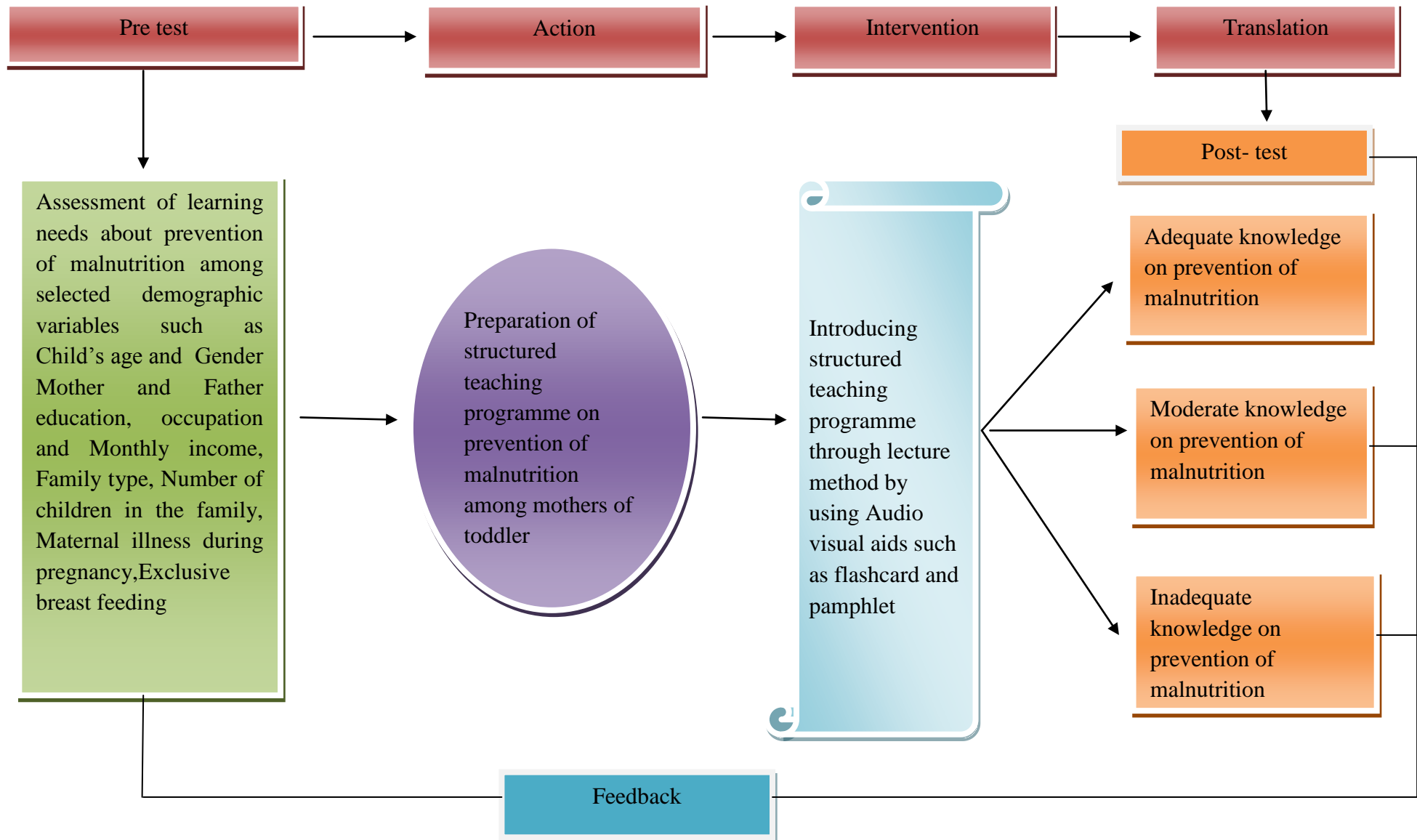
TRANSACTION

It refers to the matter, energy and information in the environment that are in an altered state. Transaction is the awareness among mothers regarding hygiene practice low cost weaning food, water sanitation, enhance breast feeding, preventive measures of worm infestation, balanced diet.

FEED BACK

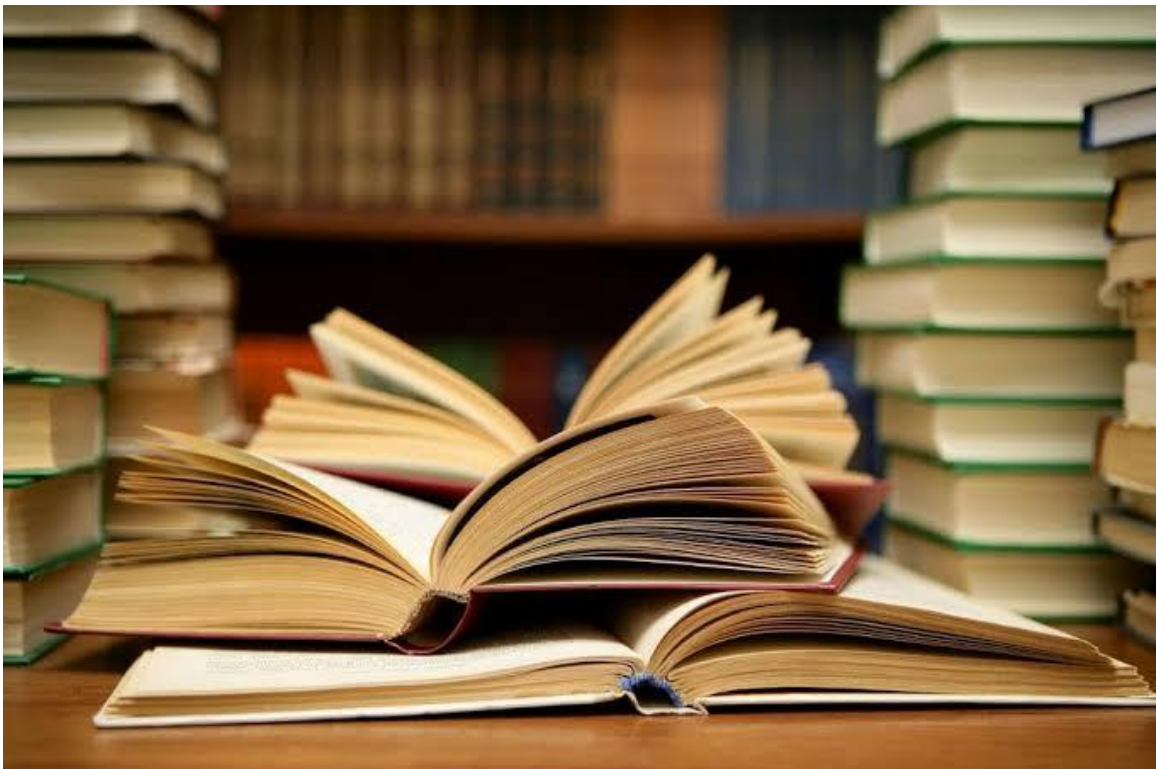
It refers to the environment response to the stimuli. Feed back is the evaluation of teaching programme by using the same semi structured questionnaires.

CONCEPTUAL FRAMEWORK



CHAPTER-II

REVIEW OF LITERATURE



CHAPTER – II

REVIEW OF LITERATURE

Literature review is a key step in the research process. The main goal of literature review is to strong knowledge base to carry out research activities in the educational and clinical practice. This chapter deals with the relevant review of literature regarding the different aspect of prevention of malnutrition.

RELATED STUDIES AND REVIEW LITERATURE:

- 1. Studies related to nutritional status.**
- 2. Studies related to factors affecting malnutrition.**
- 3. Studies related to knowledge on malnutrition.**
- 4. Studies related to prevention of malnutrition.**

2.1. STUDIES RELATED TO NUTRITIONAL STATUS.

Anuradha.R et al. (2014) conducted a study on Nutritional status of underfive children, total number of children aged 3-6 years 172 in kuthambakkam village, mothers of the children were interviewed using an interview schedule to collect information. The prevalence of undernutrition was 66.5%.the prevalence of grade 1 nourishment was 46.2%.The prevalence of under nourishment increased with increasing age and the difference was found to be statistically significant. Prevalence of undernourishment was higher among male (76.9%) children then female children (56.3%) and was statistically significant. As the socioeconomic status increased the prevalence of undernourishment decreased and the difference was found to be statiscally ($p < 0.05$).Duration of exclusive breast feeding had influence on the nutritional status. Community based preventive measures should be taken to allievate malnutrition, health education to the mother on dietary

practices, like feeding their children with locally available low cost health foods should given nutritional rehabilitation center should be established, improving the socioeconomic standards in mandatory.

Sairam Challa et al. (2015) conducted a descriptive study on Nutritional status of underfive children in the newly carved states of India. Fieldwork in Telangana was conducted during June, gathering information from 13,927 households. Fieldwork in Andhra Pradesh was conducted during August, gathering information from 20,490 households. The prevalence of wasting among the under five children was highest in rural Telangana followed by urban Telangana. Although there is a reduction in the prevalence of chronic malnutrition in both states compared to the past there is a drastic increase in the population of children with acute malnutrition. These include improving women's nutrition especially before and after pregnancy, early exclusive breast feeding, timely safe, appropriate and high quality complementary food and appropriate micronutrient interventions reason for increasing burden of the acute malnutrition need to be explored and addressed through proven interventions.

D.Saminathan et al. (2017) conducted a descriptive study on nutritional status and distribution of common illness among children in a rural area in Trichy, Tamilnadu. The study was undertaken among 134 school children belongs to rural village area of Chennai. All 134 children studying in government aided primary school. out of total population 83 were male and 51 were female their height and weight were measured. Each child was screened for routine, systemic examination from head to foot. The study concluded that 64.9% were malnourished where as the national average of malnutrition 42.5% analysing their height 24.6% were below 95 percentile of expected height for age. whereas the national average is 48.3% similarly, the most common illness found ,the children is URI with 23.7% and other illness were anaemia and dental carries 13.43% .

Pawn Kumar dubey et al. (2018) conducted a study on Regional disparity in nutritional status in India. The data used for this study is NFHS-3, 2005-2006, India. The dependent variable e.g. the child nutritional status was analyzed using three indicators of undernutrition: stunting (height for age), wasting (weight for height), and underweight (weight for age). Among the socio-demographic variables, education of parents, wealth index, and underweight (weight for age) were analyzed. Among the socio-demographic variables, education of parents, wealth index, type of caste, birth order, and preceding birth interval emerged as the most important indicators of undernutrition. Education of parents, wealth index, birth order, and spacing being the significant predictors suggesting that at least check on higher birth order with adequate spacing reduce substantially the problem of under nutrition. Further programme planner and policy makers should consider any strengthen collaboration and coordination of nutritional program that aims to alleviate nutritional program that aims to alleviate nutritional deficiencies and family health programme.

Karun Kanjlal et al. (2019) conducted a study on Nutritional status of children in Kolkata. Using National Family Health Survey-3 data an attempt is made to estimate socio-economic inequality in childhood stunting at the state level through concentration index. Across the states, a disproportionate burden of stunting is observed among the children from poor socio economic status, more so in urban areas. Results from multilevel models however show children from highest socio economic status quintile 50% better nutritional status than those from the poorest quintile. Household Socio economic condition as the contextual determinant, In spite of the declining trends of chronic childhood malnutrition in India, The concerns remain for this disproportionate burden on the poor. The socio economic gradient of long term nutritional status among children needs special focus, more so in the states where chronic malnutrition among children apparently demonstrated a lower prevalence.

2.2. STUDIES RELATED TO FACTORS AFFECTING MALNUTRITION.

Fanny Enstrom et al.(2014) conducted a study on prevention of malnutrition in south Africa in cape town among children a qualitative descriptive study was conducted with semi structured interviews, study groups for this study was children aged zero to six, study group was chosen because this particular age group among children is extra vulnerable to poor living conditions. The results showed that socio economic-factors and lack of knowledge about nutrition to be the most important causes for malnutrition among children, and also impact heavily on the preventive work.

Swaroop Kumar Sahu (2015) conducted a study on factors affecting under-nutrition among under-five children is relatively high and varied widely depending on the assessment methodology adopted, and there are limited studies on assessment of over-nutrition. The distribution of risk factors and its influence on malnutrition among children in a given set up should be analyzed in planning diverse control measures. Existing evidence shows that the prevalence of under-nutrition among under-five children was high and varied widely (under-weight: 39-75%, stunting: 15.4-74%, wasting: 10.6-42.3%) depending on the assessment methodology adopted. Strengthening public health interventions for mild malnutrition cases among the vulnerable groups with a focus on socioeconomic development and research on overweight, obesity and its etiological factors in the country are the prerequisites required to tackle malnutrition among under-five children in India.

Tette et al.(2015) has conducted a study on Factors affecting malnutrition in children and the uptake of intervention to prevent the condition, poverty remains important underlying cause of malnutrition in children attending princess Marie Lowise children hospital specific and targeted interventions are need to address this and must include efforts to prevent low birth weight and diarrhoea and reduce health inequalities, regular antenatal

clinic attendance, Deworming of children and growth monitoring should be also be encouraged, However further studies are needed on the timing and use of information on growth faltering to prevent severe forms of malnutrition.

Sachin Singh Yadav (2016) was conducted an Epidemiological study on malnutrition among under five children of rural and urban Haryana. A community based cross sectional study was conducted in children of 3-60 months' age living in the urban and rural field. 750 Children aged 3-60 months were studied for nutritional cases, socio demographic measures were obtained from structured questionnaire and followed by anthropometric measurement using standard methods. The study found that 41.3% children were underweight and 14% were severe underweight. Female children were nutritionally deprived than male child. Among socio demographic factors maternal educational and working status as well as socio economic class and rural background of family had greater impact on nutritional status of the child. For attainment of best possible nutrition growth in children, targeted short term strategies addressing underlying risk factors and more long term poverty alleviation strategies may be needed.

Neima Endris (2017) descriptive study was conducted and the data was extracted from 2014 Ethiopia mini demographic and health survey for this study. A total of 3095 children were included in the analysis. Composite index of anthropometric failure was used to measure the nutritional status of the children. The Prevalence of malnutrition among rural children in Ethiopia was 48.5%. Age of the children, preceding birth interval, educational status of the mother, wealth status and region were factors independently associated with the nutritional status of the children in rural Ethiopia. The prevalence of malnutrition among children in rural Ethiopia was high. A child older than 12 months having uneducated mother, living in a household with poor wealth status, born with short birth interval, and living in some region of the country are associated with increased odds of being malnourished.

2.3. STUDIES RELATED TO KNOWLEDGE ON MALNUTRITION.

Divya Shetti gar et al. (2014) reported a community based cross sectional descriptive study on assessment of knowledge mothers of underfive children on nutritional problems in Karnataka. Mothers were selected through Non probability convenient sampling. The data was collected using pretested structured questionnaire. A total of 50 underfive mothers were included in the study. knowledge about underfive nutritional problem and its prevention as reported by nearly half of the mothers 54% had poor knowledge, around 38% had average knowledge ,and only 8% had good knowledge regarding the common nutritional problems and its prevention. Mothers had poor knowledge on underfive nutritional problems and its prevention. A significant number of mothers were unaware of the prevention and management of underfive nutritional problems. So frequent health education campaigns should be conducted in the field of child nutrition.

Sd.Asmatunnisa et al. (2014) performed a study on Effectiveness of information booklet on knowledge regarding protein energy malnutrition among mothers of underfive children. population of study was collected by using non probability convenient sampling technique .the quasi experimental one group pre test-post test design was used in the pre test and post test there is no significant association between knowledge of PEM and the demographic variables such as age, occupation, type of family and religion and there is significant association with demographic variables like education, income, diet pattern, no of children and source of information. The study concluded that majority of the mothers of Underfive children had inadequate knowledge before pre test and giving information booklet improved the knowledge among the mothers.

Vinod Bagilkar et al. (2014) reported a descriptive study on malnutrition. The convenient sampling technique and interview schedule was used in the study. About 56% of mothers were given the information of malnutrition.58% of parents were in the age group of 23-27 years.100% of

parents were from rural area.70% of parents were belongs to jain religion.70% of parents were studied primary.72% of parents were belongs to nuclear family.92% of mothers were unemployed mothers.40% fathers were private employed fathers.54% of parents monthly income is Rs.3000 and below.76% of parents dietary practice is vegetarians.66% of parents had only one child.46% of parents were got information from other health care workers. There is no significant association between attitude and demographic variables such as informer age, education, occupation, economic status, type of family, religion, area of residence, food pattern, and source of information of the parental attitude on malnutrition. There was a significant increase in the knowledge of parents giving health education on malnutrition.

Carmen M Siagian et al. (2015) conducted a study on balanced nutrition status of Children in southern Jakarta. The study employed correlation Analytical research with cross sectional design. The applied sampling technique was consecutive sampling by taking the sample from 90 pairs of mother's aged 0-60 month infants in the sub – district. So the relationship between mothers knowledge level ($p < 0.05$) on balanced nutrition to nutritional status was statistically significant. It can be affirmed that there is a relationship between knowledge of mothers to balanced nutrition with children's nutritional status.

Kavitha (2015) carried out a study on Assess the knowledge on malnutrition among mothers in vinayaka mission Hospital in selam, A descriptive research design with cross sectional survey approach was conducted, the sample size was 30 convenient sampling technique was used to select the sample for the study. Over all mean score which is 11.4 reveals that 50% of the mothers having poor knowledge, further 20% of mothers having good knowledge, Hence it can be interrupted the most of the mothers having average knowledge regarding malnutrition. From the findings of the present study it can be concluded the highest percentage of mothers in the age group of 21-25 years, most of them had primary school education .over all mean, SD

and mean percentage revealed that mothers having average knowledge on malnutrition.

Sijo Koshy et al. (2015) implemented a study on Effectiveness of stop on knowledge regarding prevention of Malnutrition among mothers of underfive children. Pre experimental one group pre test research design with quantitative approach was used. Purposive sampling technique was adopted to select 80 samples from selected rural areas in vadodara district. Tool used to collect data was self administered structured questionnaire. Data was analysed by descriptive and inferential analysis. The result showed that high impact of structured teaching program has increased the knowledge level regarding prevention of malnutrition among mothers of underfive children. There was a significant association with the type of family. However, there were no statistical association with age of mother, education, occupation, monthly income and source of information. The structured teaching programme has motivated the mothers about prevention of malnutrition. it has given a new avenue to the researcher to widen the horizon on move research aspect of knowledge.

M.Edith et al. (2016) conducted a study on knowledge, attitude and practice survey on dietary practices in prevention of malnutrition among mothers of underfive children in Tirupur. A descriptive study using interview method was carried out to collect data among 200 mothers of underfive children .Information regarding demographic data, knowledge, attitude and practice on was collected using a structured interview schedule. Majority 56% of mothers had moderately adequate knowledge and moderately adequate practice 58% regarding dietary practice in prevention of malnutrition. Favourable attitude towards dietary practices in prevention of malnutrition was found among majority 56% of the mothers. The study concluded that adequate knowledge of mothers regarding dietary pattern of fewer than five children will enhance the attitude and practice to prevent malnutrition.

Sarika Yadav. (2016) carried out a study on knowledge and practice regarding prevention of protein energy malnutrition among mothers of underfive children in Newdelhi. A quantitative descriptive survey approach was used to assess the knowledge and practice regarding prevention of PEM. The sample size was 100 mothers who met inclusion criteria. Purposive random sampling technique is used. Majority 46.3% of the respondents had the right Dietary practice and 42% had the good practice of management of diarrhoea. There is a significant association observed between knowledge and educational status of mother. Overall finding showed that, the existing knowledge and practice is found 45.52% and 41.66% on prevention of protein energy malnutrition. The enhancement in both knowledge and practice is greatly required on the following areas of exclusive breast milk, initiation of breast milk, continuous feeding of breast milk and good dietary practices are the multidisciplinary action it should involve a research team and the findings should be communicated through journals and other media in order to enlighten nursing mothers.

Lija R Nath et al. (2017) reported a descriptive cross sectional study on knowledge and practice of mothers regarding the prevention and management of malnutrition among preschool children. The study was conducted in a coastal setting of Trivandrum district with a sample size of 115. Data collection was done by self administered questionnaire by conducting mothers meeting at selected Anganwadis. According to the results of the result of the study 19.1% of mothers had good knowledge and 34.8% mothers had poor knowledge. Regarding practice only 24.3% of mothers reported good practice while 36.6% of mothers reported poor practice. There was a strong association the knowledge and practice of mothers and selected demographic variables such as educational status of the mothers and socioeconomic class ($p < 0.01$). The study finding can be used for planning target nursing intervention in coastal areas for mothers of children.

Alka mishra et al. (2017) conducted a quantitative study on Knowledge regarding malnutrition and its prevention in slum dwelling in Newdelhi. One group pre-test and post test design was used. Tool used for generating necessary data was a structured teaching questionnaire, after establishing its validity and reliability. Purposive sampling technique was used to select 45 mothers having children less than five years of age. Before administering structured teaching program, 40% mother had poor knowledge 33.3% had average knowledge and 26.7% had good knowledge about malnutrition and its prevention, while after administration of structured teaching program 26.7% had poor knowledge, 46.7% had average knowledge 26.7% had good knowledge about malnutrition and its prevention indicating that the intervention was effective, there was significant relationship between knowledge gain and age, education and monthly family income of mothers. Finding of the study revealed that mothers having children less than five years of age had poor knowledge about malnutrition and its prevention. Structured teaching programme was an effective tool to enhance the knowledge of mothers.

Richa Bhardwaj et. (2017) conducted a study on Assess the effectiveness of structured teaching programme on the knowledge of mothers of under five children on malnutrition in pratap nagar jaipur. One group pre-test and post test design was adopted for the study. The sample comprised of 50 mothers whose child residing in pratap Nagar, A purposive sampling technique was used to select the samples. A structured interview questionnaire schedule was adopted for data collection. The study reveals that there was significant difference between pre-test and post-test knowledge score of mothers. The study helps to raise awareness among student nurse, educators and community leaders and community health nurse should take initiative in adopting policies or plan with government of India or Rajasthan for providing education to the community people especially for mothers. Planned teaching programme is very effective and helpful for imparting knowledge.

Ansuya et al. (2018) conducted a cross sectional study on mother's knowledge on malnutrition, Five hundred and seventy mothers were selected randomly from Udupi taluk. Pre-tested structured knowledge questionnaire was used to collect the data. The level of knowledge was determined by pre-defined score. Majority (31.8%) of the mother's educational qualification was lower primary and 32.6% of them have completed high school. Majority (83%) of the mothers belonged to poor socio economic status, 16% were from middle socio economic status and 1% of the mothers from below poverty line family. About 65.4% of mothers were having average knowledge about malnutrition, 31.58% of mothers had poor knowledge and only 1% of the mothers having adequate knowledge. This reiterates the need for education to improve knowledge on malnutrition among the mothers.

B.Manohar et al. (2018) carried out a descriptive study on Assessment of knowledge, Attitude and practice of mothers with severe acute malnutrition Children regarding child feeding in Andhra Pradesh. 120 mothers having children of age group infants to preschooler, admitted with severe acute malnutrition with or without co-morbidities in Nutritional Rehabilitation Center. Assessment of knowledge, attitude and practice of mothers was done by using a questionnaire containing 53 questions. The present study revealed that out of 120 mothers 57.5% have adequate knowledge followed by 30% have moderately adequate, 12.5% have inadequate knowledge. But in practice only 33.3% mother showed adequate feeding practices, remaining 62% showed moderately adequate practice, 15% have showed inadequate feeding practice. On average out of 120 mothers 35.83% shows favourable attitude, 29.16% shows moderately favourable, 35% shows negative attitude towards the child feeding. The study has shown there are some gaps in terms of knowledge and practice of mother's awareness of mothers regarding child nutrition exists but it can be further improved to make their knowledge into practice. This study emphasizes the need to improve knowledge and confidence of mothers through

appropriate counselling and supported by the clinical pharmacist in association with other health care professionals with the ultimate goal of preventing malnutrition.

Chetan S patali.(2018) Conducted a descriptive study on Assess the knowledge of mothers regarding the nutrition for underfive children in selected areas of Bagalkot with a view to Develop a self instructional module in Karnataka. 100 subjects were selected through non-probability purposive sampling technique. Data was collected by structured questionnaire. Prepared self instructional module regarding nutrition was developed after content validity of the tool was established by six experts. The result shows majority of the mothers 41% had satisfactory knowledge level, 36% of the mothers had inadequate knowledge, 23% were had adequate knowledge. There is a significant association between knowledge with age, educational status of mother, occupation of the mother, type of family, total number of under fives in the family, monthly income of the family and place of residence. The study concluded that Education programme should give importance to equip the mothers with adequate knowledge regarding nutrition thereby preventing from threat of nutritional deficiencies.

2.4. STUDIES RELATED TO PREVENTION OF MALNUTRITION.

Swapan Kumar Roy et al. (2014) conducted a community based controlled trials on prevention of malnutrition among young children in rural Bangladesh by a food health care educational intervention was conducted among 605 normal and mildly malnourished children aged 6 to 9 months in 121 community nutrition centers of Bangladesh. A significant increase in the frequency of complementary feeding was observed in the intervention group as compared with the control group and the increase was sustained throughout the observation period. The intervention group had a higher weight gain than the end of the intervention. This culturally appropriate nutrition education package based on the nutrition triangle model effectively prevented growth faltering and malnutrition among young children.

Celine Langendorf (2014) conducted a prospective study was conducted in 48 rural villages located within 15 km of a health center supported by forum santé nager in Canada. They compared the effectiveness of seven preventive strategies including distribution of nutritional supplementary foods, with or without additional household support, cash transfer only-on the incidence of severe acute malnutrition and moderate acute malnutrition among children aged 6-23 months over a 5 month period partly overlap the hunger gap in Maradi region, Niger preventive distributions combining a moderate acute malnutrition and severe acute malnutrition than strategies relaying on cash transfer or supplementary foods alone. They hypothesized that distribution of supplementary foods would more effectively reduce the incidence of acute malnutrition than distributions of household support by cash transfer.

Marko kerar et al. (2014) conducted a study on preventing acute malnutrition in young children, improving the evidence for current and future practice. Food packages can be carefully tailored to meet child's nutritional requirement, unconditional cash transfer have a capacity cash transfer also have the potential to be spent in a way that reduces none of the risk factors of concern.

Gerardo Weisstaub et al. (2014) implemented a study on Treatment and prevention of malnutrition in Latin America, National international nutrition and food programs developed over past 50 years have been implemented as integral components of broader strategies of primary health care and education, oriented towards preventing death and improving the quality of life low socio economic status group, Treating hundreds or thousands of affected children will not solve.

Pantea Tajik et al.(2017) conducted a interventional controlled clinical effectiveness trial with control group. The population included children aged more than 1year and under 10 years old, who were admitted in Mofid children hospital, the children were dived in to 3, control group, nutrition counselling group, formula 100 solution fed group. In this study, boys and girls accounted

for 50% and 50% out of 300 children with malnutrition who were hospitalized for various reasons. All these groups are homogenous in terms of growth index. After the use of F-100 solution, the growth index was improved by about 78%, 64% and 32% respectively. In the nutrition counselling group which had food orders and calorie intake, malnutrition severity was improved about 11%, 39% still had severe malnutrition and 60% had moderate malnutrition. There was a statistically significant relationship between the consumption of F-100 solution and improvement of growth. According to the present study the use of the formula feed solution that can easily be provided by families is an acceptable and accessible supplement for malnourished and under age children.

Bodzewan et al. (2018) conducted a study on knowledge of mothers and care givers on the cause, prevention and consequences of malnutrition in under five children in Nigeria. Malnutrition is caused by lack of knowledge on the types of nutrients, due to poverty and by lack of knowledge on balance diet. Ignorance is a great danger for human life and the life of the child is on the hands of the mother, the consequences of malnutrition are growth retardation and improper cognitive function, disease and death. Stake holders within the Bali urban Health Area involved in livestock production, agriculture and basic education should liaise with the health administration to safeguard the welfare of the under-five children.

Mohammed Mohrseni et al. (2019) conducted descriptive study on prevention of malnutrition among underfive children in Iran, This study was conducted in 2017 to analyze policy using the policy triangle framework. In this study the sample selection was done by 2 methods, including purposeful and snowball sampling technique. A data collection form was used to identify the current policies and documents and a semi structured interview guide form was used for the interviews. The study concluded that more attention should be paid to the shortage of some micro nutrition accurate implementation of breast feeding programme, supplementary nutrition, fortification and supplementation programmes for children and mother, utilization of the advantages of each

region and its sources and better coordination between organizations and their policies and finally story, incentive are needed to promote macro nutritional goals for children under five years of age.

CHAPTER-III

METHODOLOGY



CHAPTER – III

METHODOLOGY

This chapter deals with the methodology to assess the effectiveness of teaching strategy on knowledge regarding Prevention of Malnutrition among mothers of toddler at Institute of Child Health and Hospital for Children, Egmore, Chennai-08”.

3.1. RESEARCH APPROACH

Quantitative research approach

3.2. STUDY DESIGN

Pre experimental one group pre test post test design

The research design adopted for the study was pre experimental (one group pre test post test) with manipulation and no randomization and no control group.

E → O 1 → X → O 2

KEY:

E – Pre experimental group

O1 – Pre assessment (pre test)

X – Nursing intervention (Teaching Strategy)

O2 – Post assessment (post test)

3.3. DURATION OF THE STUDY

4 weeks (2.2.2019 – 4.3.2019)

3.4. STUDY SETTING

The study was conducted in selected medical wards at the Institute of Child Health and Hospital for Children, Egmore, Chennai-08. The Department was started in 1948, at Government General Hospital and then upgraded in 1057 for public service. It is an 867 bedded hospital with tertiary care centre, referral, Nodal centre for IMNCI and also research centre. This hospital is renowned for its excellence in medical experts, nursing care and quality diagnostic services. Institute of Child Health and Hospital for Children has Departments like IMNCI, SICU, NICU and other specialties which are rendering comprehensive care to Chennai and for neighboring states like Andhra Pradesh also. The rationale for selecting this area is feasibility and availability of adequate samples.

3.5. STUDY POPULATION

Target population: Mothers of toddler who are admitted in medical wards in Institute of Child Health and Hospital for Children

Accessible population: The Mothers available during the study time at Institute of Child Health and Hospital for Children.

3.6. SAMPLE

The sample comprises mothers of toddler.

3.7. SAMPLE SIZE

60 mothers who met with the inclusion criteria

3.8. SAMPLE CRITERIA

CRITERIA FOR SAMPLE SELECTION

3.8.1. Inclusion Criteria

- 1) All mothers having children aged between 1 – 3 years

- 2) Children those who are admitted in medical wards.
- 3) Mothers who are willing to participate in the study

3.8.2. Exclusion Criteria

- 1) Mothers having children suffering of critical illness
- 2) Mothers those who were not able to read and write Tamil and English.

3.9. SAMPLING TECHNIQUE

Sampling procedure is non-probability convenient sampling technique

3.10. RESEARCH VARIABLES

Independent variable:

Teaching strategy on knowledge regarding prevention of malnutrition

Dependent variable:

The knowledge of the mothers regarding prevention of malnutrition.

3.11. DEVELOPMENT AND DESCRIPTION OF TOOLS:

3.11.1. DEVELOPMENT OF TOOLS

Structured questionnaire was developed after in-depth review of literature; obtained opinion and content validity from medical, nursing and statistical experts. Construction and pretesting of tool was done during pilot study direct assessment of mothers was performed during data collection.

3.11.2. DESCRIPTION OF TOOLS

SECTION I: Comprises a demographic variable of mothers which includes age, gender, family income, Father Education, Mother Education, Father Occupation and mother occupation, previous hospitalization, Exclusive breast feeding on malnutrition.

SECTION II: consists of 25 multiple choice questions to assess the effectiveness of structured teaching programme on knowledge regarding

prevention of malnutrition and it has following subsection like knowledge aspects of general information, causes and clinical manifestation, treatment and prevention of malnutrition of malnutrition.

SCORING PROCEDURE:

Section A: The demographic variables were coded to assess there and thereby to subject it for statistical analysis.

Section B: The semi structured knowledge questionnaire, each correct answer was given a score of ‘one’ and the wrong answer was given a score of ‘zero’

SCORING INTERPRETATION OF KNOWLEDGE

3.1. Scoring interpretation of knowledge

SCORE	INTERPRETATION
$\geq 76\%$	Adequate knowledge
51-75%	Moderate knowledge
$\leq 50\%$	Inadequate knowledge

3.12. CONTENT VALIDITY

Content validity of the tool was obtained from 2 medical and 2 nursing experts and 1 research experts in the field of child health nursing. They suggested certain modification in the tool. The expert’s suggestions were incorporated in the tool. Then the tool was finalized and used for the main study.

3.13. RELIABILITY OF THE TOOL

Reliability of the tool was determined by test retest method. There was a significant co-relation between the test and retest knowledge score according to Karl Pearson’s correlation coefficient the value is 0.08.this score indicates high co relation. Hence the tool was found to be reliable to conduct the main study.

3.14. PROTECTION OF HUMAN SUBJECTS

Obtained approval from the Institutional Ethics Committee, Madras Medical College, Director of Institute of Child Health and Hospital for Children, Egmore, Chennai and all respondents were carefully informed about the purpose of the study. The mothers were explained about the purpose and need of the study. They were assured and their details and answers will be used only for research purpose and kept confidentially. Written permission was obtained from the participants before conducting the study.

3.15. PILOT STUDY:

In order to test the feasibility of the study, a pilot study was conducted with 10 mothers. Convenient sampling technique was used. Before and after structured teaching program pre and post test was conducted, those data were analyzed to find out suitability of study. The results of the pilot study showed that there was a positive correlation between the knowledge of the mothers with prevention of malnutrition and the investigator found that study was feasible.

DATA COLLECTION PROCEDURE

The study was conducted in Institute of child health and hospital for children, after obtaining permission from the Director and Head of the Department of Medical wards in Institute of Child Health and Hospital for Children, Chennai-08. Before the data collection, the researcher introduced herself, explained the purpose of the study to the mothers regarding prevention of malnutrition. The confidentially was assured and consent was obtained from the participants then the mothers were interviewed and educated using structured teaching module. Five to ten participants were selected everyday and assured that at anytime they can withdraw from the study. The period of study extended for four weeks, the data was collected from Monday to Saturday between to 8am to 4pm. Using convenient sampling technique 60 samples were collected who fulfilled their selection criteria.

Pre test was conducted 25 minutes; the structured teaching programme was implemented on the same day for 45 minutes using Flash cards and information booklets which was prepared by the researcher after consulting with the specialist. The Mothers participated with interest and they were alert and enthusiastic. Certain points were repeated for better understanding and doubts were cleared and given a self instructional module to each mothers regarding prevention of malnutrition.

After seven days of interval the post test was administered to the same sample for 20 to 25 minutes regarding the knowledge regarding prevention of malnutrition, using the same questionnaire, and evaluates the effectiveness of structured teaching programme on prevention of malnutrition.

DATA ENTRY AND ANALYSIS

Demographic variables in categories were given in frequencies with their percentages.

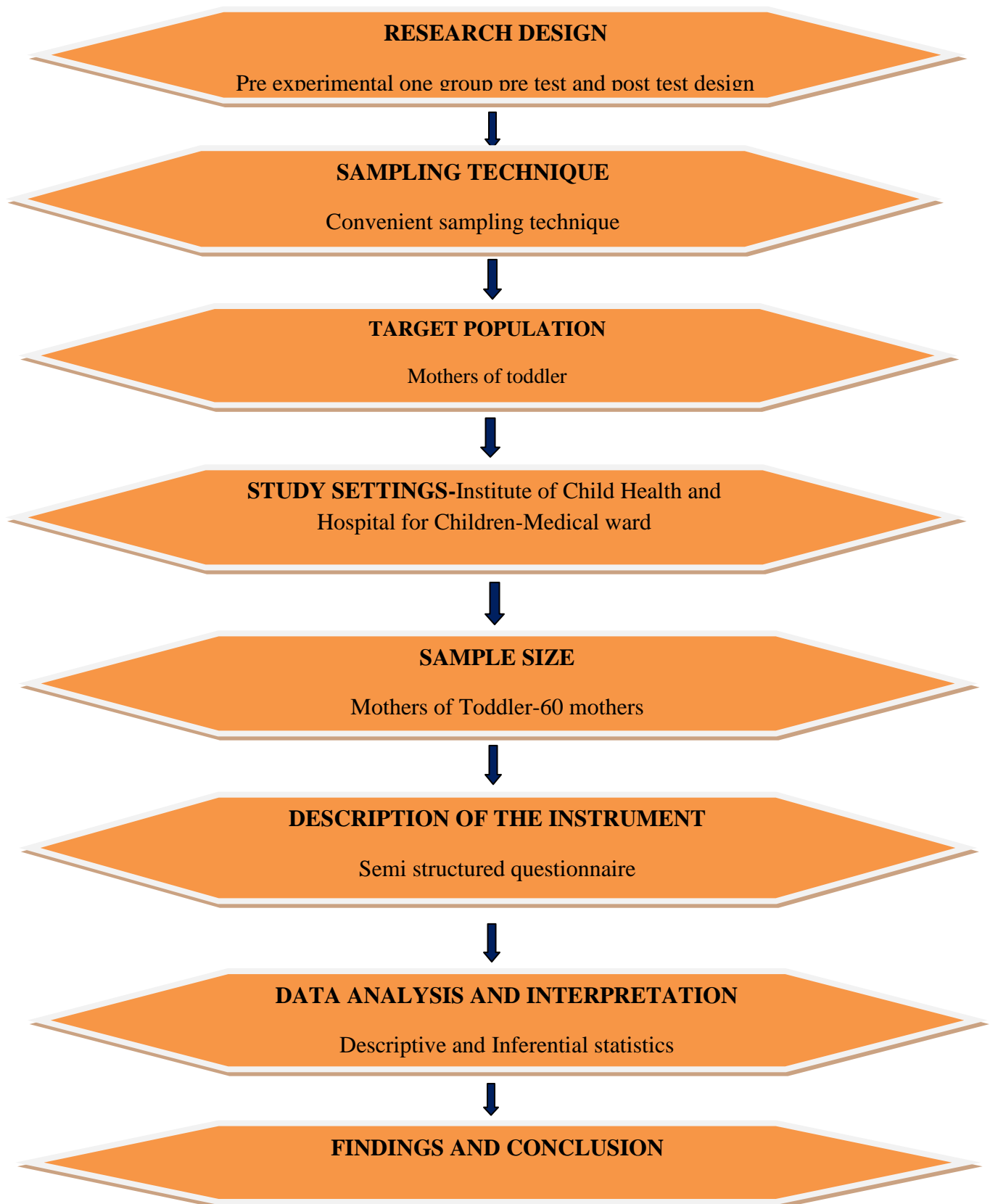
Knowledge score were given in mean and standard deviation.

Quantitative knowledge score in pre test and post-test were compared using mother's paired t-test.

Association between knowledge gain score with demographic variables are assessed using one way ANOVA F-test and t-test.

Diagram, with regression estimate were used to represent the data.

3.1. SCHEMATIC REPRESENTATION OF THE RESEARCH METHODOLOGY



CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION



CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

This chapter presents the analysis and interpretation of data collected from 60 subjects using a structured questionnaire to assess the knowledge regarding prevention of malnutrition among mothers. The data was analyzed according to the objectives and hypothesis formulated for purpose of the study using descriptive and inferential statistics.

Analysis is the process of organizing and synthesizing the data in such a way that research questions can be answered and hypotheses tested. The purpose of analysis is to reduce the data into an intelligible and interpretable form, so that the relation of research problem can be studied and tested.

ORGANIZATION OF DATA

Section A: Description of frequency and percentage distribution of demographic variables.

Section B: Assessment of pre test knowledge among mothers with prevention of malnutrition.

Section C: Assessment of post test knowledge among mothers with prevention of malnutrition.

Section D: Comparison of pre test and post test knowledge among mothers with prevention of malnutrition and effectiveness of structured teaching programme.

Section E: Association between the post test knowledge among mothers with prevention of malnutrition with demographic variables.

STATISTICAL ANALYSIS

Demographic variables in categories were given in frequencies with their percentages.

Knowledge score were given in mean and standard deviation.

Quantitative knowledge score in pre test and post test were compared using student's paired t-test.

Qualitative level of knowledge in pre test and post test were compared using Stuart-Maxwell test /extended McNemar test

Association between demographic variables and knowledge score were analysed using Pearson chi-square test

Simple bar diagram, multiple bar diagram, Pie diagram, Doughnut diagram and Box plot were used to represent the data.

$P < 0.05$ was considered statistically significant. All statistical test are two tailed test.

SECTION A: DESCRIPTION OF DEMOGRAPHIC VARIABLES OF STUDY PARTICIPANTS.

Table -4.1: Reveals distribution of demographic variables of mothers with prevention of malnutrition.

Demographic variables		No. of mothers	%
Age of the Child	1-2 years	35	58.33%
	2-3 years	25	41.67%
Sex of the Child	Male	33	55.00%
	Female	27	45.00%
Educational Qualification of the mother	Professional	2	3.33%
	Graduate	10	16.67%
	Post high school	3	5.00%
	High school	13	21.67%
	Middle school	14	23.33%
	Primary school	13	21.67%
	Illiterate	5	8.33%
Occupational status of the mother	Professionals	1	1.67%
	Semi-professionals	1	1.67%
	Clerk ,ship-owner	1	1.67%
	Skilled worker	2	3.32%
	Semiskilled worker	4	6.67%
	Unskilled worker	3	5.00%
	Unemployment	48	80.00%
Educational Qualification of the father	Professional	5	8.33%
	Graduate	10	16.67%
	Post high school	4	6.67%
	High school	10	16.67%
	Middle school	17	28.33%
	Primary school	9	15.00%
	Illiterate	5	8.33%
Occupational status of the father	Professionals	2	3.33%
	Semi-professionals	9	15.00%
	Clerk ,ship-owner	6	10.00%
	Skilled worker	16	26.67%
	Semiskilled worker	3	5.00%
	Unskilled worker	24	40.00%
	Unemployment	0	0.00%

Demographic variables		No. of mothers	%
Monthly Income	Below Rs. 2,091	3	5.00%
	Rs 2,092 – 6,213	11	18.33%
	Rs 6,214 – 10,356	25	41.67%
	Rs 10,357 – 15,535	12	20.00%
	Rs 15,536 – 20,714	6	10.00%
	Rs 20,715 – 41,429	3	5.00%
	>Rs 41,429	0	0.00%
Type of family	Nuclear family	42	70.00%
	Joint family	18	30.00%
	Broken family	0	0.00%
Number of children in the family	One	16	26.67%
	Two	39	65.00%
	Three	5	8.33%
Maternal illness during pregnancy	Yes	9	15.00%
	No	51	85.00%
Initiation of weaning	At 6 month	11	18.33%
	7-9 month	23	38.34%
	13-24 month	26	43.33%
Hospitalization during last 6 month	Yes	10	16.67%
	No	50	83.33%
Exclusive breast feeding till	< 3 months	12	20.00%
	4- 6 months	48	80.00%

This section describes the description of demographic variables of the study population. Age group of 1-2 years 58% of the children. Out of the total study population 55% of the children were male. Out of the total study population 21.6% of the mothers were studied up to primary school and high school. Out of the total study population 80% of the mothers are homemaker. Out of the total study population 28.83% of the children fathers had middle school education. Out of the total study population 40% of the fathers were unskilled worker. Out of the total study population Monthly income of the Family 41.67% was Rs.6,214 – Rs 10,356. Out of the total study population 70% of the families were nuclear family. Out

of the total study population 65% of the mothers have two children in the family. Out of the total study population 85% of the mothers were not affected by maternal illness. Out of the total study population 43.33% of the mothers were started to wean at the month of 13-24 months. Out of the total study population 83.33% of the children were not hospitalized from birth. Out of the total study population 80% of the children's were exclusively breast fed up to 4-6 months.

Data presented in table 1 shows the following:

Figure- 4.1: Age Distribution

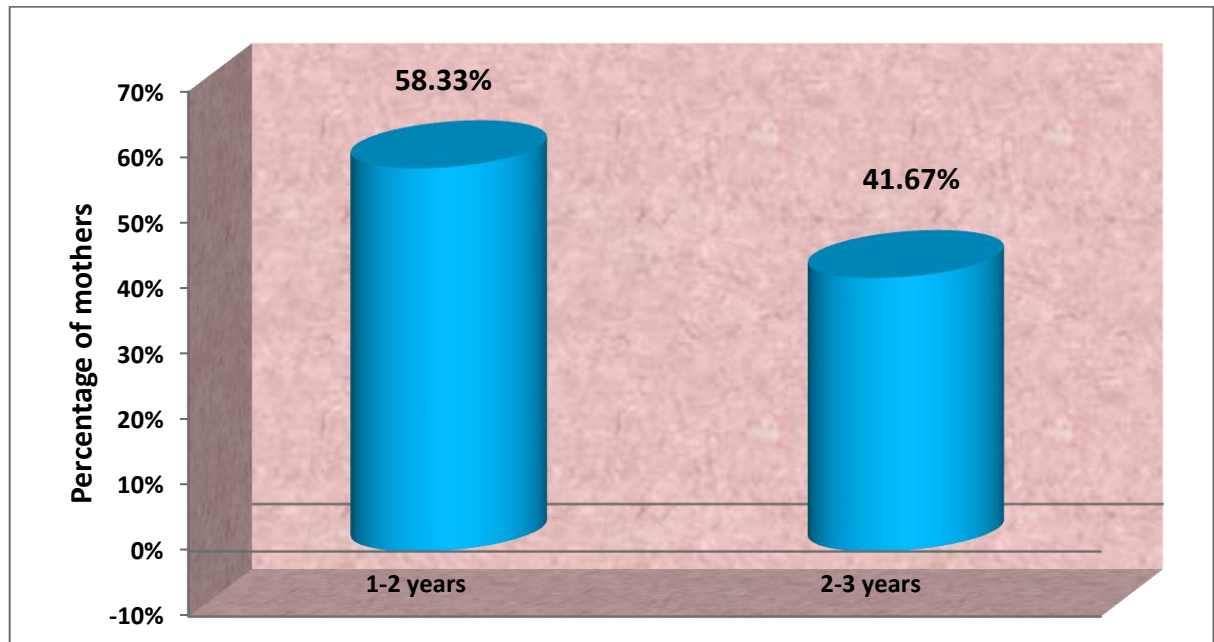


Figure-4.2: Sex of the child.

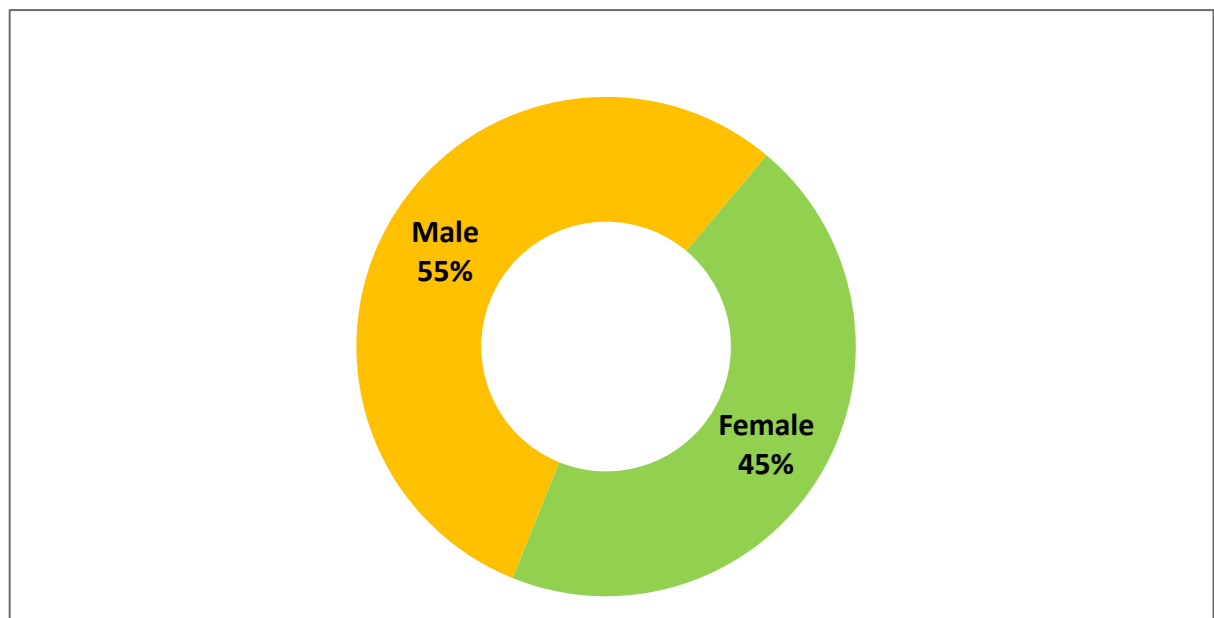


Figure4. 3: Educational status of the Mother

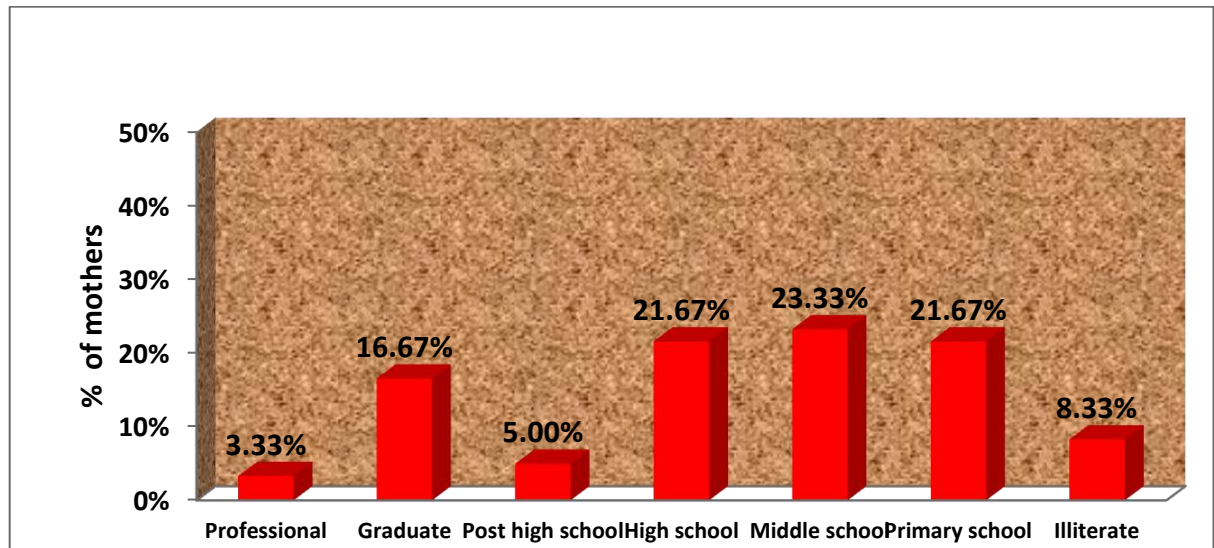


Figure-4.4: Occupational status of the Mother.

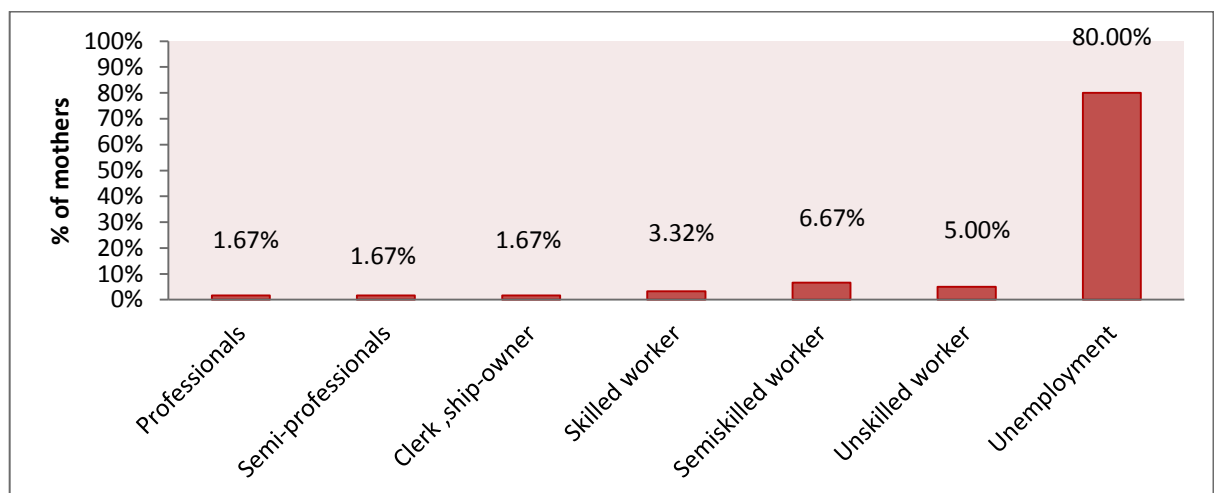


Figure-4.5: Educational status of the Father

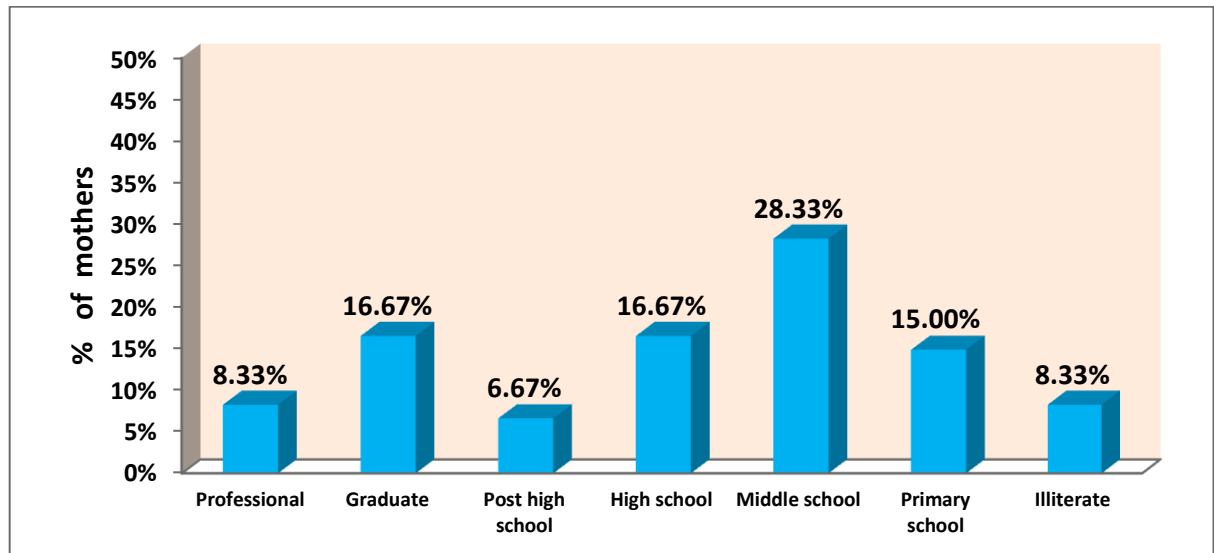


Figure-4.6: Occupational status of Father

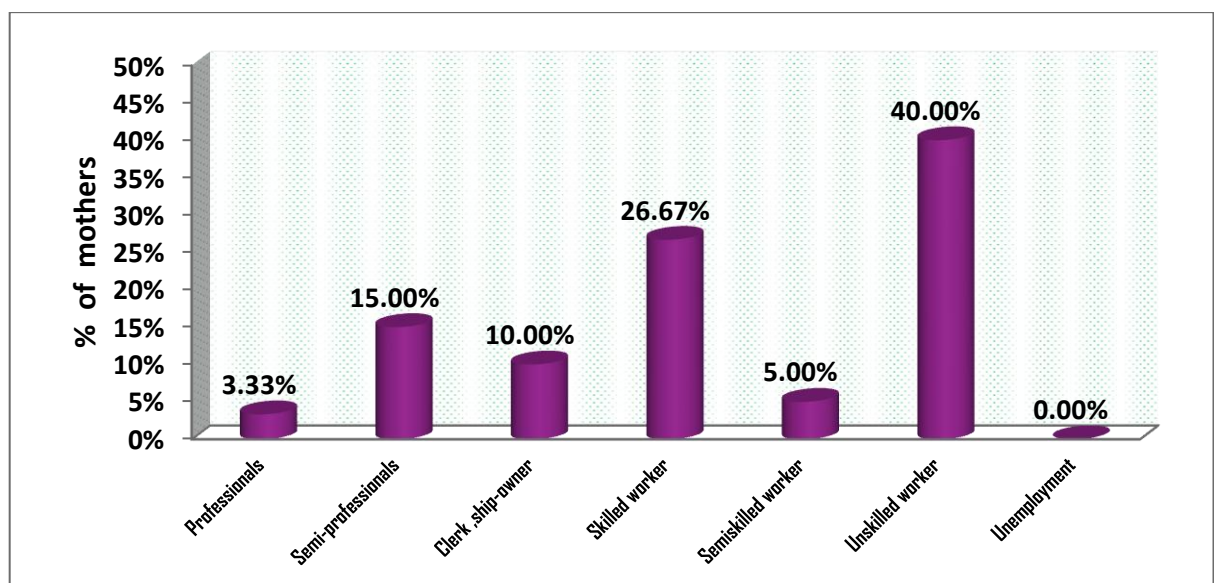


Figure -4.7: Monthly income of the family

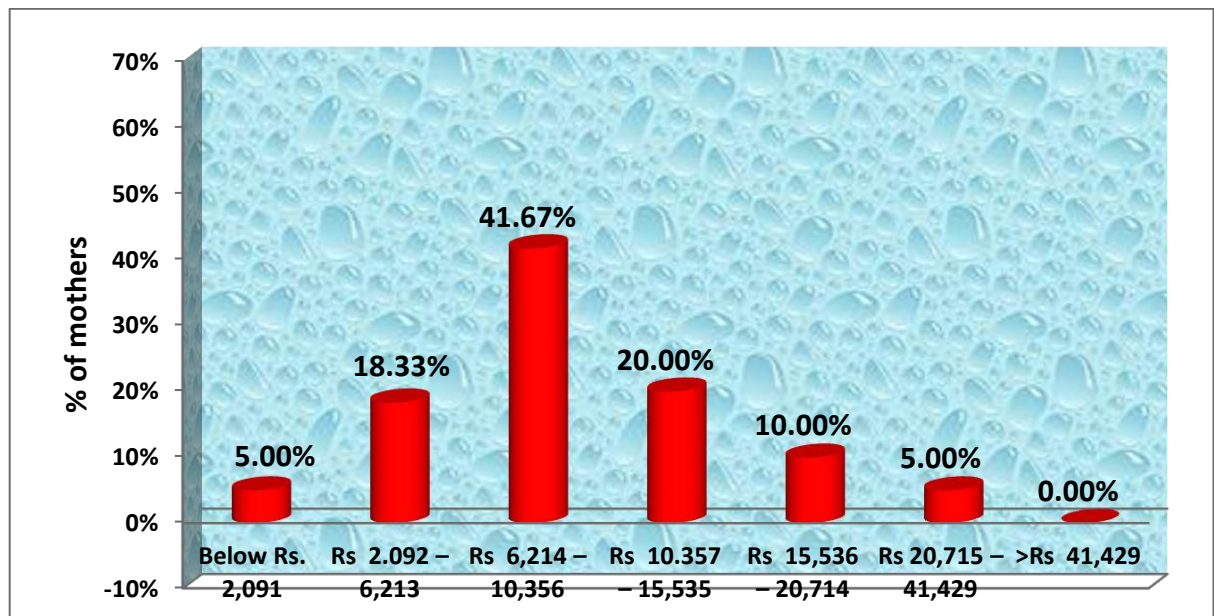


Figure-4.8: Type of family.

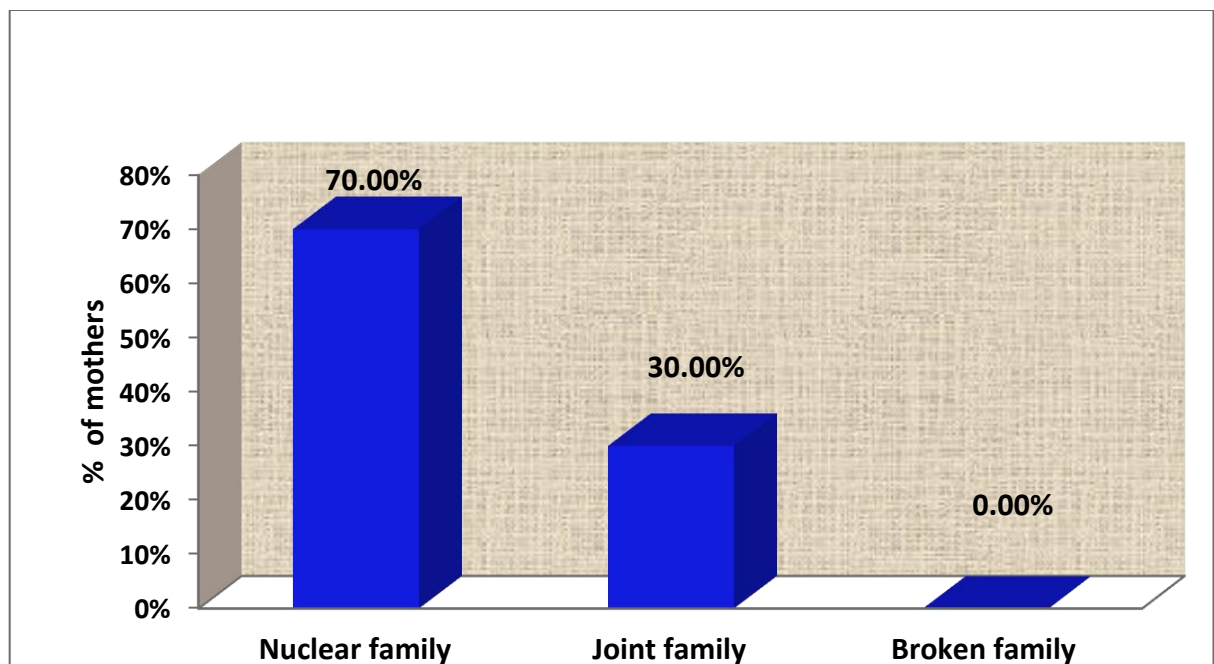


Figure-4.9: Number of children in the family.

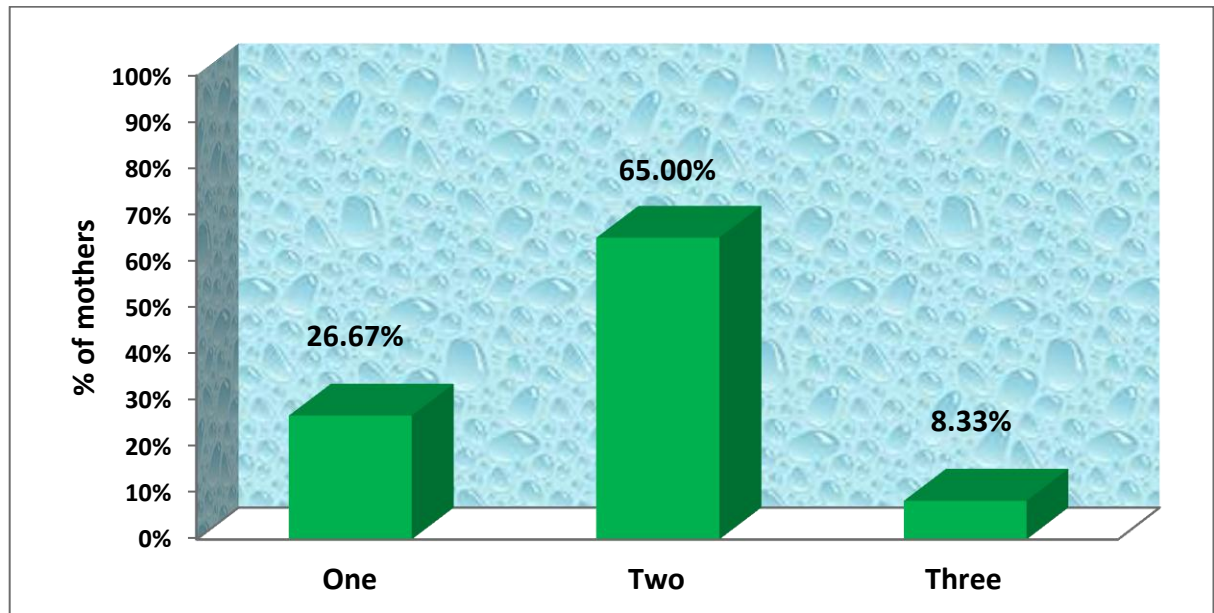


Figure-4.10: Maternal illness during pregnancy

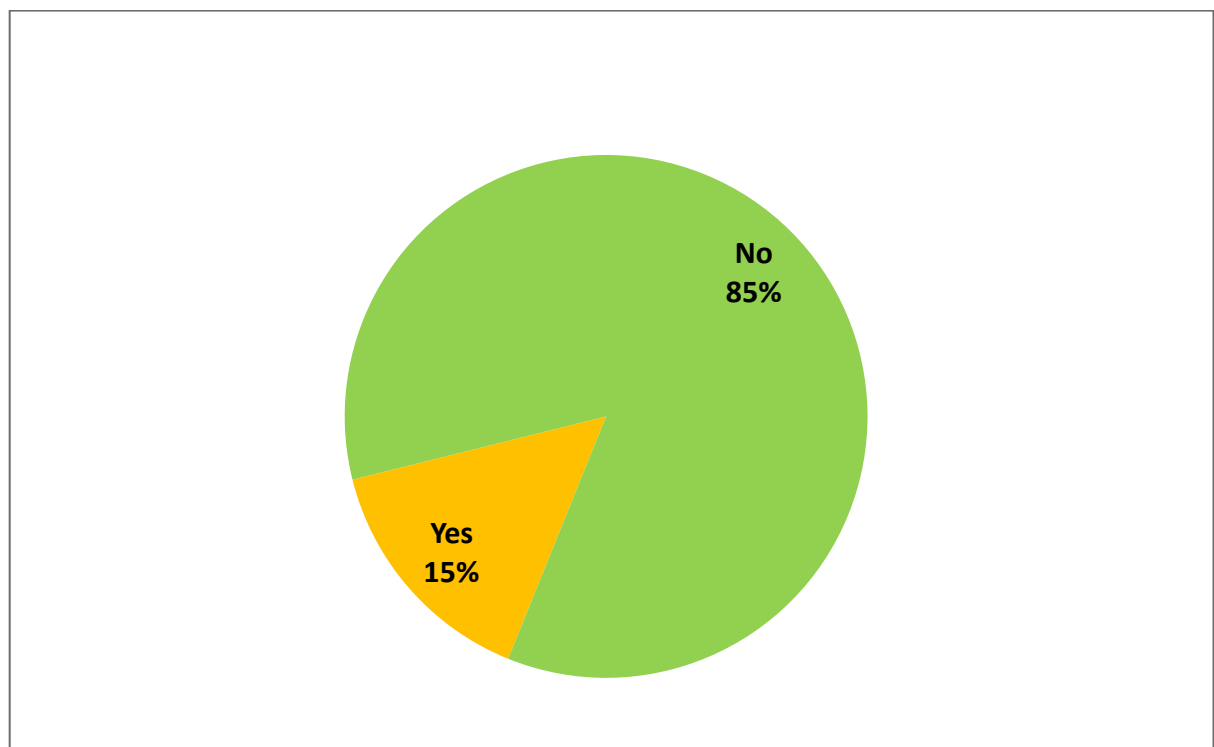


Figure -4.10: Initiation of weaning.

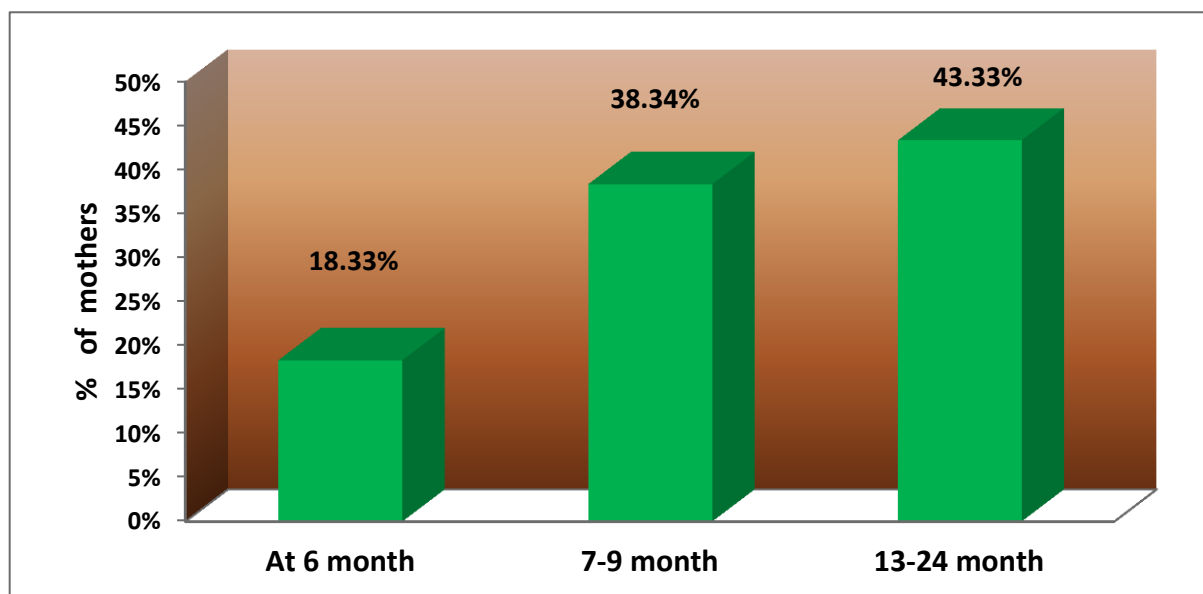


Figure -4.12: Hospitalization during last six month

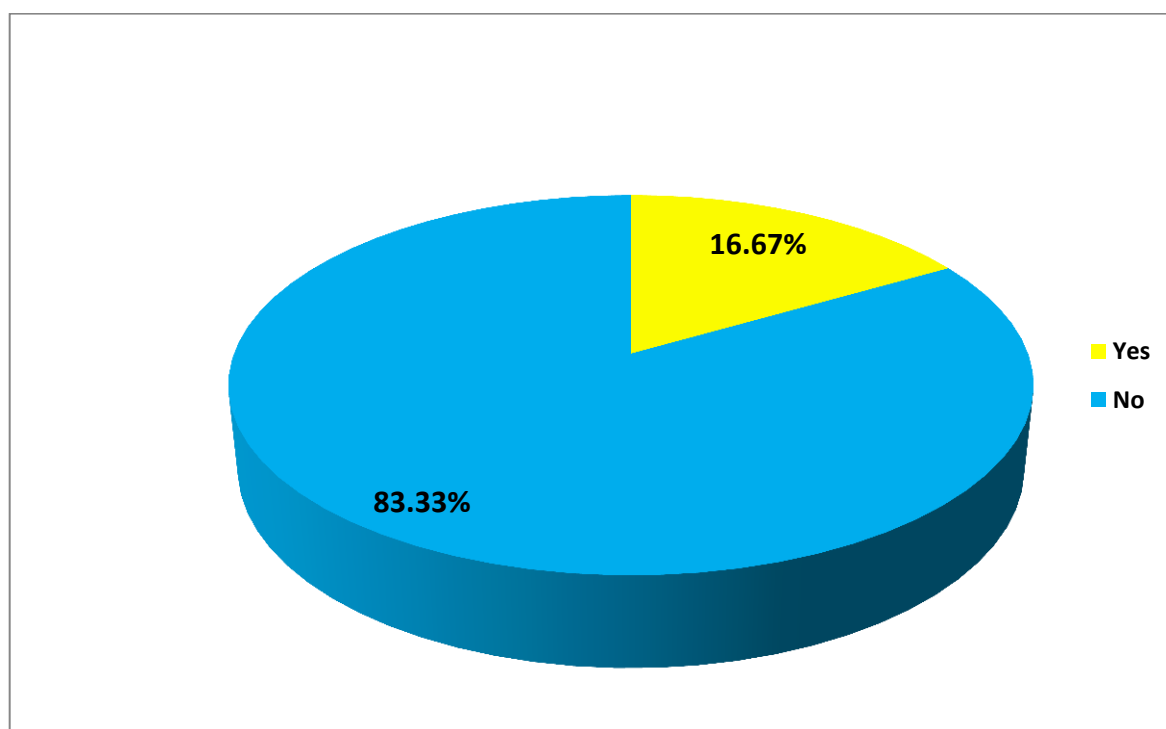
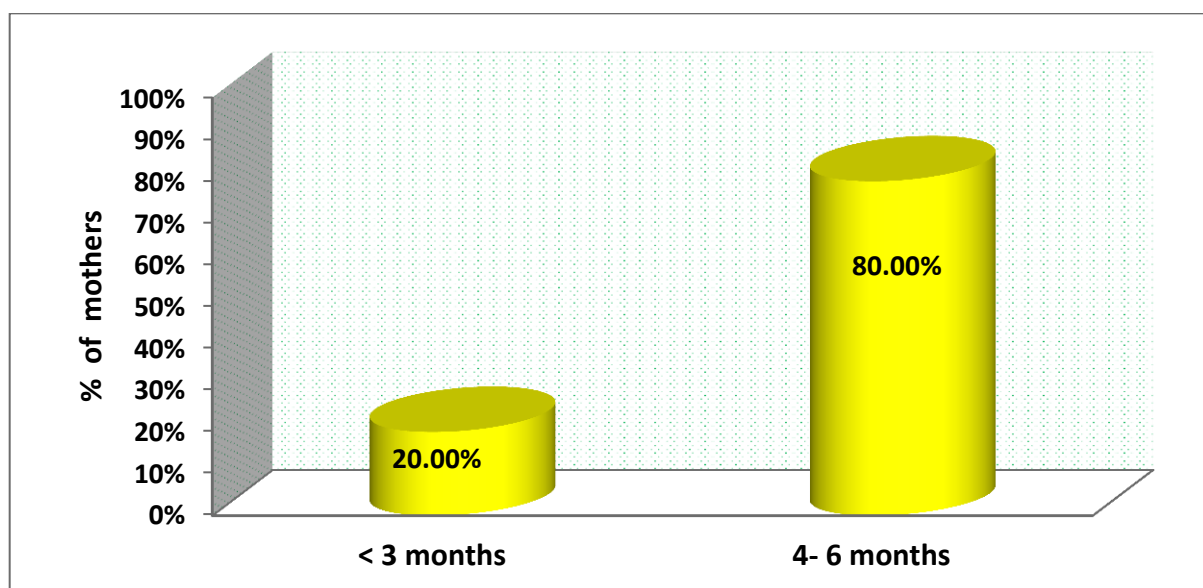


Figure -4.13: Exclusive breast feeding



SECTION B; ASSESSMENT OF PRETEST KNOWLEDGE AMONG MOTHERS WITH

PREVENTION OF MALNUTRITION.

Table -4.2: Pretest p'ercentage of knowledge on Prevention of malnutrition.

	Domains	No. of questions	Min – Max score	Knowledge score		
				Mean	SD	% of mean score
1	General information and causes of malnutrition	7	0 -7	3.47	1.28	49.57%
2	Symptoms and treatment of malnutrition	8	0 - 8	3.27	1.22	40.88%
3	Prevention and complication of malnutrition	10	0-10	4.17	1.54	41.70%
	TOTAL	25	0 - 25	10.90	2.58	43.60%

Table -4. 2 shows each domain wise pre-test percentage of knowledge regarding prevention of malnutrition among mothers of toddlers in medical wards at Institute of Child Health and Hospital for Children, Egmore, and Chennai-08. They are having maximum Knowledge about **General information and causes of malnutrition** (49.57%) and minimum knowledge score in Knowledge about **Prevention and complication of malnutrition** (41.70%). Overall knowledge score is 43.60%

Table -4.3: PRETEST LEVEL OF KNOWLEDGE

Level of knowledge	No. of Mothers	%
Inadequate knowledge	47	78.33%
Moderate knowledge	13	21.67%
Adequate knowledge	0	0.0%
Total	60	100%

Table -4.3 shows the Mothers level of knowledge on prevention of malnutrition..In general 78.33% of Mothers are having inadequate knowledge and 21.67% of them having moderate level of knowledge and none of them are having adequate knowledge.

Table -4.4 : Knowledge score interpretation:

Min=0 Max=1 Total questions=25 Maximum marks= 25

S no.	Grade	Percentage	Marks
1.	Inadequate knowledge	0 – 50%	0-12
2.	Moderate knowledge	50 – 75%	13-19
3.	Adequate knowledge	76 – 100 %	20-25

Figure 14: shows that about 47 mothers (78.33%) were having inadequate knowledge, 13 mothers (21.67%) were having moderate knowledge and none of them are having adequate level of knowledge.

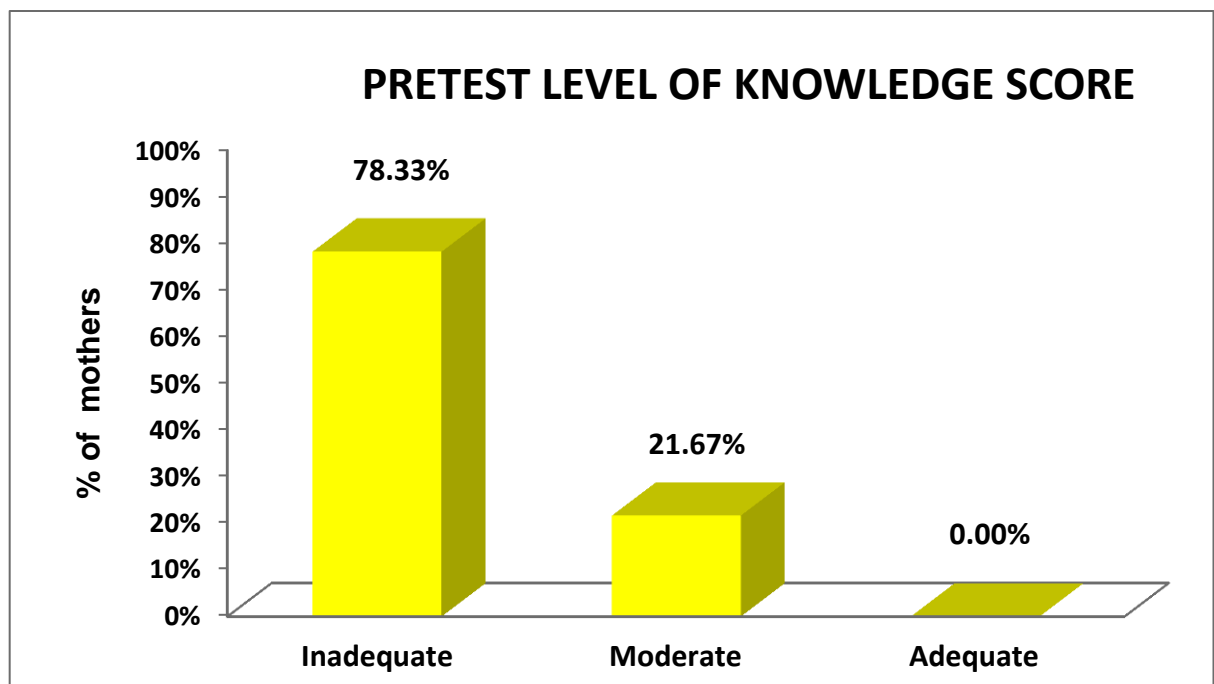


Figure 4.14: Pre Test Level of Knowledge Score

SECTION C: ASSESSMENT OF POST TEST KNOWLEDGE PREVENTION OF MALNUTRITION WITH PREVENTION OF MALNUTRITION.

Table-4. 5: post test percentage of knowledge score on prevention of malnutrition

	Domains	No. of questions	Min – Max score	Knowledge score		
				Mean	SD	% of mean score
1	General information and causes of malnutrition	7	0 - 7	3.47	1.28	49.57%
2	Symptoms and treatment of malnutrition	8	0 - 8	3.27	1.22	40.88%
3	Prevention and complication of malnutrition	10	0-10	4.17	1.54	41.70%
	TOTAL	25	0 - 25	10.90	2.58	43.60%

Table-4.5: shows each domain wise pre-test percentage of knowledge regarding prevention of malnutrition among mothers of toddlers in medical wards at Institute of Child Health and Hospital for Children, Egmore, Chennai-08. They are having maximum Knowledge about **General information and causes of malnutrition(49.57%)** and minimum knowledge score in Knowledge about **Prevention and complication of malnutrition(41.70%)**. Overall knowledge score is **43.60%**

Table- 4. 6: POST TEST LEVEL OF KNOWLEDGE

Level of knowledge	No. of Mothers	Percentage
Inadequate knowledge	0	0.00%
Moderate knowledge	12	20.00%
Adequate knowledge	48	80.0%
Total	60	100%

Table No-4.6 shows the Mothers level of knowledge on prevention of malnutrition..In general 80.00% of Mothers are having inadequate knowledge and 20.00% of them having moderate level of knowledge and none of them are having adequate knowledge.

Figure -4.15: shows post test level of knowledge score of about 20.0% of mothers were having moderate level of knowledge and 80.0% of mothers were having adequate level of knowledge.

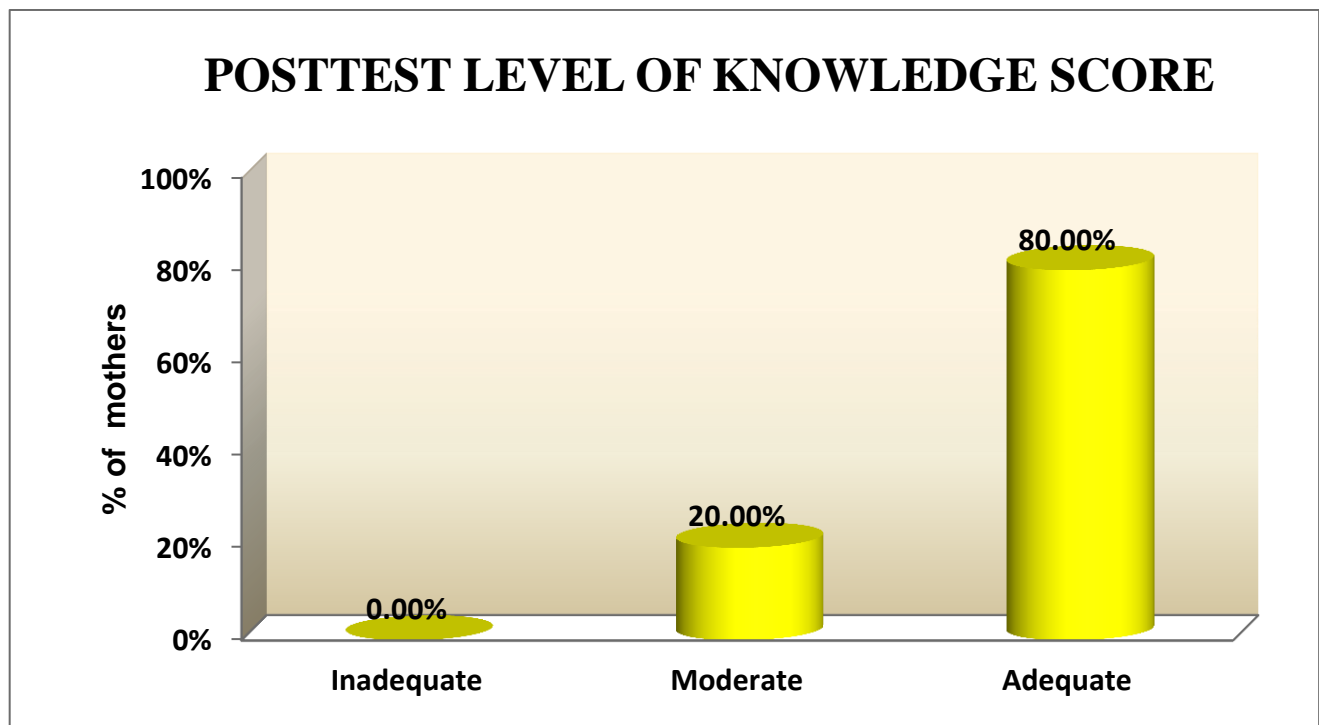


Figure 4.15: Post Test Level of Knowledge Score

SECTION D: COMPARISON OF PRETEST AND POSTTEST LEVEL OF KNOWLEDGE SCORE AMONG MOTHERS REGARDING PREVENTION OF MALNUTRITION.

Table-4.7: Comparison of pretest and posttest level of knowledge score

COMPARISON OF PRETEST AND POSTTEST LEVEL OF KNOWLEDGE SCORE

Level of knowledge	Pretest		Post test		Generalized Mc Nemar's test
	n	%	n	%	
Inadequate knowledge	47	78.33%	0	0.00%	$\chi^2=51.18P=0.001^{***}(S)$
Moderate knowledge	13	21.67%	12	20.00%	
Adequate knowledge	0	0.0%	48	80.0%	
Total	60	100.0%	60	100.0%	

*** Very Highly significant at $p<0.001$ level

Table no.7 shows the pretest and post-test level of knowledge among Mothers

Before teaching strategy, 78.33% of Mothers are having inadequate knowledge and 21.67% of them having moderate knowledge and none of them are having adequate knowledge

After teaching strategy, none of the Mothers are having inadequate knowledge 20.00% of them having moderate knowledge and 80.00% of them are having adequate knowledge.

Level of knowledge gain of between pretest and posttest was calculated using Generalised McNemar's chi square test.

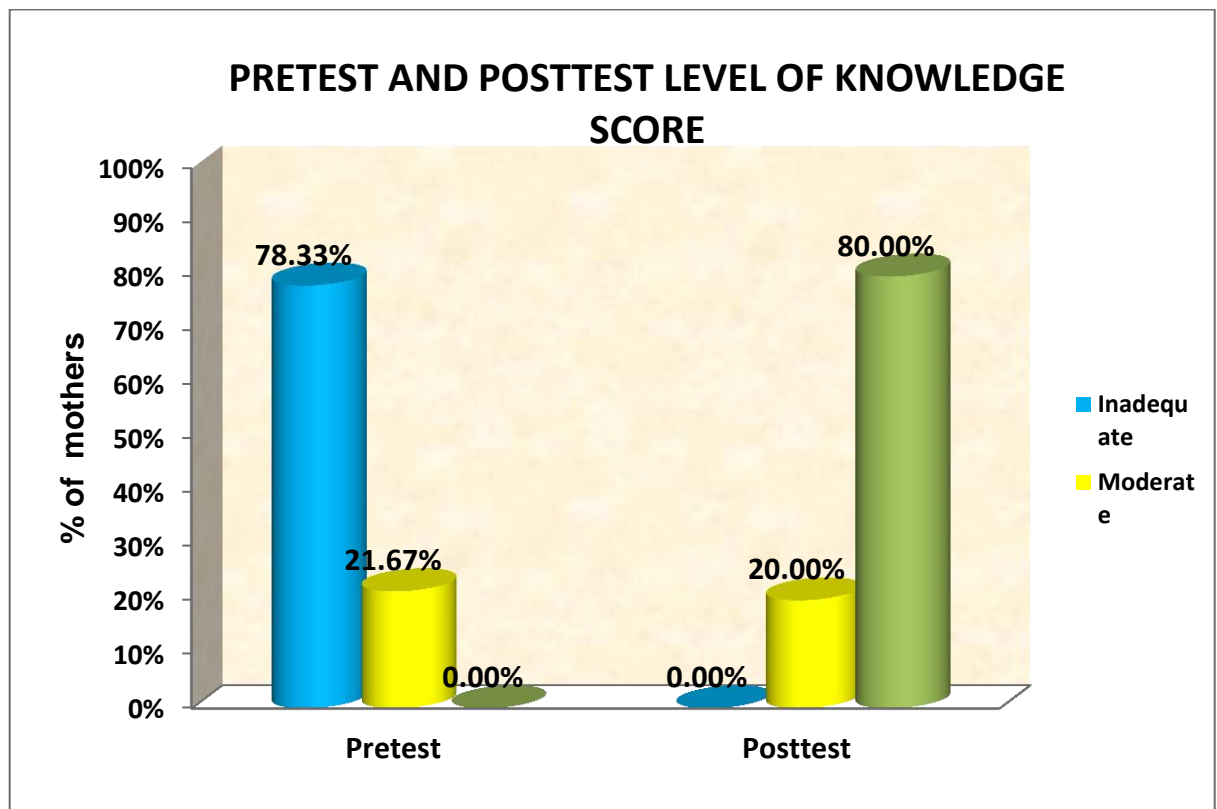


Figure 4.16: Percentage of Pre test and Post test level of knowledge

Table-4. 8: Comparison of Pretest and Post test Knowledge Score

	Knowledge on	Pretest		Post test		Mean Difference	Student's paired t-test
		Mean	SD	Mean	SD		
1	General information and causes of malnutrition	3.47	1.28	5.70	.96	2.23	t=11.53P=0.001 *** DF= 59 , Significant
2	Symptoms and treatment of malnutrition	3.27	1.22	6.42	.85	3.15	t=16.85 P=0.001 *** DF= 59 , Significant
3	Prevention and complication of malnutrition	4.17	1.54	8.13	.91	3.96	t=15.77 P=0.001 *** DF= 59 , Significant

*** very high significant at $P \leq 0.001$ DF= Degrees of freedom

Table no 4. 8 shows the comparison of pretest and posttest knowledge score regarding prevention of malnutrition.

Knowledge regarding

General information and causes of malnutrition: In pretest, Mothers are having 3.47 score whereas in posttest they are having 5.70 score. Difference is 2.23. This difference is large and it is statistically significant difference.

Symptoms and treatment of malnutrition: In pretest, Mothers are having 3.27score whereas in posttest they are having 6.42 score. Difference is 3.15. This difference is large and it is statistically significant difference.

Prevention and complication of malnutrition: In pretest, Mothers are having 4.17 score whereas in posttest they are having 8.13score. Difference is 3.96 .This difference is large and it is statistically significant difference.

Significance of difference between pretest and posttest score was calculated using student paired t-test.

Table 4.9: COMPARISON OF OVERALL KNOWLEDGE SCORE BEFORE AND AFTER TEACHING STRATEGY

	No. of <i>Mothers</i>	Pretest Mean±SD	Posttest Mean±SD	Mean differenceMean± SD	Student'S paired t-test
Overall Knowledge Score	60	10.90 ± 2.58	20.25 ± 1.71	9.35 ± 3.07	t=27.15P=0.001*** DF = 59, significant

*** Very high significant at $P \leq 0.001$

Table no-4.8 shows the comparison of overall knowledge score before and after the administration of teaching strategy.

On an average Mothers are improved their knowledge from 10.90 to 20.25 after the administration of teaching strategy. Or we can say , in pretest they are able to answer only 11 questions before administration of teaching strategy, after administration of teaching strategy they are able to answer upto 20 questions. Due to teaching strategy they are able to answer 9 more questions correctly. This difference is statistically significant. Statistical significance was calculated by using student's paired 't' test.

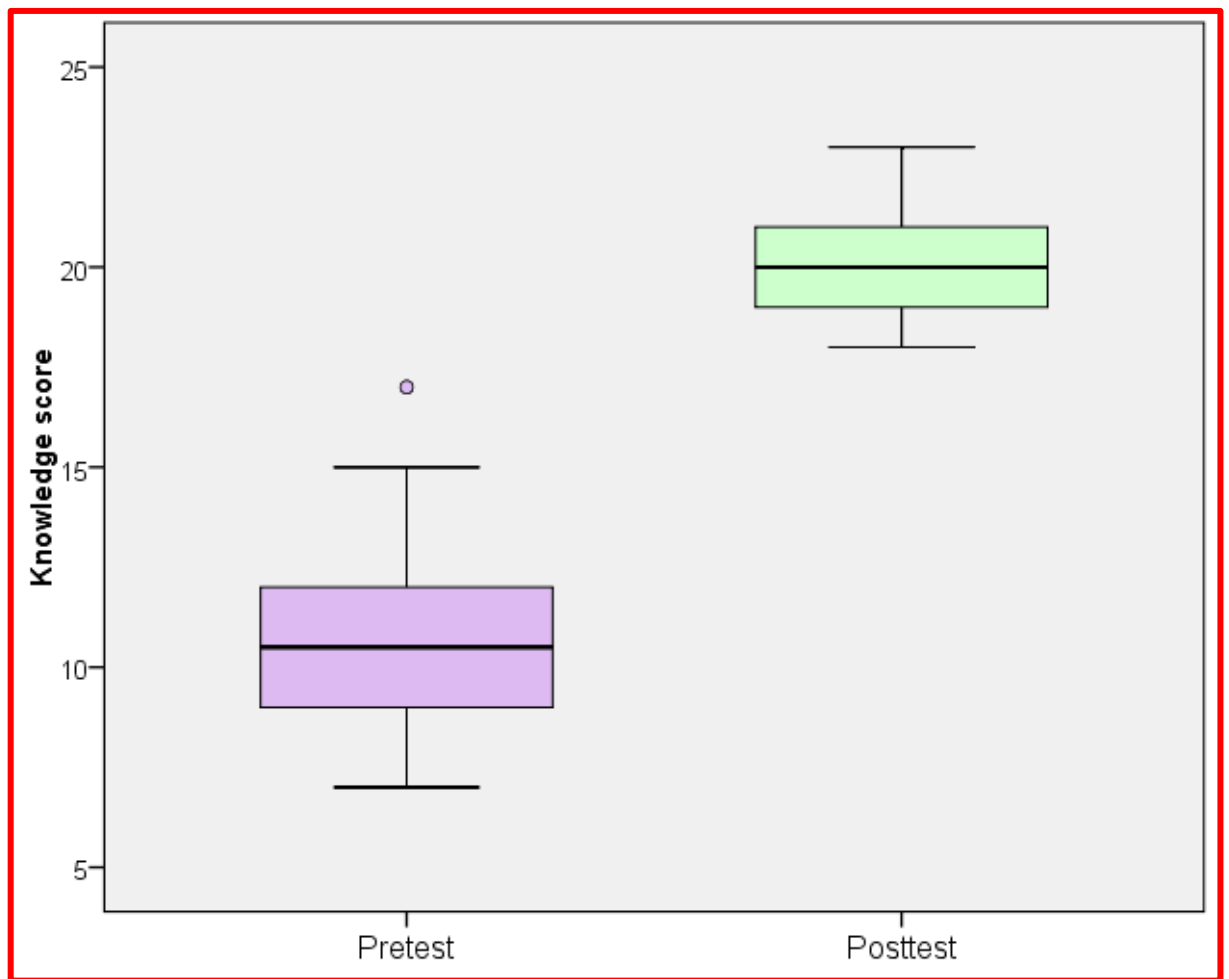


Fig 4.17: Box Plot Compares the Mothers pre-test and post-test knowledge sco

Table-4.10 : EACH DOMAINWISE PRETEST AND POSTTEST PERCENTAGE OF KNOWLEDGE

	Domains	Pretest knowledge	Post test knowledge	% of knowledge gain
1	General information and causes of malnutrition	49.57%	81.43%	31.86%
2	Symptoms and treatment of malnutrition	40.88%	80.25%	39.37%
3	Prevention and complication of malnutrition	41.70%	81.30%	39.60%
	OVERALL	43.60%	81.00%	37.40%

Table no -4.10 : shows each domain wise knowledge gain score among the Mothers. On an average, In pre test they are having 43.60% of knowledge score and in post test they are having 81.00% of knowledge score.

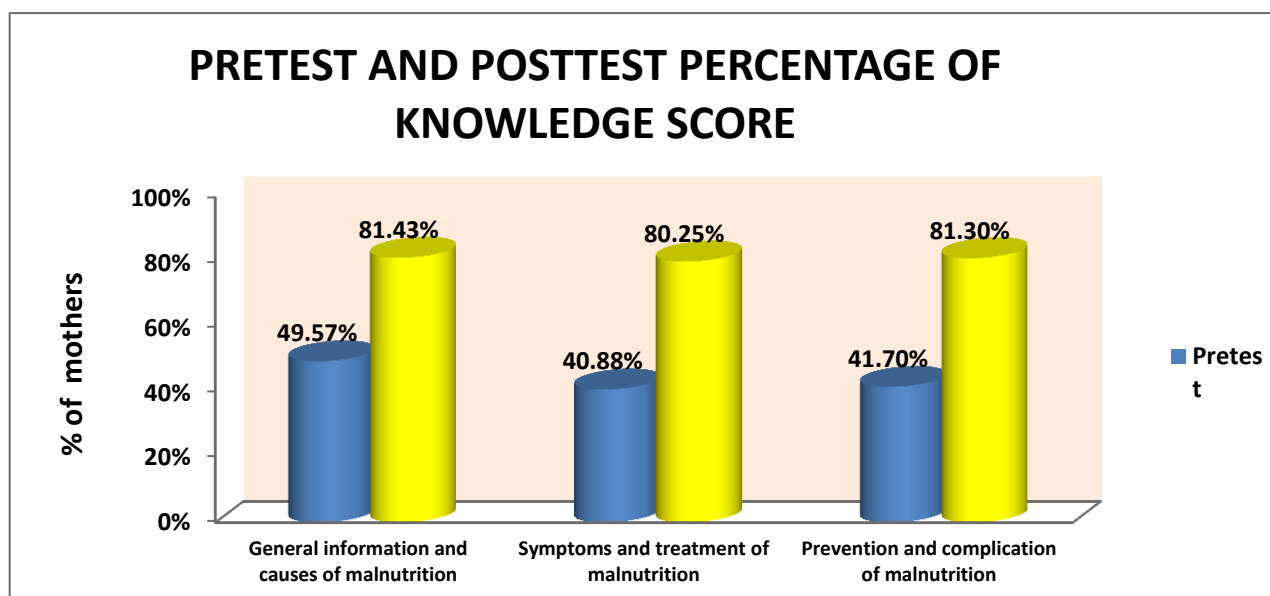


Figure- 4.18: Pretest and Post test percentage of knowledge score

Table-4.11: EFFECTIVENESS TEACHING STRATEGY AND GENERALIZATION OF KNOWLEDGE GAIN SCORE

	Max score	Mean score	Mean Difference of knowledge gain score with 95% Confidence interval	Percentage Difference of knowledge gain score with 95% Confidence interval
Pretest	25	10.90	9.40(8.70 – 10.09)	37.60%(34.80% – 40.36%)
Posttest	25	20.25		

Table no-4.11 shows the effectiveness of teaching strategy on knowledge regarding prevention of malnutrition among mothers of toddlers in medical wards at Institute of Child Health and Hospital for Children, Egmore, Chennai-08.

On an average, in posttest after having teaching strategy, Mothers are gained 37.60% more knowledge score than pretest score. This gain shows the effectiveness of the study.

Differences and generalization of knowledge gain score between pretest and posttest score was calculated using mean difference with 95% CI and proportion with 95% CI.

SECTION E: ASSOCIATION BETWEEN MOTHERS POSTTEST LEVEL OF KNOWLEDGE AND THEIR DEMOGRAPHIC VARIABLES

Table -4.12: Shows association between mothers posttest level of knowledge and their demographic variables

Demographic variables		Posttest level of knowledge score						N	Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Age of the Child	1-2 years	0	0.00%	10	28.57%	25	71.43%	35	$\chi^2=1.28$ P=0.25(NS)
	2-3 years	0	0.00%	4	16.00%	21	84.00%	25	
Sex of the Child	Male	0	0.00%	10	30.30%	23	69.70%	33	$\chi^2=1.99$ P=0.16(NS)
	Female	0	0.00%	4	14.81%	23	85.19%	27	
Educational Qualification of the mother	Professional	0	0.00%	0	0.00%	2	100.00%	2	$\chi^2=13.16$ P=0.05*(S)
	Graduate	0	0.00%	0	0.00%	10	100.00%	10	
	Post high school	0	0.00%	1	33.33%	2	66.67%	3	
	High school	0	0.00%	1	7.69%	12	92.31%	13	
	Middle school	0	0.00%	3	21.42%	11	78.58%	14	
	Primary school	0	0.00%	6	46.15%	7	63.85%	13	
	Illiterate	0	0.00%	3	60.00%	2	40.00%	5	
Occupational status of the mother	Professionals	0	0.00%	1	100.00%	0	0.00%	1	$\chi^2=6.08$ P=0.44(NS)
	Semi-professionals	0	0.00%	0	0.00%	1	100.00%	1	
	Clerk ,ship-owner	0	0.00%	0	0.00%	1	100.00%	1	
	Skilled worker	0	0.00%	1	50.00%	1	50.00%	2	
	Semiskilled worker	0	0.00%	0	0.00%	4	100.00%	4	
	Unskilled worker	0	0.00%	1	33.33%	2	66.67%	3	
	Unemployment	0	0.00%	11	22.92%	37	77.08%	48	
Educational Qualification of the father	Professional	0	0.00%	1	20.00%	4	80.00%	5	$\chi^2=8.10$ P=0.23(NS)
	Graduate	0	0.00%	0	0.00%	10	100.00%	10	
	Post high school	0	0.00%	2	50.00%	2	50.00%	4	
	High school	0	0.00%	4	40.00%	6	60.00%	10	
	Middle school	0	0.00%	5	29.41%	12	70.59%	17	
	Primary school	0	0.00%	2	22.22%	7	77.78%	9	
	Illiterate	0	0.00%	0	0.00%	5	100.00%	5	
Occupational status of the father	Professionals	0	0.00%	1	50.00%	1	50.00%	2	$\chi^2=6.00$ P=0.31(NS)
	Semi-professionals	0	0.00%	1	11.11%	8	88.89%	9	
	Clerk ,ship-owner	0	0.00%	1	16.67%	5	83.33%	6	
	Skilled worker	0	0.00%	5	31.25%	11	68.75%	16	
	Semiskilled worker	0	0.00%	2	66.67%	1	33.33%	3	
	Unskilled worker	0	0.00%	4	16.67%	20	83.33%	24	
	Unemployment	0	0.00%	0	0.00%	0	0.00%	0	

Demographic variables		Posttest level of knowledge score						N	Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Monthly Income	Below Rs. 2,091	0	0.00%	0	0.00%	3	100.00%	3	$\chi^2=4.47$ P=0.48(NS)
	Rs 2,092 – 6,213	0	0.00%	1	9.09%	10	90.91%	11	
	Rs 6,214 – 10,356	0	0.00%	8	32.00%	17	68.00%	25	
	Rs 10,357 – 15,535	0	0.00%	3	25.00%	9	75.00%	12	
	Rs 15,536 – 20,714	0	0.00%	2	33.33%	4	66.67%	6	
	Rs 20,715 – 41,429	0	0.00%	0	0.00%	3	100.00%	3	
	>Rs 41,429	0	0.00%	0	0.00%	0	0.00%	0	
Type of family	Nuclear family	0	0.00%	6	14.28%	36	85.72%	42	$\chi^2=6.40$ P=0.01**(S)
	Joint family	0	0.00%	8	44.44%	10	55.46%	18	
	Broken family	0	0.00%	0	0.00%	0	0.00%	0	
Number of children in the family	One	0	0.00%	1	6.25%	15	93.75%	16	$\chi^2=6.48$ P=0.05*(S)
	Two	0	0.00%	10	25.64%	29	74.36%	39	
	Three	0	0.00%	3	60.00%	2	40.00%	5	
Maternal illness during pregnancy	Yes	0	0.00%	5	55.55%	4	44.45%	9	$\chi^2=6.14$ P=0.01*(S)
	No	0	0.00%	9	17.64%	42	82.36%	51	
Initiation of weaning	At 6 month	0	0.00%	2	18.18%	9	81.82%	11	$\chi^2=0.38$ P=0.82(NS)
	7-9 month	0	0.00%	5	21.74%	18	78.26%	23	
	13-24 month	0	0.00%	7	26.92%	19	73.08%	26	
Hospitalization during last 6 month	Yes	0	0.00%	3	30.00%	7	70.00%	10	$\chi^2=0.29$ P=0.58(NS)
	No	0	0.00%	11	22.00%	39	78.00%	50	
Exclusive breast feeding till	< 3 months	0	0.00%	3	25.00%	9	75.00%	12	$\chi^2=0.02$ P=0.88(NS)
	4- 6 months	0	0.00%	11	22.92%	37	77.08%	48	

NS =Not significant S= Significant P>0.05 not significant *p< 0.05

significant **P≤ 0.01

Highly significant

Table no -4.12 shows the association between post test level of knowledge and Mothers demographic variables.

Educational status of the mother, Nuclear family mothers, one children mothers and no illness during pregnancy mothers are gained more knowledge score than others.

Statistical significance was calculated using pearson chi square test.

Table- 4. 13 : ASSOCIATION BETWEEN MOTHERS KNOWLEDGE GAIN SCORE AND THEIR DEMOGRAPHIC VARIABLES

Demographic variables		Knowledge gain score						N	Oneway ANOVA F- test/t-test
		Pretest		Posttest		Gain score= post-pre			
		Mean	SD	Mean	SD	Mean	SD		
Age of the Child	1-2 years	10.57	2.44	20.06	1.76	9.49	2.88	35	t=0.36 P=0.68 (NS)
	2-3 years	11.36	2.74	20.52	1.64	9.16	3.37	25	
Sex of the Child	Male	10.85	2.43	20.03	1.86	9.18	3.34	33	t=0.46 P=0.64 (NS)
	Female	10.96	2.79	20.52	1.50	9.56	2.76	27	
Educational Qualification of the mother	Professional	11.00	1.41	21.70	3.54	10.70	2.12	2	F=2.29 P=0.05* (S)
	Graduate	11.40	3.13	22.20	1.14	10.80	2.95	10	
	Post high school	14.00	2.65	23.33	2.08	9.33	4.73	3	
	High school	10.23	2.09	20.08	1.66	9.85	2.30	13	
	Middle school	11.14	3.03	19.93	2.27	8.79	3.83	14	
	Primary school	10.54	2.18	17.94	1.04	7.40	2.36	13	
	Illiterate	10.00	1.87	16.00	2.07	6.00	3.13	5	
Occupational status of the mother	Professionals	17.00	0.00	17.00	0.00	.00	0.00	1	F=1.84 P=0.10 (NS)
	Semiprofessionals	11.00	00.0	22.00	00.0	11.00	00.0	1	
	Clerk ,ship-owner	10.00	00.0	21.00	00.0	11.00	00.0	1	
	Skilled worker	11.00	1.41	19.50	3.54	8.50	2.12	2	
	Semiskilled worker	11.25	2.63	20.75	.50	9.50	2.65	4	
	Unskilled worker	10.67	3.79	19.67	1.53	9.00	4.00	3	
	Unemployment	10.77	2.53	20.29	1.71	9.52	2.93	48	
Educational Qualification of the father	Professional	12.60	2.51	20.00	1.87	7.40	2.19	5	F=1.06 P=0.39 (NS)
	Graduate	10.80	2.78	21.20	.63	10.40	2.95	10	
	Post high school	11.75	3.86	19.25	2.63	7.50	5.07	4	
	High school	9.70	2.45	19.70	1.95	10.00	3.09	10	
	Middle school	11.18	2.40	20.24	2.02	9.06	2.99	17	
	Primary school	11.11	2.09	20.22	1.39	9.11	2.37	9	
	Illiterate	9.80	2.77	20.60	.89	10.80	3.49	5	
Occupational status of the father	Professionals	12.00	4.24	19.00	2.83	7.00	7.07	2	F=0.27 P=0.92 (NS)
	Semi-professionals	11.22	3.60	20.78	1.48	9.56	4.56	9	
	Clerk ,ship-owner	11.33	3.01	21.00	2.10	9.67	3.44	6	
	Skilled worker	10.50	2.53	19.94	1.91	9.44	2.83	16	
	Semiskilled worker	10.00	2.65	18.67	1.15	8.67	1.53	3	
	Unskilled worker	10.96	2.14	20.37	1.47	9.42	2.50	24	
	Unemployment	0.00	0.00	0.00	0.00	0.00	0.00	0	

Demographic variables		Knowledge gain score						N	Oneway ANOVA F-test/t-test
						Gain score= post-pre			
		Pretest		Posttest					
		Mean	SD	Mean	SD	Mean	SD		
Monthly Income	Below Rs. 2,091	13.00	3.61	21.33	.58	8.33	3.79	3	F=0.63 P=0.67 (NS)
	Rs 2,092 – 6,213	9.91	2.26	20.45	1.29	10.55	3.21	11	
	Rs 6,214 – 10,356	11.00	2.71	19.96	1.99	8.96	2.81	25	
	Rs 10,357 – 15,535	10.92	2.71	20.25	1.66	9.33	3.63	12	
	Rs 15,536 – 20,714	11.50	2.07	20.17	2.14	8.67	3.27	6	
	Rs 20,715 – 41,429	10.33	2.08	21.00	.00	10.67	2.08	3	
	>Rs 41,429	0.00	0.00	0.00	0.00	0.00	0.00	0	
Type of family	Nuclear family	10.81	2.18	21.39	1.80	10.58	2.56	42	t=2.01 P=0.05* (S)
	Joint family	11.11	3.39	19.19	1.54	8.08	4.13	18	
	Broken family	0.00	0.00	0.00	0.00	0.00	0.00	0	
Number of children in the family	One	10.94	2.77	22.43	1.78	11.49	3.30	16	F=3.33P=0.04* (S)
	Two	11.00	2.61	20.12	1.69	9.12	3.00	39	
	Three	10.00	1.87	18.00	.55	8.00	2.07	5	
Maternal illness during pregnancy	Yes	12.22	3.27	19.78	2.44	7.56	3.97	9	t=2.02 P=0.05* (S)
	No	10.67	2.40	20.14	1.57	9.47	2.82	51	
Initiation of weaning	At 6 month	12.00	2.41	20.91	1.76	8.91	3.51	11	t=1.21 P=0.30 (NS)
	7-9 month	10.00	2.20	20.13	1.71	10.13	2.65	23	
	13-24 month	11.23	2.78	20.08	1.70	8.85	3.21	26	
Hospitalization during last 6 month	Yes	11.20	3.12	20.20	1.87	9.00	3.46	10	t=0.39 P=0.69 (NS)
	No	10.84	2.49	20.26	1.70	9.42	3.02	50	
Exclusive breast feeding till	< 3 months	11.33	3.14	20.58	1.68	9.25	3.52	12	t=0.10 P=0.90 (NS)
	4- 6 months	10.79	2.44	20.17	1.73	9.38	2.99	48	

NS =Not significant S= Significant P>0.05 not significant *p≤ 0.05 significant **P≤ 0.01 Highly significant

Table no-4.13: Shows the association between knowledge gain score and Mothers demographic variables. Educational status of the mother, Nuclear family, Number of children in the family maternal illness during pregnancy mothers are gained more knowledge score than others.

Statistical significance was calculated using one way analysis of variance F-test and student independent t-test.

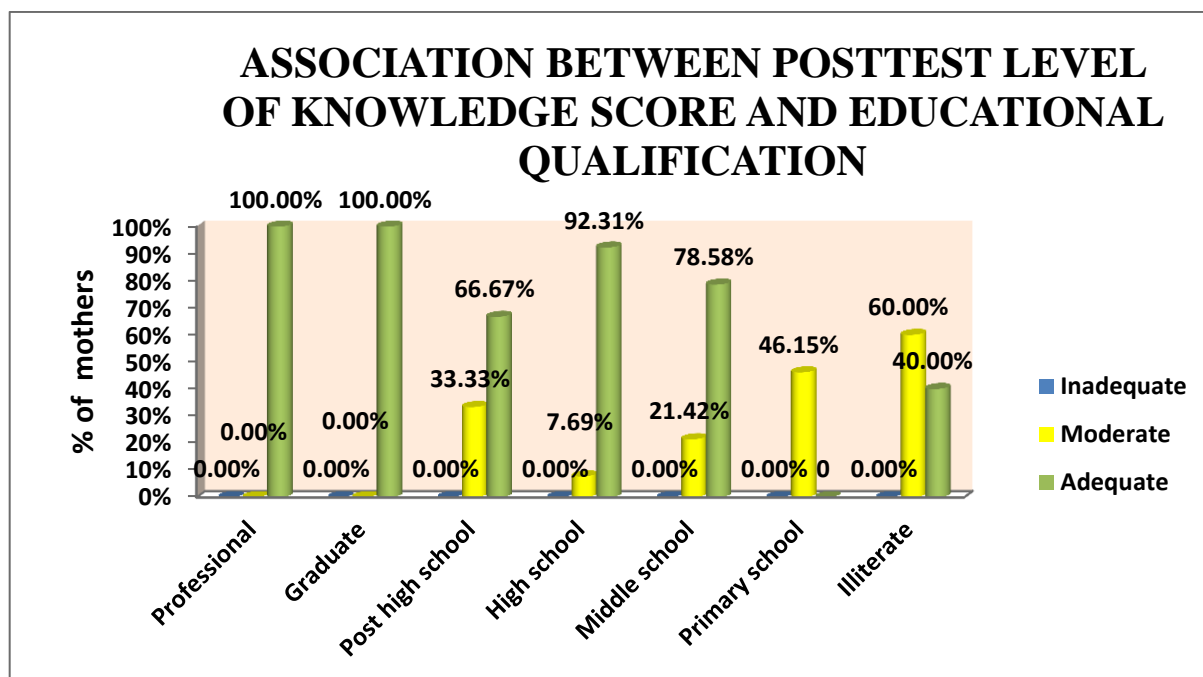


Figure-4.19: Shows association between the posttest level of knowledge score and educational qualification.

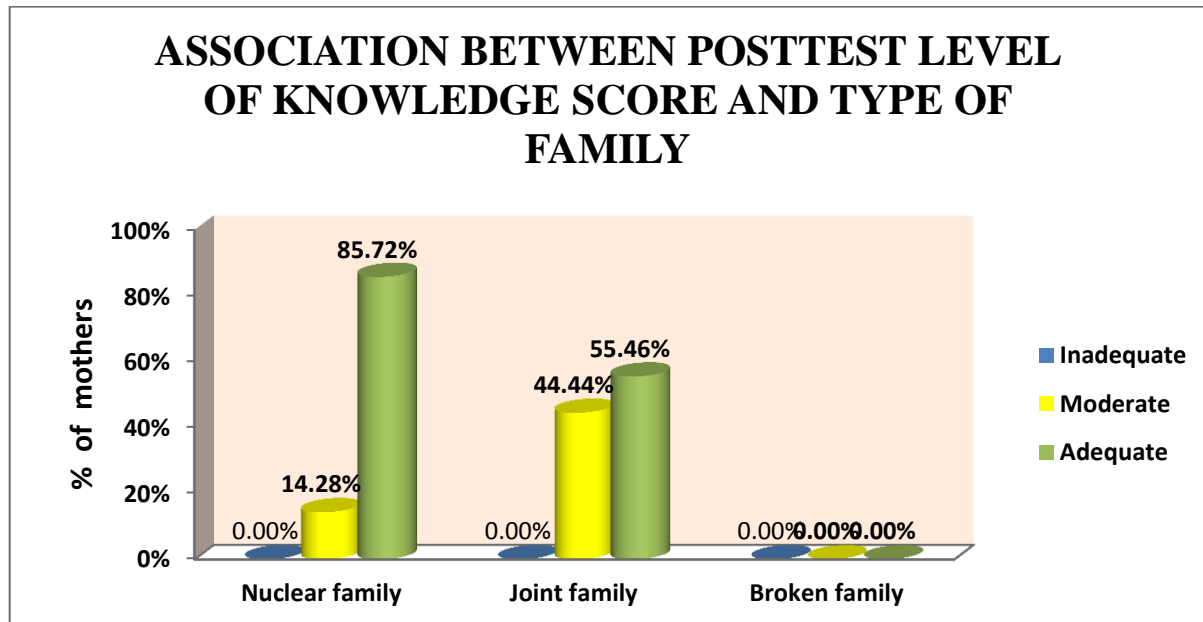


Figure-4.20: Shows association between the posttest level of knowledge score and type of family.

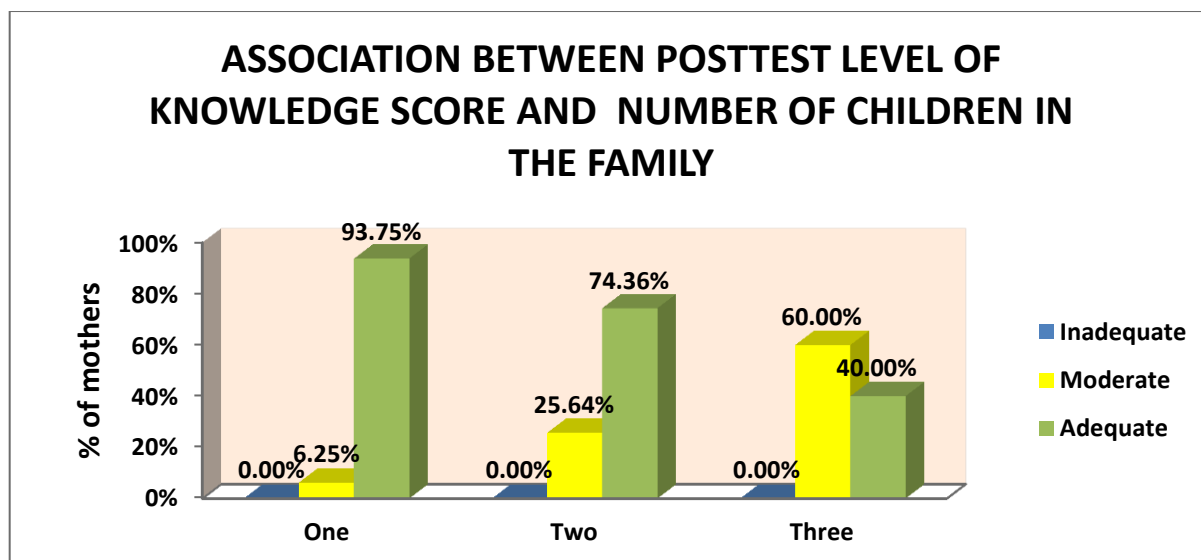


Figure -4.21: Shows association between the posttest level of knowledge score and number of children in the family

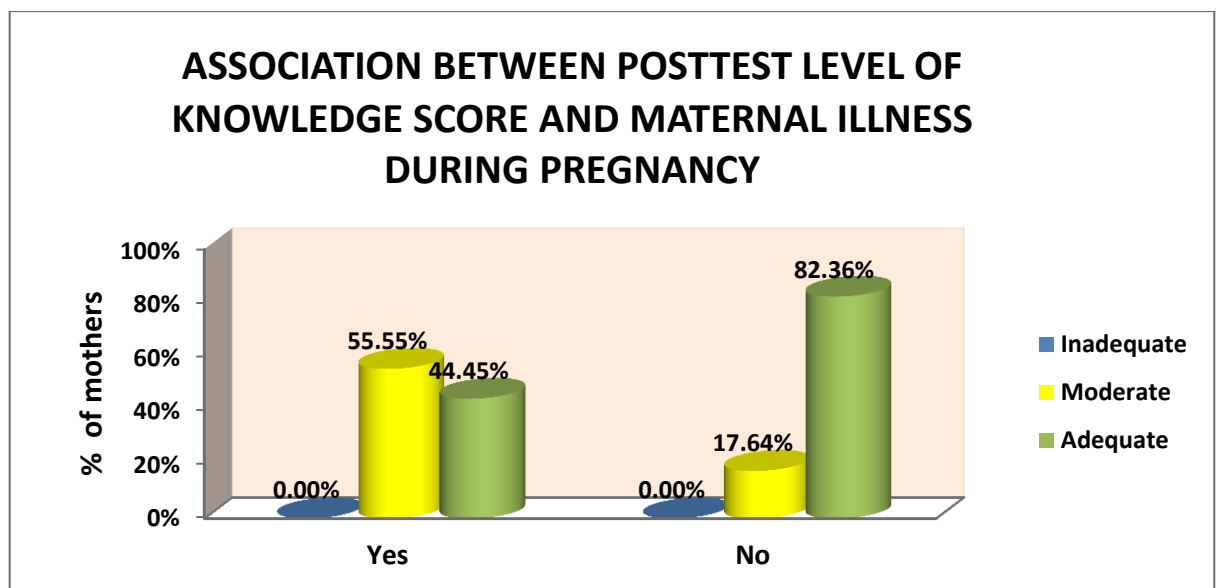


Figure -4.22: Shows association between the posttest level of knowledge score and maternal illness during pregnancy.

CHAPTER-V

DISCUSSION



CHAPTER-V

DISCUSSION

This chapter deals with the discussion of the results of the data analysed based on the objectives of the study hypothesis and the purpose of the study was to assess the effectiveness of teaching strategy on knowledge regarding prevention of malnutrition among mothers of toddlers at Institute of Child Health and Hospital for Children, Egmore, Chennai-08.

In this study, the investigator planned to implement teaching strategy regarding malnutrition to assess the knowledge among mothers of toddlers. The study population is mothers of toddlers, 60 mothers were selected by convenient sampling technique. Pretest was conducted with semi structured questionnaire, after that teaching strategy was given regarding prevention of malnutrition. Post test was conducted after 7 days of intervention of teaching strategy. It has been proved with comparison of pre test and post test values, the investigator conducted an pre experimental study to evaluate the effectiveness of teaching strategy on knowledge regarding prevention of malnutrition among mothers of toddlers in Institute of Child health and Hospital for Children, Egmore, Chennai-08.

The result of the study was discussed based on the objectives and the following supportive studies.

FINDINGS BASED ON SOCIO DEMOGRAPHIC VARIABLES;

- 58.3% of the children in a age group of 2-3 years.
- 85.19% of the children were females.
- 21.6% of the mothers were studied up to primary school and high school.

- 80% of the mothers were home maker
- 28.83% of the fathers were studied up to middle school.
- 40% of the fathers were unskilled worker.
- 41.67% of the family monthly income was Rs.6, 214 – Rs 10,356.
- 70% of the families were nuclear families.
- 65% of the mothers have two children in the family.
- 85% of the mothers were not affected by maternal illness during pregnancy.
- 43.33% of the mothers were started to weaning at the month of 13-24 months.
- 83.33% of the children's were not hospitalized during last six month.
- 80% of the children's were exclusively breast fed upto 4-6 months.

5.1. FINDINGS BASED ON OBJECTIVES

OBJECTIVE-1: To assess the pre test knowledge on prevention of malnutrition among mothers.

During pre-test score of knowledge regarding prevention of malnutrition among mothers. They were having maximum knowledge in symptom and treatment of malnutrition (40.88%) and prevention and complication of malnutrition (41.70%). Overall knowledge score is 43.60%

Pre-test level of knowledge score regarding prevention of malnutrition among mothers before administration of structured teaching programme are 78.33% of mothers are having inadequate level of knowledge score, 21.67% of them having moderate level of knowledge score and none of them are having adequate level of knowledge score.

The study shows that there was significant increase in post score. The gain in knowledge score is significant. As calculated value is higher than table value, so research hypothesis was accepted. The above study finding were supported by the study conducted at vinayaka mission hospital by **Kavitha (2015)** found in their study that 50% of the mothers had average knowledge, 30% had poor knowledge, 20% had good knowledge regarding malnutrition. **Divya shetti gar et al (2014)** had conducted a study on knowledge regarding malnutrition, the study concluded that significant number of mother were unaware about the prevention and management of malnutrition. **Ansuya.et al.,(2018)** was conducted a study on knowledge regarding malnutrition. The study concluded that 65.4% of mothers were having average knowledge about malnutrition, 31.58% of mothers had poor knowledge and 1% is having adequate knowledge. Mothers had poor knowledge in prevention of malnutrition. Mothers play a vital role in improving the child's nutritional status. So educate the mother about malnutrition will improve the child nutritional status.

OBJECTIVE -2: To assess the post test knowledge on prevention of malnutrition among mothers

During the post-test score of knowledge regarding prevention of malnutrition. They were having maximum knowledge in **General Information (81.43%)** and minimum knowledge score in **symptom and treatment (80.25%)**. Overall knowledge score is **81%** among mothers.

Post test level of knowledge score regarding prevention of malnutrition among mothers after administration of structured teaching programme. In general none of the mothers are having

inadequate level of knowledge score, 20% of them having moderate level of knowledge score and 80% of them are having adequate level of knowledge score.

The above study finding is supported by study conducted by **M.Edith et al. (2016)** conducted a study on knowledge, attitude and practice survey on dietary practices in prevention of malnutrition among mothers of underfive children in Tirupur. Majority 56% of mothers had moderately adequate knowledge and moderately adequate practice 58% regarding dietary practice in prevention of malnutrition. **Vinod V.Bagilkar et al., (2015)** was conducted a study on malnutrition. The study finding reveals that 58% of mother having moderate knowledge, 86% of mothers having positive attitude and there was a significant increase in the knowledge of parents after giving health education intervention. **Sd.Asmatunnisa et al.,(2014)** was conducted a study on knowledge regarding protein energy malnutrition in Andrapradesh, the study concluded that majority of the mothers had inadequate knowledge before pretest and giving information booklet improved the knowledge among mothers. So imparting the knowledge regarding prevention of malnutrition is guiding the mothers to encourage the nutritional status of the child

OBJECTIVE 3: To compare the pretest and posttest knowledge of mothers regarding prevention of malnutrition among mothers.

Knowledge regarding

General information and causes of malnutrition: In pre test , Mothers are having 3.47 score whereas in post test they are having 5.70 score. Difference is 2.23 . This difference is large and it is statistically significance at $p < 0.001$

Symptoms and treatment of malnutrition: In pre test , Mothers are having 3.27score whereas in posttest they are having 6.42 score. Difference is 3.15 . This difference is large and it is statistically significance at $p<0.001$.

Prevention and complication of malnutrition: In pretest , Mothers are having 4.17 score whereas in posttest they are having 8.13score. Difference is 3.96 . This difference is large and it is statistically significance at $p<0.001$.

Total: In pre test mothers are having 10.90 score and in post test they are having 20.25 score, so the difference is 9.40.This difference is large and statistically significant difference.

Knowledge score, on an average, mothers are improved their knowledge from 10.90 to 20.25 after the administration of structured teaching programme. Or we can say, in pre test they are able to answer only 12 questions before administration of STP, after administration of STP they are able to answer upto 21 questions. Due to STP they are able to answer 9 more questions correctly. This difference is statistically significant. Statistical significance was calculated by using student's paired 't'test.

Pretest percentage of knowledge score is 43%. among mothers is 78.33% of mothers are having inadequate level of knowledge score, 21.67% of them having moderate level of knowledge score and none of them are having adequate level of knowledge score.

Post test level of knowledge score is 81% among nursing mothers. Mainly none of the mothers are having inadequate level of knowledge score, 20% of them having moderate level of knowledge score and 80% of them are having adequate level of knowledge score.

Effectiveness of structured teaching programme in **general information** mothers gained 81.43%, **symptom and treatment** 80.25%, **prevention and complication** 81.30% after intervention. This shows effectiveness of structured teaching programme intervention.

This study findings was supported by the following studies

Alka Mishra et al., (2017) was conducted a study conducted on knowledge on malnutrition in Newdelhi they found in their study that mothers having poor knowledge about malnutrition and its prevention, the post test score was significantly increased after structured teaching programme. Hence the structured teaching programme was effective in enhancing the knowledge of mother. **Richa Bhardwaj, et al.,(2017)** was conducted a study on knowledge of mothers regarding malnutrition in pratap nagar, jaipur the study reveals that there was a significant difference between pre test and post test knowledge score of mothers ($p < 0.05$),planned teaching programme is very effective and helpful in imparting knowledge. **Sijo Koshy, et al., (2015)** was conducted a study on knowledge regarding malnutrition in vadodara district. The study concluded that structured teaching programme has motivated the mothers about prevention of malnutrition and remarkably increase in the knowledge score of mothers.

The analysis revealed that there was significant difference in the level of knowledge who received structured teaching programme. Hence hypothesis **H₁** stated that there is significant difference between the mean pre test and post test knowledge regarding prevention of malnutrition who received the structure teaching programme.

OBJECTIVE-4: To find the association between the post-test knowledge scores of mothers with selected demographic variables.

The association between knowledge gain score and their demographic variables.

Maternal illness during pregnancy, type of family, number of children in the family, educational status of the mothers are gained more knowledge score than others. Statistical significance was calculated using one way analysis of variance F-test and student independent t-test.

H₂ There is a significant association between the post test knowledge score of mothers with their selected demographic variables.

A study findings were showed that there is significant association between mothers education and prevention of malnutrition. The above study findings were supported by the study conducted by **Neima Endris et al., (2017)** was conducted a study on prevalence of malnutrition among mothers in Ethiopia, The study reveals that mothers Educational status, wealth status, short birth interval and living in some region of the country are associated with the nutritional status of the children. **Lija R nath et al., (2017)** was conducted a study on prevalence of malnutrition among underfive children in nellanadu panchayath in thiruvandrum the study concludes that their was a highly significant association between malnutrition and selected demographic variables such as gender of the child, family income, low birth weight and lack of exclusive feeding ($p < 0.05$). **Sasika Yadav et al., (2016)** was conducted a study on knowledge and practice regarding prevention of prevention of malnutrition. The study researcher concludes that there is a significant association between knowledge and educational status of mother. The enhancement of knowledge is greatly required on the

following areas like exclusive breast feed, continuous feeding of breast milk and good dietary practices. Hence the mothers need continuous education regarding prevention of malnutrition.

The analysis revealed that there was significant association between demographic variables such as mother educational status, type of family, number of children in the family, maternal illness during pregnancy, Educational status of the mother $\chi^2=13.16$ $P=0.05^*(S)$.

The analysis revealed that there was significant association between the knowledge regarding prevention of malnutrition among mothers with selected demographic variables. Hence H_2 was accepted.

The present study results highlight the effectiveness of teaching strategy on knowledge regarding prevention of malnutrition among mothers of toddlers. Healthy eating by children is important for health and development. Regular pattern of healthy eating and proper care of children and life style changes will make positive effects on child nutritional status, and also child's psychological, spiritual and social aspects for healthy life.

CHAPTER-VI
SUMMARY, IMPLICATION,
RECOMMENDATION,
LIMITATION AND
CONCLUSION



6.1 SUMMARY OF THE STUDY

Investigator undertook the study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of malnutrition among mothers of toddler in medical ward at Institute of Child Health and Hospital for Children, Egmore, Chennai-08.at Institute of Child Health and Hospital for children, Egmore, Chennai-08.

The conceptual framework of the study was based on the Modified Imogene King's Goal Attainment Theory (2011).a pre experimental one group pre test and post test design was used. The independent variable was structured teaching programme, dependent variable was knowledge of the mothers regarding prevention of malnutrition.

The study period was 4 weeks from 2.2.19 to 4.3.19.totally 60 mothers were selected as samples using convenient sampling technique. The data was collected using semi structured questionnaire. Structured teaching program and information booklet was given. The reliability of the tool was test retest method, the data analysis and interpretation were done by using descriptive and inferential statistics.

6.2 MAJOR FINDINGS OF THE STUDY

6.2.1 Based on the demographic variables

- Age group of 1-2 years 58% of the children.
- Sex of the child 55% of the children were male.
- Educational qualification of the Mother 21.6% of the mothers were studied up to primary school and high school.
- Occupational status of the mother 80% of the mothers are homemaker.

- Educational qualification of Father 28.83% of the children fathers had middle school education.
- Father occupation 40% of the fathers were unskilled worker.

Monthly income of the Family 41.67% was Rs.6,214 – Rs 10,356.

- Type of family 70% of the families were nuclear family.
- Number of children in the family 65% of the mothers have two children in the family.
- Maternal illness during pregnancy 85% of the mothers were not affected by maternal illness.
- Initiation of weaning 43.33% of the mothers were started to wean at the month of 13-24 months.
- Hospitalization during last six month 83.33% of the children's were not hospitalized from birth.
- Exclusive breastfeeding 80% of the children's were exclusively breast fed upto 4-6 months.

6.2.2 Based on knowledge of mothers before and after structured teaching programme:

- ❖ **In the pre test** They are having maximum knowledge in **General information and causes of malnutrition (49.57%)** and minimum knowledge score in **symptoms and treatment f malnutrition (40.88%)**. Overall knowledge score is 43.60%. Mainly 78.33% of mothers are having inadequate level of knowledge score, 21.67% of them having moderate level of knowledge score and none of them are having adequate level of knowledge score.
- ❖ **In post test** They are having maximum knowledge in **General Information (81.43%)** and minimum knowledge score in

symptoms and treatment of malnutrition (80.25%). Overall knowledge score is **81%**. Mainly none of the mothers are having inadequate level of knowledge score, 20% of them having moderate level of knowledge score and 80% of them are having adequate level of knowledge score.

6.2.3 Finding based on comparison of pre test and post test mean knowledge score

Knowledge regarding

General information and causes of malnutrition: In pretest , Mothers are having 3.47 score whereas in posttest they are having 5.70 score. Difference is 2.23 . This difference is large and it is statistically significant difference.

Symptoms and treatment of malnutrition: In pretest , Mothers are having 3.27score whereas in posttest they are having 6.42 score. Difference is 3.15 . This difference is large and it is statistically significant difference.

Prevention and complication of malnutrition: In pretest , Mothers are having 4.17 score whereas in posttest they are having 8.13score. Difference is 3.96 . This difference is large and it is statistically significant difference.

Total: In pre test mothers are having 10.90 score and in post test they are having 20.25 score, so the difference is 9.35. This difference is large and statistically significant difference.

Significance of difference between pre test and post test score was calculated by using student's paired 't'test.

6.2.4 Findings based on effectiveness of structured teaching programme

In post-test, the majority of the mothers of about (80.0%) were having adequate level of knowledge, (20.00%) were and none of the mothers having inadequate knowledge. The overall knowledge regarding malnutrition in post test 81% with standard deviation of 3.07. the improvement score of mean value was 9.35 and 't' test value was 27.15 which were statistically significant.

6.2.5 Findings based on association between post test knowledge and demographic variables.

Association between demographic variables and post test level of knowledge gain score. Educational qualification of the mothers (13.16), Type of family (6.40), Number of children in the family (6.48), Maternal illness during pregnancy (6.14) statistical significance was calculated using chi square test.

6.3. IMPLICATIONS OF THE STUDY

The findings of present study may be helpful for such future studies. In this context the findings of the study has valuable implication in different areas of nursing practice, nursing administration, nursing education and nursing research.

6.3.1. NURSING EDUCATION

- The nurse educator can use the structured teaching module to teach the mothers about prevention of malnutrition.
- The nurse educator can create awareness to the mothers about the home management and the treatment options which are available as unnoticed and with cost effective, easily available and accessible manner for malnourishment.

- The nurse educator can include the nutritional health tips and diet therapy aspects in the clinical teaching programme, which can be adopted by the mothers and nursing personnel.
- The mothers should be made aware of their responsibility in malnourished child and improving their nutritional status.

6.3.2. NURSING PRACTICE

- Regular screening of underfive children to detect malnutrition and control its complications
- Health education is an important tool for the health care agency, nurses play a major role in health promotion and maintenance in the family especially for children, hence the researchers generally integrate findings into practice.
- Nurses can adopt the health education module to educate the mothers about malnutrition.
- Nurses can impart the knowledge to the caregivers regarding do's and don'ts of nutritional practice which leads to occurrence of malnutrition and educate the mothers regarding prevention of malnutrition.

6.3.3. NURSING ADMINISTRATION

- Nurses as Administrators can influence the quality of nursing care in the community they can also coordinate and discuss about the effectiveness of teaching programme regarding malnutrition in improving the child nutritional status.
- Nurse administrators can encourage the staffs to conduct various programmes to the various nursing and health personnel related to the prevention of malnutrition
And the management of other morbid disorders resulting from malnourished status which can be managed by the parents.

- Nurse administrator can organize in service education program for the nurses to abreast their knowledge on malnutrition.

6.3.4. NURSING RESEARCH

- Nurses and nursing mothers should undertake more research activities in easily available and acceptable food products in improving the health rather than treating after they end up in severe morbid form.
- Nurses can assist researchers in the maintenance and improvement of new modalities in the management of the malnutrition toddler children.
- Develop network for new directions in research and collaboration with other Health care professionals for the effective management of the malnutrition in toddler.
- This study can be utilized by the emerging researchers for their references purpose.

6.4. LIMITATION OF THE STUDY

- This study is limited to mothers of toddlers admitted in medical wards at Institute of Child Health and Hospital for Children, Egmore.
- The study is limited up to 4 weeks of period.
- The study is limited to mothers of toddlers.

6.5. RECOMMENDATION

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

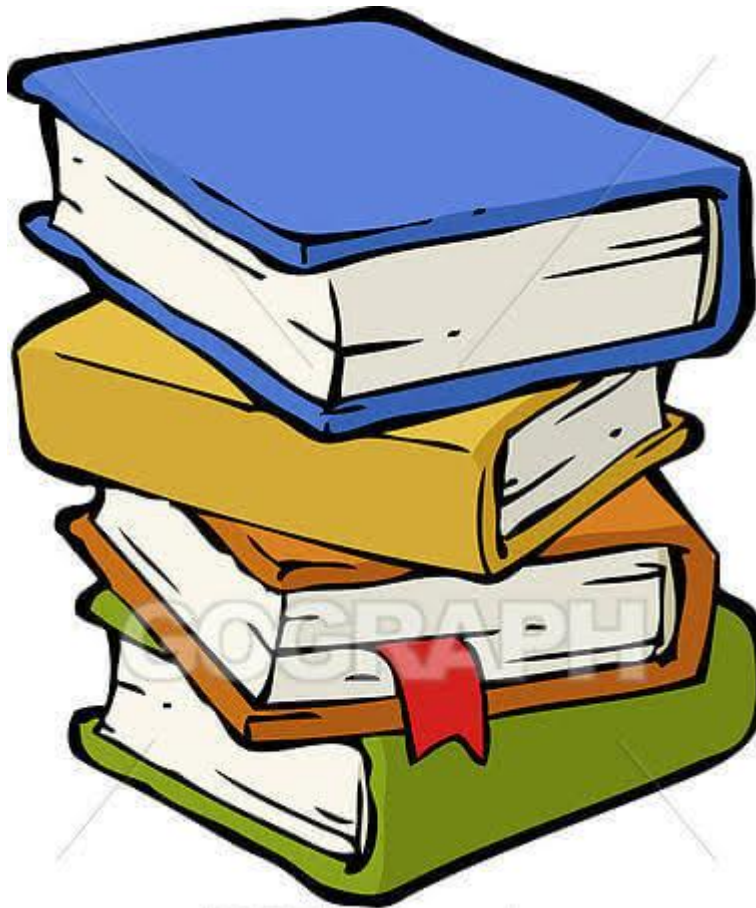
- A similar study can be done on large sample for the purpose of generalization.
- A similar study could be conducted in different settings to find out the effectiveness of teaching strategy.

- A similar study can be conducted in mixed methodology both quantitative and qualitative method.
- A similar study can be conducted in quasi experimental study with control group.
- A study could be replicated with a control group.
- A comparative study can be conducted among mothers in rural and mothers in urban regarding prevention of malnutrition.

6.6. CONCLUSION

Nurses have a pivotal and essential role in the nutritional care of children's and have a duty of care to screening the children and educate the mother regarding preventive measures to improve the nutritional status of the child, Educating regarding prevention of malnutrition have found to be a valuable measure in enhancing the nutritional status of the child.

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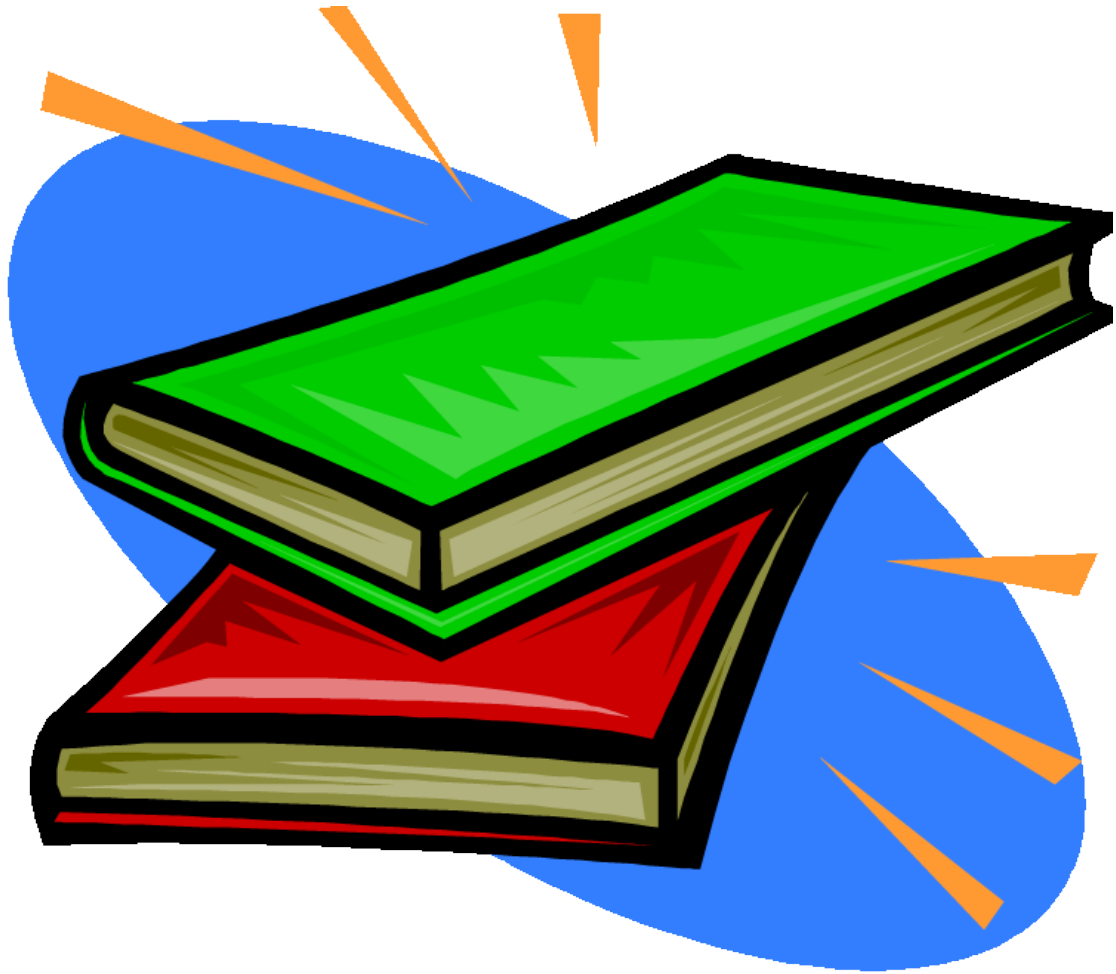
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APPENDICES



**INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003**

EC Reg.No.ECR/270/Inst./TN/2013
Telephone No.044 25305301
Fax: 011 25363970

CERTIFICATE OF APPROVAL

To
A Santhiya,
M.Sc. Nursing I Year,
College of Nursing,
Madras Medical College,
Chennai 600 003.

Dear A Santhiya,

The Institutional Ethics Committee has considered your request and approved your study titled **"A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI - 08" - NO.29072018.**

The following members of Ethics Committee were present in the meeting hold on **24.07.2018** conducted at Madras Medical College, Chennai 3

- | | |
|---|----------------------|
| 1. Prof.P.V.Jayashankar | : Chairperson |
| 2. Prof.R.Jayanthi,MD.,FRCP(Glasg) Dean,MMC,Ch-3 | : Deputy Chairperson |
| 3. Prof.Sudha Seshayyan,MD., Vice Principal,MMC,Ch-3 | : Member Secretary |
| 4. Prof.N.Gopalakrishnan,MD,Director,Inst.of Nephrology,MMC,Ch | : Member |
| 5. Prof.S.Mayilvahanan,MD,Director,Inst. of Int.Med,MMC, Ch-3 | : Member |
| 6. Prof.A.Pandiya Raj,Director, Inst. of Gen.Surgery,MMC | : Member |
| 7. Prof.Shanthy Gunasingh, Director, Inst.of Social Obstetrics,KGH | : Member |
| 8. Prof.Remma Chandramohan,Prof.of Paediatrics,ICH,Chennai | : Member |
| 9. Prof. Susila, Director, Inst. of Pharmacology,MMC,Ch-3 | : Member |
| 10.Prof.K.Ramadevi,MD., Director, Inst. of Bio-Chemistry,MMC,Ch-3 | : Member |
| 11.Prof.Bharathi Vidya Jayanthi,Director, Inst. of Pathology,MMC,Ch-3 | : Member |
| 12.Thiru S.Govindasamy, BA.,BL,High Court,Chennai | : Lawyer |
| 13.Tmt.Arnold Saulina, MA.,MSW., | : Social Scientist |
| 14.Thiru K.Ranjith, Ch- 91 | : Lay Person |

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.


Member Secretary - Ethics Committee

*To Co-ordinator
with Nutrition
dept.*
17/01/19

DIRECTOR AND SUPERINTENDENT
INSTITUTE OF CHILD HEALTH AND
GOVT. HOSPITAL FOR CHILDREN
EGMORE, CHENNAI-600 008.

REQUISITION LETTER

28.01.2019

From
A. Santhiya ,
M.Sc (N) II year Student,
College of Nursing,
Madras Medical College,
Chennai-600 003

To
Director,
Institute of Child Health and Hospital for children ,
Egmore,
Chennai-600 008

Through
Principal,
College of Nursing,
Madras Medical College,
Chennai-03,

Respected Sir/ Madam,

**Sub: College of Nursing - Madras Medical College, Chennai-3- M.Sc(N) II Year
Student- Dissertation - Requesting permission to conduct research study in
Medical Wards at Institute of Child Health and Hospital for Children -
Regarding**

I A.Santhiya, M.Sc Nursing II year student have to conduct the research study for the fulfillment of M.Sc (N) programme. My topic is "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLER IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN ,EGMORE, CHENNAI -08" The data collection period is from 02.02.2019 to 04.03.2019 from 8 am to 4 pm. I assure that I will not disturb the routine activities of the Medical wards .

With due respect, I request your good self to kindly permit me to conduct this study in Medical wards at Institute of Child Health and Hospital for Children .

Thanking you,


Signature of HOD

(Research)

*Forwarded
Adhikari's Reg
02/02/19*

PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003.

Yours faithfully,


(A.SANTHIYA)

REQUISITION LETTER

From

A. Santhiya,
M.Sc (N) II year Student,
College of Nursing,
Madras Medical College,
Chennai-600 003

#8.01.2019

To

Head of the Department,
Department of Medicine,
Institute of Child Health and Hospital for children ,
Egmore,
Chennai-600 008

Through

Principal,
College of Nursing,
Madras Medical College,
Chennai-03.

Respected Sir/ Madam,

Sub: College of Nursing - Madras Medical College, Chennai-3- M.Sc(N) II Year Student- Dissertation - Requesting permission to conduct research study in Medical Wards at Institute of Child Health and Hospital for Children - Regarding

I,A.Santhiya,M.Sc Nursing II year student have to conduct the research study for the fulfillment of M.Sc (N) programme. My topic is "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLER IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI -08" The data collection period is from 02.02.2019 to 04.03.2019 from 8 am to 4 pm. I assure that I will not disturb the routine activities of the Medical wards.

With due respect, I request your good self to kindly permit me to conduct this study in Medical wards at Institute of Child Health and Hospital for Children .

Thanking you,


Signature of HOD

(Research)

Forwarded
Adeline
06/02/19

PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003.

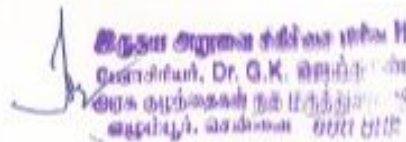
Yours faithfully,


(A.SANTHIYA)

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by A.SANTHIYA, M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled, "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with seal



Name: Dr. G.K. Jayakaran

Designation: Associate Professor of Paediatric

Place: Chennai - 08

Date: 10/01/19

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by A.SANTHIYA, M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled, "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with seal

DEPARTMENT OF NEPHROLOGY
INSTITUTE OF CHILD HEALTH AND
HOSPITAL FOR CHILDREN
MADRAS-600 008

Name: _____

Name: Dr. M. S. Bhat
Designation: Assistant Professor

Place:

Date:

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by A. Santhiya M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in his study titled, "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then he can proceed to do the research.

Signature with seal



Name: NEESA SATHYA SATHY

Designation: Professor

College: Apollo CON, Chennai

Place: Chennai

Date: 30.07.19

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by A. Santhiya M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in his study titled, "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then he can proceed to do the research.

Signature with seal


BILLROTH COLLEGE OF NURSING
NO.2, METTUKUPPAM ROAD,
MADURAVOYAL,
CHENNAI - 600 005

Name: MS. S. JAYASELVI

Designation: ASSOCIATE PROFESSOR

College: BILLROTH COLLEGE OF NURSING

Place: CHENNAI

Date: 29/1/2019

CERTIFICATE OF ENGLISH EDITING

This is to certify that the dissertation work topic "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08" done by A.Santhiya M.Sc., (Nursing) II year, College of Nursing, Madras Medical College-03 was edited for English language appropriateness.

NAME : P.MALLEMA

DESIGNATION : POST GRADUATE ASSISTANT

DATE : 08.07.2019

PLACE : CHENNAI - 83

SIGNATURE WITH SEAL : 

Headmistress *Pc*
Govt. Girls Hr. Sec. School
Ashok Nagar, Chennai - 600 033.

CERTIFICATE OF TAMIL EDITING

This is to certify that the dissertation work topic "A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08" done by A.Santhiya M.Sc., (Nursing) II year, College of Nursing, Madras Medical College-03 was edited for Tamil language appropriateness.

NAME : R. RAJESWARI

DESIGNATION : POST GRADUATE ASSISTANT

DATE : 08.07.2019

PLACE : CHENNAI - 83

SIGNATURE WITH SEAL :


GOVERNMENT GIRLS
HIGHER SECONDARY SCHOOL
Ashok Nagar, Chennai - 600 083.

INFORMED CONSENT

TITLE: “A study to assess the Effectiveness of teaching strategy on knowledge regarding Prevention of Malnutrition among mothers of toddlers in Medical wards at Institute of Child Health and Hospital for children, Egmore, Chennai-08”.

Sample no :

Name of participant :

Name of the principal investigator : A.SANTHIYA.

Name of the Institution : **Institute of Child Health and Hospital for Children, Egmore, Chennai-08**

Whether the participants consent was asked : yes/no

[If the answer to the above question is yes, write the following phrase: you agree with the manner in which consent was asked from you and given by you. You agree to take part in this study].

[If answer to the above question is no, give reason(s):

Name and signature or thumb impression of the participant legal representative.

Name ----- Signature-----

Date-----

Name and signature of the investigator or his representative obtaining consent:

Name ----- Signature-----

Date-----

INFORMATION TO PARTICIPANTS

TITLE :

“A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING STRATEGY ON KNOWLEDGE REGARDING PREVENTION OF MALNUTRITION AMONG MOTHERS OF TODDLERS IN MEDICAL WARDS AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI-08”.

Investigator : A. Santhiya

Name of the Participant :

Date :

Age/sex

You are invited to take part in this study. The information in this document is meant to help you decide whether or not to take part. Please feel free to ask if you have any queries or concerns.

You are being asked to Cooperate in this study being conducted in Institute of child health and hospital for children at Chennai.

What is the Purpose of the Research (explain briefly)

This research is conducted to assess the effectiveness of teaching strategy on knowledge regarding prevention of malnutrition among mothers of toddlers in medical wards at Institute of Child Health and Hospital for Children, Egmore, Chennai-08.

We have obtained permission from the Institutional Ethics Committee.

Study Procedures

- Study will be conducted after approval of ethics committee
- A written formal permission will be obtained from authorities of child health hospital and hospital for children at Chennai to conduct study.
- The purpose of study will be explained to the participants.
- The investigator will obtain informed consent.

Possible benefits to other people

The result of the research may provide benefits and also empathetic care to them by investigator.

Confidentiality of the information obtained from you

You have the right to confidentiality regarding the privacy of your personal details. The information from this study, if published in scientific journals or presented at scientific meetings, will not reveal your identity.

How will your decision not to participate in the study affect you?

Your decisions not to participate in this research study will not affect your activity of daily living, medical care or your relationship with investigator or the institution.

Can you decide to stop participating in the study once you start?

The participation in this research is purely voluntary and you have the right to withdraw from this study at any time during course of the study without giving any reasons.

Your Privacy in the research will be maintained throughout study. In the event of any publications or presentation resulting from the research, no personally identifiable information will be shared.

Signature of Investigator

Signature of Participants

Date

Date

சுயஒப்புதல் படிவம்

முறையான கற்பித்தல் திட்டமுறை மூலமாக ஊட்டச்சத்து குறைப் பாட்டினை தடுக்கும் முறை பற்றி தளநடைப் பருவகுழந்தைகளின் தாய்மார்கள் அறிவுத்திறன் குறித்த ஆய்வு.

ஆய்வாளர் பெயர் : அ.சந்தியா
பங்கேற்பாளர் :
தேதி :
வயது/பால் :

- ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடையகட்டாயமுமின்றி முழு மனதுடனும் சுய நினைவுடனும் சம்மதிக்கிறேன்
- ஆய்வாளர் மேற்கொள்ள போகும் பரிசோதனைகளை மிக தெளிவாக விளக்கி கூறினார்
- எனக்கு விருப்பமில்லாத பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகலாம் என்பதை ஆய்வாளர் மூலம் தெரிந்து கொண்டேன்
- இந்த ஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நன்கு புரிந்து கொண்டேன்.எனது உரிமைகள் மற்றும் கடமைகள்ஆராய்ச்சியாளர்கள் மூலம் விளக்கப்பட்டது.
- நான் ஆராய்ச்சியாளருடன் ஒத்துழைக்க சம்மதிக்கிறேன்.எனக்கு ஏதேனும் உடல் நலக்குறைவு ஏற்பட்டால் ஆராய்ச்சியாளரிடம் தெரிவிப்பேன்
- நான் வேறு எந்த ஆராய்ச்சியிலும் தற்சமயம் இடம் பெறவில்லைஎன்பதை தெரிவித்து கொள்கிறேன்
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன்.அப்படி வெளியிடும் போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்
- எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது.

ஆய்வாளர் கையொப்பம்
தேதி

பங்கேற்பவர் கையொப்பம்
தேதி

ஆராய்ச்சி தகவல்கள்

முறையான கற்பித்தல் திட்ட முறை மூலமாக ஊட்டச்சத்து குறைபாட்டினை தடுக்கும் முறை பற்றி தளர்நடை பருவ குழந்தைகளின் தாய்மார்கள் அறிவுதிறன் குறித்த ஆய்வு

ஆய்வாளர் பெயர் : அ.சந்தியா
பங்கேற்பாளர் :
தேதி :
வயது/பால் :

- ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டியாழுமின்றி முழு மனதுடன் சம்மதிக்கலாம்
- இதில் பங்கேற்பதன் நோக்கம் இந்த ஆராய்ச்சியின் தகவல்களை தெரிந்து கொள்வதற்காகவும் அதனை பயன் படுத்துவதற்காகவும் மட்டும்தான்
- இந்த ஆராய்ச்சியின் நோக்கம் முறையான கற்பித்தல் திட்ட முறை மூலமாக ஊட்டச்சத்து குறைபாட்டினை தடுக்கும் முறை பற்றி தளர்நடை பருவ குழந்தைகளின்தாய்மார்கள் அறிவுதிறன் குறித்து அறியலாம்.

ஆராய்ச்சி மேற்கொள்ளும் முறை

- இந்த ஆராய்ச்சியில் முறையான கற்பித்தல் திட்டமுறை மூலமாக ஊட்டச்சத்து குறைபாட்டினை தடுக்கும் முறை பற்றி தளர்நடை பருவ குழந்தைகளின்தாய்மார்கள் அறிவுதிறன் குறித்த ஆய்வு.

ஆய்வாளருக்கான பயன்

- இந்த ஆய்விற்கு பின் முறையான கற்பித்தல் திட்ட முறை மூலமாக ஊட்டச்சத்து குறைபாட்டினை தடுக்கும் முறை பற்றி தளர்நடை பருவ குழந்தைகளின்தாய்மார்கள் அறிவுதிறன் குறித்து அறியலாம்.

பங்கேற்பாளருக்கான பயன்

- இந்த ஆய்வு முறையான கற்பித்தல் திட்ட முறை மூலமாக ஊட்டச்சத்து குறைபாட்டினை தடுக்கும் முறை பற்றி தளர்நடை பருவ குழந்தைகளின்தாய்மார்கள் அறிவுதிறன் குறித்து அறியலாம்.
- இந்த ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும் உங்களின் சராசரிமுறையில் எந்த வித மாற்றமும் ஏற்படாது என்பதை தெரிவிக்கிறேன்
- இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழு மனதுடன் நீங்கள் இந்த ஆராய்ச்சியில் இருந்து விலகி கொள்ளலாம் என்பதை தெரிவிக்கிறேன்
- இந்த ஆராய்ச்சியில் உள்ள தகவல்களை பாதுகாப்பாக வைத்துக் கொள்கிறேன் என்பதை தெரிவித்துக் கொள்கிறேன்
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிடும் போது உங்களை பற்றிய அடையாளங்கள் வெளி வராது என்பதை உறுதி கூறுகிறேன்

ஆய்வாளர் கையொப்பம்
தேதி

பங்கேற்பவர் கையொப்பம்
தேதி

DEMOGRAPHIC VARIABLES

INSTRUCTIONS: The Respondents are expected to answer the following questions by placing the answer () against the response which you feel appropriate

1. Age of the Child

- a) 1-2 years ()
- b) 2-3 years

2. Sex of the Child

- a) Male ()
- b) Female

3. Educational Qualification of the mother

- a) Illiterate ()
- b) Primary education
- c) Secondary education
- d) High school
- e) High school certificate
- f) Graduate
- g) Professional

4. Occupational status of the mother

- a) Unemployment ()
- b) Unskilled worker
- c) Semiskilled worker
- d) Skilled worker
- e) Clerk ,shopowner and farmer
- f) Semiprofessionals
- g) Professionals

5. Educational status of the father

- a) Illiterate ()
- b) Primary education
- c) Secondary education
- d) High school
- e) High school certificate
- f) Graduate
- g) Professional

6.Occupational status of the father

- a) Unemployment ()
- b) Unskilled worker
- c) Semiskilled worker
- d) Skilled worker
- e) Clerk ,shopowner and farmer
- f) Semiprofessionals
- g) Professionals

7. Monthly Income

- a) Below Rs.2,091 ()
- b) Rs 2,092- Rs 6,213
- c) Rs .6,214- Rss .10,356
- d) Rs .10,357- Rs .15,535
- e) Rs .13,536- Rs .20714
- f) Rs .20,715- Rs .41,429
- g) AboveRs.41,430

8. Type of family.

- a) Nuclear family ()
- b) Joint family
- c) Broken family

9. Number of children in the family.

- a) One ()
- b) Two
- c) Three

10. Maternal illness during pregnancy

- a) Yes ()
- b) No

11. Initiation of weaning

- a) At 6 month ()
- b) 7-9 month
- c) 13-24 month

12. Hospitalization during last 6 month

- a) Yes ()
- b) Two

13.Exclusive breast feeding till

- a)First 3 months ()
- b) First 6 months

பகுதி-அ
தனிநபர் தகவல்

மாதிரி

எண்:

குறிப்பு :பொருந்தக்கூடிய பொருத்தமான இடத்தில் பதில் அளிக்கவும்,நீங்கள்வழங்கிய தகவல்கள் ரகசியமாக வைக்கப்பட்டு, ஆராய்ச்சிக்குமட்டுமே பயன்படுத்தப்படும்

1.குழந்தையின் வயது ()

அ) 1-2 வயது

ஆ) 2-3 வயது

2.குழந்தையின் பாலினம் ()

அ) ஆண்

ஆ)பெண்

3.தாயின் கல்வி தகுதி ()

அ)தொழில் சார்ந்த படிப்பு

ஆ)பட்டதாரி

இ)பட்டய படிப்பு

ஈ)மேல்நிலை கல்வி

உ)உயர்நிலைக் கல்வி

ஊ)ஆரம்ப கல்வி

எ) படிப்பறிவின்மை

4.தாயின் தொழில் ()

அ)உயர் அதிகாரி

ஆ)தொழில் நுட்பவியலார்

இ)சொந்த தொழில் செய்பவர்மற்றும் விவசாயம்

ஈ)கைவினை மற்றும் இயந்திர ஆப்டேட்டர்கள்,

உ) சந்தை விற்பனை தொழிலாளர்.

ஊ)அடிப்படை தொழிலாளர்கள்

எ)இல்லத்தரசி/வேலையில்லாதவர்

5.தந்தையின் கல்விதகுதி

அ)தொழில் சார்ந்த படிப்பு

ஆ)பட்டதாரி

இ)பட்டய படிப்பு

ஈ)மேல்நிலை கல்வி

உ)உயர்நிலைக் கல்வி

ஊ)ஆரம்ப கல்வி

எ) படிப்பறிவின்மை

6.தந்தையின் தொழில் ()

- அ)உயர் அதிகாரி
- ஆ)தொழில் நுட்பவியலார்
- இ)சொந்த தொழில் செய்பவர்மற்றும் விவசாயம்
- ஈ)கைவினை மற்றும் இயந்திர ஆபரேட்டர்கள்,
- உ) சந்தை விற்பனை தொழிலாளர்.
- ஊ)அடிப்படை தொழிலாளர்கள்
- எ)இல்லத்தரசி/வேலையில்லாதவர்

7.குடும்ப மாதவருமானம் ()

- அ)ரூ.6327-ரூ.18,949
- ஆ)ரூ.18,953-ரூ.31,589
- இ)ரூ.31,591 -ரூ.47,262
- ஈ) ரூ.47,266-ரூ. 63,178
- உ) ரூ.63,182-ரூ.1,26,356
- ஊ) ரூ.1,26,360க்கு கீழ்

8.குடும்ப வகை ()

- அ)தனிக்குடும்பம்
- ஆ)கூட்டுக்குடும்பம்
- இ)பிளவுபட்ட குடும்பம்.

9.குடும்பத்தில் உள்ள குழந்தைகளின் எண்ணிக்கை ()

- அ)ஒன்று
- ஆ)இரண்டு
- இ)மூன்று

10.கர்ப்பகால நோய் பாதிப்பு ()

- அ)ஆம்
- ஆ)இல்லை

11.பால் மறக்கடித்தல் தொடங்கப் பட்ட மாதம் ()

- அ) 6-ஆம் மாதத்திற்கு
- ஆ)7-9 மாதத்தில்
- இ) 13-24 மாதத்தில்

12.கடந்த 6 மாதத்திற்கு முன்புமுருத்துவமனையில்குழந்தை அனுமதிகப்பட்டரா. ()

- அ)ஆம்
- ஆ)இல்லை

- 13.பிரத்யேகமாக தாய்ப்பால் கொடுக்கப்பட்ட கால அளவு ()
அ)முதல் 3 மாதங்கள்
ஆ)முதல் 6 மாதங்கள்

PART-II

INSTRUCTIONS: The Respondents are expected to answer the following question by placing the (a) against the response which you feel appropriate

1. The meaning of under nutrition.

- a) Insufficient food intake
- b) Over eating ()
- c) Insufficient fluid intake

2. Vulnerable age group for malnutrition

- a) 1-3 years
- b) 3-6 years ()
- c) 6-12 years

3. Most prevalent gender for malnutrition

- a) Male children ()
- b) Female children
- c) Both gender

4. Main cause for malnutrition in toddler

- a) Infection ()
- b) Congenital anomalies
- c) Inborn error metabolism

5. Result of improper sanitation

- a) Diarrhoea and intestinal worm infestation ()
- b) Dermatitis
- c) Peptic ulcer

6. Maternal factor that affects the child growth

- a) Placenta previa
- b) Multiparty ()
- c) Inadequate food intake during pregnancy

7. The Symptom of malnutrition

- a) Loss of body hair
- b) Loss of fat, muscle mass and body tissue ()
- c) Loss of vision

8. Major clinical manifestation of severe malnutrition in toddler

- a) Shrunken eyes, hollow cheeks
- b) Irritability ()
- c) Bone disorder

9. Main cause for diarrhoea

- a) Poor water sanitation
- b) Poor hygiene ()
- c) poor environment

10. Mode of transmission of diarrhoea

- a) Faceo-oral-route
- b) Vector borne ()
- c) Air borne

11. Calories needed for toddler per/day

- a) 1500-2000 calories/day
- b) 1000-1400 calories/day ()
- c) 2100-2500 calories/day

12. Mineral most likely require for proper body function

- a) Calcium
- b) Magnesium ()
- c) Chloride

13. Food rich in protein

- a) Fruits
- b) Bread and Cereals and meat. ()
- c) Milk and cheese

14. The meaning of weaning

- a) Introducing new food to the baby
- b) Stop of breast milk. ()
- c) Involving in baby care

15. Vitamin D is recommended for toddler per day

- a) 800 IU
- b) 700 IU ()
- c) 600 IU

16. Nutritional source high in milk in the community

- a) protein
- b) Vitamin D and calcium ()
- c) Carbohydrate.

17. Low cost food in the community

- a) Rice and rice product
- b) Fruits ()
- c) Green leafy vegetables

18. Method to promote the nutritional status of the child

- a) Giving adequate intake of fluid
- b) Providing nutritional education ()
- c) Healthy diet, proper hygienic measures and immunization

19. Benefit of breast feeding.

- a) Improve growth and immunity
- b) Lower the risk of chronic disease ()
- c) Increase in body weight

20. The meaning of balanced diet ()

- a) Equal proportions of protein, carbohydrate and calorie
- b) Protein rich diet
- c) Calorie rich diet

21. Preventive measures of worm infestation

- a) Proper hand hygiene with antimicrobial soap
- b) Wearing slippers ()
- c) restrict the child to play outside

22. Complication of under nutrition

- a) Structural damage of brain
- b) Physical deformities ()
- c) Seizures

23. Method to promote sleep in toddler

- a) Maintain a daily sleep schedule, bed room environment
- b) Drink milk before going to bed ()
- c) Encourage in activities

24. Preventive measure of infection

- a) Immunization.
- b) Growth monitoring ()
- c) Proper rest and sleep

25. Prognosis of untreated malnutrition

- a) Chronic disease
- b) Development delay ()
- c) Child mortality

KEY ANSWER

QUESTION NUMBER	ANSWER
1	A
2	A
3	B
4	A
5	A
6	C
7	B
8	A
9	C
10	A
11	B
12	A
13	B
14	A
15	C
16	B
17	A
18	C
19	A
20	C
21	B
22	A
23	A
24	A
25	A

பகுதி -ஆ
அறிவு சார்ந்த வினாக்கள்

மாதிரி எண்:

குறிப்பு : பொருந்தக்கூடிய பொருத்தமான இடத்தில் பதில் அளிக்கவும், நீங்கள் வழங்கிய தகவல்கள் ரகசியமாக வைக்கப்பட்டு, ஆராய்ச்சிக்குமட்டுமே பயன்படுத்தப்படும்

1. ஊட்டச்சத்து குறை என்பதன் பொருள் ()
அ) போதுமான அளவு உணவு உட்கொள்ளாமை
ஆ) அதிகமாக உணவு உட்கொள்ளுதல்
இ) போதுமான அளவு நீர் அருந்தாமை
2. ஊட்டச்சத்து குறைப்பாட்டால் பாதிக்கப்படும் குழந்தைகளின் வயது ()
அ) 1-3 வயது
ஆ) 3-6 வயது
இ) 6-12 வயது
3. வழக்கமாக ஊட்டச்சத்து குறைப்பாட்டால் பாதிக்கப்படும் பாலினத்தவர் ()
அ) ஆண் குழந்தைகள்
ஆ) பெண் குழந்தைகள்
இ) இரு பாலினத்தவரும்
4. ஊட்டச்சத்து குறைபாட்டிற்கான முக்கிய காரணம் ()
அ) நோய் தொற்று
ஆ) பிறவிக் குறைபாடு
இ) பிறவிலேயே ஏற்படும் வளர்சிதைமாற்ற நோய்
5. சுகாதாரமின்மையின் விளைவு ()
அ) வயிற்றுபோக்குமற்றும் குடற்புழு தொற்று
ஆ) தோல் நோய்
இ) குடற் புண்
6. குழந்தையின் வளர்ச்சியை பாதிக்கும் தாய்வழிக் காரணி ()
அ) நச்சுக்கொடி கற்பப்பைவாயின்முன்பு இருத்தல்
ஆ) தொடர் கருத்தரித்தல்
இ) கர்ப்ப காலத்தின் போது தேவையான அளவு உணவு உண்ணாமை
7. ஊட்டச்சத்து குறைப்பாட்டின் அறிகுறி ()
அ) உடல் ரோமம் உதிர்ந்தல்
ஆ) உடல் இளைத்தல்
இ) பார்வை இழப்பு
8. கடுமையான நிலை ஊட்டச்சத்து குறைபாட்டின் அறிகுறி ()
அ) குழிந்த கண்கள், ஓட்டிய கன்னங்கள்
ஆ) எரிச்சலடைதல்
இ) எலும்பு சார்ந்த நோய்கள்.
9. வயிற்றுபோக்கின் முக்கிய காரணி ()
அ) குடிநீர் தூய்மையின்மை
ஆ) தன் சுத்தமின்மை
இ) சுகாதாரமின்மை

10. வயிற்றுபோக்குபரவும் முறை ()
அ)மலம்மூலம்
ஆ) நோய் உயிர் கடத்தி வழியாக
இ)காற்றின்மூலம்
- 11.தளர்நடை பருவ குழந்தைக்குஒரு நாளைக்குதேவைப்படும் கலோரிஅளவு .()
அ)1500-2000 கலோரி
ஆ) 1000-1400 கலோரி
இ) 2100-2500 கலோரி
- 12.உடல் செயல்பாடுக்குஇன்றியமையாதகனிமம் ()
அ)கால்சியம்
ஆ)மெக்னீசியம்
இ)பாஸ்பரஸ்
- 13.புரதம் அதிகம் உள்ள உணவு பொருள் ()
அ)பழவகைகள்
ஆ) இறைச்சி மற்றும் தானியங்கள்
இ) பால் சார்ந்த பொருள்கள்
- 14.இணை உணவுஎன்பதன் பொருள் ()
அ) புதிய உணவு பொருளை குழந்தைக்கு கொடுத்தல்
ஆ) தாய் பால் கொடுத்தலை நிறுத்துதல்
இ) குழந்தை பராமரிப்பில் கவனம் செலுத்துதல்
- 15..தளர்நடை பருவ குழந்தைக்கு தேவைப்படும்வைட்டமின் டி அளவு
அ) 800 IU ()
ஆ) 700 IU
இ)600 IU
- 16.பாலில் அதிகம் அளவு உள்ள ஊட்டச்சத்து ()
அ)புரதம்
ஆ) வைட்டமின் டி மற்றும் கால்சியம்
இ)கார்போஹைட்ரேட்
- 17.சமுதாயத்தில் குறைந்த செலவில் கிடைக்கும் உணவு பொருள்
அ)அரிசி மற்றும் அரிசி சார்ந்த பொருள்கள் ()
ஆ) பழ வகைகள்
இ) பச்சைக் காய்கறிகள்
18. குழந்தையின் ஊட்டச்சத்து நிலையை ஊக்குவிக்கும் முறை
அ)குழந்தைக்கு தேவையான அளவு நீர் அருந்த கொடுத்தல்
ஆ)ஊட்டச்சத்து குறைபாட்டினைபற்றிய நலக்கல்வி அளித்தல்
இ) சத்தான உணவு,முறையான சுகாதார முறைகள்,தடுப்பூசி போடுதல்
- 19.தாய்பால் கொடுத்தலின் பலன் ()
அ)வளர்ச்சி மற்றும் நோய் எதிர்ப்பு சக்தியை அதிகரிக்கிறது.
ஆ)நாள்பட்ட நோயின் தீவிரத்தை குறைக்கிறது
இ) உடல் பருமனாக உதவுகிறது.
- 20.குடற்புழு தொற்று ஏற்படுவதை தடுக்கும் வழிமுறைகள் ()
அ)கைகளை சோப்பினை பயன்படுத்தி கழுவுதல்
ஆ)காலணிகளை அணிந்து வெளியில் செல்லுதல்
இ) வெளியில் விளையாட அனுமதி மறுத்தல்

21.சரிவிகித உணவு என்பது ()

அ)சரியான அளவு புரதம்,கார்போஹைட்ரேட்,கலோரி உள்ள உணவு

ஆ)அதிக அளவு புரதம் உள்ள உணவு

இ)அதிக அளவு கலோரி உள்ள உணவு

22.தளர்நடை பருவ குழந்தைகளுக்கு உறக்கத்தை ஊக்குவிக்கும் முறை

அ) உறக்க அட்டவணை மற்றும்படுக்கை அறை சுற்றுப்புறத்தை பராமரித்தல். ()

ஆ) உறங்க செல்லும்முன்புபால் அருந்துதல்

இ) குழந்தைகளின் செயல்களை ஊக்குவித்தல்

23.ஊட்டச்சத்து குறைபாட்டின்பக்கவிளைவு ()

அ)மூளைச்சிதைவு

ஆ)உடல் மாற்றங்கள்

இ)வலிப்பு நோய்

24.நோய் தொற்று ஏற்படுவதை தடுக்கும் முறை ()

அ) தடுப்பூசி போடுதல்

ஆ)சரிவிகித உணவு

இ)முறையாக ஓய்வு மற்றும் உறக்கம்

25.சிகிச்சையளிக்காத ஊட்டச்சத்து குறைபாட்டின்பின்விளைவு

அ)நாள்பட்ட நோய் ()

ஆ)வளர்ச்சி குறைபாடு

இ)குழந்தை இறப்பு

LESSON PLAN

ON

PREVENTION OF MALNUTRITION

LESSON PLAN

PREVENTION OF MALNUTRITION

INSTITUTION	: College Of Nursing, Madras Medical College, Chennai-03.
NAME	: Santhiya.A
PROGRAMME	: M.Sc (N) II Year
TOPIC	: Prevention Of Malnutrition
GROUP	: Mothers of Toddlers in Medical wards.
DATE AND TIME	: February 2019
VENUE	: Medical wards
METHOD OF TEACHING	: Lecturer cum discussion.

Central objectives:

At the end of the teaching strategy mothers will gain adequate knowledge on prevention of malnutrition and practice their knowledge in home setting.

Specific objectives;

- 1)define malnutrition
- 2)list down the causes of malnutrition
- 3)mention the symptoms of malnutrition
- 4)explain about food and water sanitation
- 5)describe about the prevention of infection
- 6)elaborate about promotion of breast feeding
- 7)enlist about the low cost weaning food
- 8)enumerate about the preventive measures of worm infestation
- 9) describe about the balanced diet
- 10) list out the complication of malnutrition.

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER ACTIVITY	STUDENT ACTIVITY	A.V AIDS	EVALUATION
1	2 min	define malnutrition.	<p>INTRODUCTION: Malnutrition in children is common globally and may result in both short and long term irreversible negative health outcomes. The World Health Organization (WHO) estimates that malnutrition accounts for 54 percent of child mortality worldwide, about 1 million children. Another estimate also by WHO states that childhood underweight is the cause for about 35% of all deaths of children under the age of five years worldwide.</p> <p>DEFINITION: The cellular imbalance between the supply of nutrients and energy and body's demand for them to ensure growth, maintenance and specific function. World Health Organization</p> <p>Malnutrition is a broad term commonly used as an to under nutrition to under nutrition but technically it also refers to over nutrition.</p> <p>People are malnourished if their diet does not provide adequate calories and protein for growth and maintenance or they are unable to fully utilize the food they eat due to illness (undernutrition) they are also malnourished if they consume too many calories(over nutrition)</p>	<p>Explaining</p> <p>Explaining</p>	<p>Listening</p> <p>Listening</p>	<p>Flash card</p>	<p>What is the definition of malnutrition?</p>

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER ACTIVITIES	STUDENT ACTIVITIES	A.V AIDS	EVALUATON
2	3min	List down the causes of malnutrition.	<p>CAUSES:</p> <ul style="list-style-type: none"> • Inadequate food intake. • Infection (diarrhoea, respiratory infection, measles, and intestinal worms which increase requirement for calories and protein and other nutrients, while decrease their absorption and utilization). <p>Nutritional factors;</p> <ul style="list-style-type: none"> • Non breastfed. • Late weaning. • Inadequate supplementation. • Failure to feed during illness. • Failure to increase to caloric intake immediately after the illness <p>Non-nutritional factors;</p> <ul style="list-style-type: none"> • Non immunization. • Improper growth monitoring. • Poor antenatal care. • Poverty • Illiteracy • Large family/consanguinity • False belief and sentiments • Nationwide lower food production, improper distribution, failure to raise the purchasing power. 	Explaining	Listening	Flash Card	What are the causes of malnutrition?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER ACTIVITY	LEARNER ACTIVITY	A.V AIDS	EVALUATION
3	3min	mention the symptoms of malnutrition.	SYMPTOMS: <ul style="list-style-type: none"> • Growth failure • Decrease weight for age, decrease height for age, decrease weight for height. • Muscle wasting (sometimes hidden by oedema and fat). • Oedema (present in lower legs, usually in face and lower arms) • Thin and brittle hair (easily pull out) • Shallow cheeks • Poor appetite • Often diarrhoea • Skin changes (diffuse pigmentation, sometimes flaky, paint dermatosis) • Weaken immune system. 	Explaining	Listening	Flash card	What are the symptoms of malnutrition?
4	2 min	explain about food and water sanitation.	PREVENTION: FOOD SANITATION: <ul style="list-style-type: none"> ➤ Good basic housekeeping and maintenance ➤ Proper cleaning and sanitizing food equipment food contact surfaces ➤ Wash hand before and after cutting vegetables. ➤ Food storage for the proper time and at safe temperature. 	Explaining	Listening	Flash card	How to maintain food and water sanitation?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER ACTIVITY	LEARNER ACTIVITY	A.V AIDS	EVALUATION
5	2 min	describe about the prevention of infection.	<p>WATER SANITATION: Primary prevention of diarrhoea through water sanitation and hygiene intervention is based on reducing the Faeco-oral transmission of pathogens and includes the</p> <ul style="list-style-type: none"> ➤ Provision of an improved water supply and water supply ➤ Safe storage and periodic cleaning of water source ➤ Improving sanitation facilities ➤ Hygiene education include washing <p>PREVENTION OF INFECTION:</p> <ul style="list-style-type: none"> ✓ Wash hands and wash and disinfect the surface. ✓ Immunization (vaccines provide important protection against harmful disease ,measles immunization prevents malnutrition and vitamin A should be given along with measles immunization). ✓ Mother should educate the child about the hygienic measures like oral, nail, bathing, hand hygiene, foot hygiene, toileting hygiene. 	Explaining	Listening	Flash card	How to prevent the spread of infection?
6	4min	elaborate about the promotion of breast feeding.	<p>PROMOTION OF BREAST FEEDING: Initiation of breastfeeding soon after delivery, exclusive breast feeding for first 6 month of life and continuation of breastfeeding for first 6 month of life and continuation of breast feeding upto 2 years along with complementary feeding to prevent malnutrition and ensure adequate growth and development. Woman should be</p>	Explaining	Listening	Flash card	How to Promote Breast Feeding?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER ACTIVITY	STUDENT ACTIVITY	A.V AIDS	EVALUATION
7	3 min	enlist about low cast weaning food.	<p>informed that breastfeeding is also a more efficient way of distributing calories. Infants between zero to six months need, on average, 627 calories/day, which can all be acquired through breast milk, while a breastfeeding mother only needs 500 extra calories per day This is approximately a 20% increase in caloric efficiency.</p> <p>As many pregnant women suffer from micronutrient deficiencies, mothers should be given supplements in vitamin A, iron, and folic acid. Also, they should be informed about the importance of procuring an extra 500 kcal per day</p> <p>Benefits of breast feeding:</p> <ul style="list-style-type: none"> ● Improved growth and nutrition status ● Less likely to die. ● Less diarrhoea and respiratory infections ● Lower risk of later chronic diseases ● Lower risk of overweight/v obesity ● Improved cognitive and motor development <p>LOW CAST WEANING FOOD:At 6 months, adequate complementary food should be introduced to meet the nutritional requirement for adequate growth. Food cooked at home should be given to young children.For toddlers (1-3) years the expected weight is 9-13 kgCalorie requirement is 1200 kcs Protein requirement is 18 grams.</p>	Explaining	Listening	Flash Card.	What are the low cast weaning food?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT			TEACHER ACTIVITY	LEARNER ACTIVITY	A.V AIDS	EVALUATION
8	4min	enumerate the preventive measures of worm infestation.	Food group	Food items	Rich in nutrients				
			pulse	Green gram Black gram Bengal gram	Protein and energy				
			millets	Ragi, bajra	minerals				
			Tubers	Yam ,sweet potato, Potato.	Energy and Vitamins				
			Vegetables	Green leafy vegetables.	Vitamins and minerals				
			Fruits	Banana and papaya	Vitamins,minerals				
			PREVENTING WORM INFESTATION IN CHILDREN; Hygiene here is crucial. Teach your kids basic hygiene habits and educate them about worms entering their body and making them sick. Tips to prevent worm infestation; <ul style="list-style-type: none">✓ Inculcate the habit of frequently and thoroughly washing the hands with a good antibacterial soap.✓ Teach your kid to drink clean, filtered or boiled water.✓ Make sure your kids change their undergarments daily,						

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER ACTIVITY	LEARNER ACTIVITY	A.V AIDS	EVALUATION
			<ul style="list-style-type: none"> ✓ wash their bedding, pillow covers, blanket etc. ✓ Sterile your toddler's toys. ✓ Encourage your child wear slipper when go out ✓ Encourage your kid to play in dry areas and not splash in muddy puddles as these horde millions of germs. ✓ Make sure that your the veggies and meat are thoroughly cooked before you serve them to your kid. ✓ Keep your kid's nail well trimmed. Show them how dirt collects under long fingernails and must be kept clean. ✓ Teach potty hygiene. ✓ Do not share towels and undergarments. ✓ Clean your house thoroughly and with proper disinfectants. ✓ Teach your kid to shower regularly. Practice thorough cleaning of private parts. ✓ Allow plenty of sunshine in your kid's room. some worms are sensitive to light and nothing better than letting the sun do this job. <p>If untreated, worm infections may sometimes take a serious form of blocking intestine, attacking other organs and inhibiting your child's growth.</p>				

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER ACTIVITY	LEARNER ACTIVITY	A.V AIDS	EVALUATION
9	3min	describe about the balanced diet	<p>BALANCED DIET; Humans need a wide range of nutrients to lead a healthy and active life. Providing good nutrition and proper intake of food in relation to the body's dietary need is required.</p> <p>A balanced diet is one which contains variety of food in such quantities and proportion that the need of all nutrients is adequately met for maintaining health and general well being and makes a small provision for extra nutrients to with stand short duration of leanness.</p> <p>Food rich in carbohydrates and fats; Whole grains, cereals, millets, ghee, nuts and oilseeds, tubers, vegetable oils.</p> <p>Food rich in protein;(body building foods) Pulses, nuts and oil seeds, milk and milk product, meat, fish</p> <p>Food rich in vitamins and minerals; (protective foods) Green leafy vegetables, fruits, eggs, milk and milk products and flesh food</p>	Explaining	Listening	Flash Card	Which food rich in protein?
10	2min	list down the complication of malnutrition.	<p>COMPLICATIONS; Pneumonia. Gastroenteritis. Tuberculosis. Measles. Acquired immune deficiency syndrome. Heart failure. Anaemia.</p>	Explaining	Listening	Flash Card	What are the Complication of malnutrition?

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CONCLUSION;

good nutrition is fundamental for children’s current and future health as well as their development and learning, the benefits of developing healthy dietary and lifestyle pattern from an early age onwards can positively impact on child’s nutrition and health throughout their adult lives, and enhance the productivity of the nation.

தலைப்பு ; ஊட்டச்சத்து குறைபாடு குறித்து, தாய்மார்களுக்கு கல்வி செய்தி மூலம் கற்பித்தல் நிகழ்ச்சியின்

முக்கியத்துவம் குறித்த மதிப்பீடு

குழு ; தளர்நடை பருவ குழந்தைகளின் தாய்மார்கள்

இடம் ; மருத்துவ பிரிவு, அரசு குழந்தைகள் மருத்துவமனை, எழும்பூர், சென்னை-8

நேரம் ; 45 நிமிடம்

கற்பிப்பவர் ; செவிலியர் முதுகலை பட்டப்படிப்பு, இரண்டாம் வருட மாணவி

கற்பிக்கும் முறை ; சொற்பொழிவு மற்றும் கருத்து பகிர்வு முறை

ஒலி ஒளி சாதனங்கள் ; தகவல் அட்டை.

பொது நோக்கம் ;

ஊட்டச்சத்து குறைப்பாடு பற்றி தளர்நடை பருவ குழந்தைகளின் தாய்மார்களுக்கு ஊட்டச்சத்து குறைபாடு குறித்து அறிவுத்திறனை பெருக்குதல், ஊட்டச்சத்து குறைப்பாடு பற்றிய தெளிவான மனப்பாங்கை ஏற்படுத்துதல் ஊட்டச்சத்து குறைப்பாட்டை தடுக்கும் முறை பற்றி விளக்குதல்.

துணை நோக்கங்கள்;

- 1) ஊட்டச்சத்து குறைப்பாடு வரைய
- 2) ஊட்டச்சத்து குறைப்பாட்டின் காரணிகளை பட்டியலிடு
- 3) ஊட்டச்சத்து குறைப்பாட்டிற்கான அறிகுறிகளை குறிப்பிடுக
- 4) குடிநீர் மற்றும் உணவு சுகாதாரத்தை பற்றி விளக்குக
- 5) நோய்தொற்றினை தடுக்கும் முறை பற்றி விவரியுங்கள்.
- 6) தாய்ப்பால் கொடுத்தலை ஊக்குவிக்கும் முறைகள் பற்றி விரிவாக்குக.
- 7) குறைந்த செலவில் கிடைக்கும் இணை உணவைப் பற்றி விவரி
- 8) குடற்புழு தொற்று ஏற்படுவதை தடுக்கும் வழிமுறைகள் பற்றி வரிசைப்படுத்துக

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	பொருளடக்கம்	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி	மதிப்பீடு
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9) சரிவிகித உணவைப் பற்றி விவரி.

10) ஊட்டச்சத்து குறைப்பாட்டின் பக்கவிளைவுகளை பட்டியலிடுக.

						சாதனங்கள்	
வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	பொருளடக்கம்	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
1	2 நிமிடங்கள்	ஊட்டச்சத்து குறைப்பாடு வரையறை	முன்னுரை; ஊட்டச்சத்து குறைப்பாட்டால் குழந்தைகள் உலகளவில் டபெருமளவு பாதிக்கப்படுகின்றனர். ஊட்டச்சத்து குறைப்பாட்டின் விளைவாக குழந்தைகளுக்கு குறுகிய மற்றும் நீண்ட கால மீளமுடியாத விளைவை ஏற்படுத்துகிறது. உலக சுகாதார நிறுவனத்தின் அறிக்கைப்படி 1 மில்லியன் குழந்தைகளில் 54% குழந்தைகள் உலகளவில் பாதிக்கப்படுகின்றனர். மற்றொரு அறிக்கையின்படி குழந்தைகள் இறப்பு விகிதத்தில் 35% குழந்தைகள் உடல் எடை குறைப்பாடு முக்கிய காரணமாகும்.	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	ஊட்டச்சத்து குறைப்பாடு என்றால் என்ன?
2	3 நிமிடங்கள்	ஊட்டச்சத்து குறைப்பாட்டின் காரணிகளை பட்டியலிடு	வரையறை; ஊட்டச்சத்து குறைப்பாடு என்பது உடலின் வளர்ச்சி, பராமரிப்பு மற்றும் குறிப்பிட்ட வேலையை செய்வதற்கு தேவையான சக்திக்கும் மற்றும் ஊட்டச்சத்து வழங்கலுக்கும் இடையேயான ஏற்றத்தாழ்வால் உண்டாகிறது.	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	
			காரணங்கள்; <ul style="list-style-type: none"> போதுமான அளவு உணவு உட்கொள்ளாமை. 	விளக்குதல்	கவனித்தல்	தகவல்	ஊட்டச்சத்து

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	<ul style="list-style-type: none"> தொற்றுநோய் (வயிற்றுப்போக்கு,சுவாச பாதை தொற்றுநோய்கள்,தட்டம்மை, குடற்புழு தொற்றால் உடலுக்கு பொருளடக்கம் 	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	அட்டை ஒலி ஒளி காட்சி சாதனங்கள்	குறைபாட்டிற்கான காரணிகள் யாவை? மதிப்பீடு
			<ul style="list-style-type: none"> தேவையான அளவு கலோரி மற்றும் புரதத்தை உட்கிரகிக்கும் தன்மை குறைகிறது). ஊட்டச்சத்து காரணங்கள்; <ul style="list-style-type: none"> தாய்ப்பால் கொடுக்காமல் இருத்தல். இணைஉணவு தாமதமாக கொடுக்க துவங்குதல். போதுமான அளவு சேர்மான உணவு உட்கொள்ளாமை. நோய்யுற்றிருக்கும் சத்தான உணவை உட்கொள்ளாமை. நோய் பாதிப்பிற்கு பிறகு போதுமான அளவு கலோரி உட்கொள்ளாமை. ஊட்டச்சத்து அல்லாத காரணங்கள்; <ul style="list-style-type: none"> தகுந்த நேரத்தில் தடுப்பூசி போட்டுக்கொள்ளாமை முறையாக வளர்ச்சியை கண்காணிக்காமல் இருத்தல். கர்ப்ப காலத்தின் போது போதுமான அளவு கவனிக்காமை. வறுமை அறியாமை 				

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	பெரிய குடும்பம்/நெருங்கிய உறவு முறையில் திருமணம் செய்து கொள்ளுதல் <ul style="list-style-type: none"> தவறான உணவு பழக்கங்கள் மற்றும் பொருளடக்கம் 	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
3	3 நிமிடங்கள்	ஊட்டச்சத்து குறைப்பாட்டிற்கான அறிகுறிகளை குறிப்பிடுக	<p>நம்பிக்கைகள்</p> <ul style="list-style-type: none"> உலகளாவிய அளவில் உணவு பொருள்கள் குறைவான உற்பத்தி. <p>அறிகுறிகள்;</p> <ul style="list-style-type: none"> வளர்ச்சி குறைபாடு, வயதுக்கு குறைவான எடை மற்றும் உயரம், வயதுக்கு குறைவான உயரம், தசை இழப்பு, மெல்லிய மற்றும் எளிதில் உடையும் முடி, குழிந்த கன்னங்கள் பசியின்மை அடிக்கடி வயிற்றுப்போக்கு ஏற்படுதல் தோலில் ஏற்படும் மாற்றங்கள் குறைவான நோய் எதிர்ப்பு சக்தி 	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	ஊட்டச்சத்து குறைபாட்டின் அறிகுறிகள் என்ன?

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	பொருளடக்கம்	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
4	2 நிமிடங்கள்	குடிநீர் மற்றும் உணவு சுகாதாரத்தை பற்றி விளக்குக	<p>முறையான உணவை பாதுகாக்க மற்றும் உணவால் பரவும் நோய்களை தடுக்கும் குறிப்புகள்;</p> <ul style="list-style-type: none"> முறையான தன்சுத்தம் பேணுதல்; அடிக்கடி கை மற்றும் முழங்கைகளை கழுவுதல் மற்றும் காயங்களை மூடி வைத்தல். முறையான உணவு சமைக்கும் பாத்திரங்கள் சமையலறை சுத்தமாக வைக்கவேண்டும். வீட்டை சுத்தமாக வைக்க வேண்டும். முறையான வெப்ப நிலையில் உணவை மூடிவைக்க வேண்டும். <p>குடிநீர் சுகாதாரம்;</p> <ul style="list-style-type: none"> வயிற்றுப்போக்கை தடுக்கும் முதன்மை வழிமுறைகளான குடிநீர் சேமிப்பு முறைகள் மற்றும் தலையீடு முறைகளால் மலம் சரியாக கைகளை கழுவாததால் வாய் வழியாக நோய்கிருமிகள் பரவுகிறது இவ்வாறு நோய்கிருமிகள் பரவுவதை தடுக்கும் விதமாக 	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	மதிப்பீடு குடிநீர் சுகாதாரத்தை மேம்படுத்தும் வழிமுறைகள் யாவை?

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	பொருளடக்கம்	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
5	2 நிமிடங்கள்	நோய்தொற்றினை தடுக்கும் முறை பற்றி விவரியுங்கள்.	<p>குடிநீரை முறையாக சேமித்து வைக்க வேண்டும்.</p> <ul style="list-style-type: none"> குடிநீர் சுகாதாரம் பற்றிய நலக்கல்வி அளித்தல். குடிநீர் சேமித்து வைக்கும் பாத்திரங்களை அடிக்கடி சுத்தம் செய்தல்.மேம்படுத்தப் படுத்த குடிநீர் சுகாதார முறைகளை கையாளுதல். <p>நோய்த்தொற்று ஏற்படுவதை தடுக்கும் வழிமுறைகள்;</p> <ul style="list-style-type: none"> குழந்தைகளுக்கு நோய்தொற்று ஏற்படாமல் தடுப்பதன் மூலம் குழந்தைகளை நோய்தாக்குதலில் இருந்து பாதுகாக்கவும், மற்றும் குழந்தைகளின் ஆரோக்கியத்தை ஊக்குவிக்க முடியும். <p>தன் சுகாதார முறைகள்;</p> <ul style="list-style-type: none"> பல் சுத்தம் நகச் சுத்தம் 	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	நோய் தொற்றினை தடுக்கும் வழிமுறைகள் என்ன?

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	<ul style="list-style-type: none"> குளிக்கும் முறைகள் கை சுத்தம் பாத சுத்தம் 	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
6	4 நிமிடங்கள்	தாய்ப்பால் கொடுத்தலை ஊக்குவிக்கும் முறைகள் பற்றி விரிவாக்குக.	<p>பொருளடக்கம்</p> <ul style="list-style-type: none"> கழிப்பறை சுத்தம் ஆகியவற்றை மேற்கொள்ள வேண்டும். <p>தாய்ப்பால் கொடுத்தலை ஊக்குவிக்கும் வழிமுறைகள்;</p> <ul style="list-style-type: none"> தாய்ப்பால் கொடுத்தலை ஊக்குவிப்பதன் மூலம் தாய் மற்றும் குழந்தையின் உடல் நலத்தை மேம்படுத்த முடியும். குழந்தைக்கு முதல் ஆறு மாதங்கள் வரை கொடுப்பதின் மூலம் தாய்ப்பால் கொடுத்தலை ஊக்குவிக்குத்தல் குழந்தைக்கு முதல் ஆறு மாதங்கள் வரை கொடுப்பதின் மூலம் குழந்தைக்கு தினமும் அதிகப்படியான கலோரி 627 கலோரி கிடைக்கிறது. இது தோராயமாக 20% கலோரியின் தன்மையை அதிகரிக்கிறது. நுண்ணுட்டச்சத்து குறைப்பாட்டால் பாதிக்கப்பட்டிருக்கும் கர்ப்பினி தாய்மார்கள் வைட்டமின் 	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	தாய்ப்பால் கொடுத்தலை ஊக்குவிக்கும் முறைகள் யாவை?

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	<p>எ,இரும்புச்சத்து மற்றும் போலிக்</p> <ul style="list-style-type: none"> ஆசிட் அடங்கிய உணவு பொருள்கள் உண்பது அவசியம் <p>பொருளடக்கம்</p>	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
7	3 நிமிடங்கள்	குறைந்த செலவில் கிடைக்கும் இணை உணவைப் பற்றி விவரி	<p>தாய்ப்பால் கொடுப்பதால் ஏற்படும் நன்மைகள்;</p> <ul style="list-style-type: none"> குழந்தையின் வளர்ச்சி மற்றும் ஊட்டச்சத்து நிலையை உணக்குவிக்கிறது குழந்தையின் இறப்பு சதவிகிதத்தை குறைக்கிறது வயிற்றுப்போக்கு மற்றும் நுரையீரல் சார்ந்த நோய்தொற்றுகளை குறைக்கிறது. நாள்பட்ட நோயின் தீவிரத்தை குறைக்கிறது அதிக உடல் எடை மற்றும் உடல் பருமன் ஏற்படுவதைக் குறைக்கிறது. அறிவுத்திறனை அதிகரிக்கிறது. <p>குறைந்த செலவில் கிடைக்கும் இணை உணவுகள்</p> <ul style="list-style-type: none"> ஆறு மாதத்தில் குழந்தைகளுக்கு இணை உணவை அறிமுகப்படுத்துவதின் மூலம் குழந்தையின் வளர்ச்சிக்கு 	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	குறைந்த செலவில் கிடைக்கும் இணை உணவு என்ன?

வ.எண்	கால அளவு	Sசிறப்பு குறிக்கோள்	தேவையான ஊட்டச்சத்தை அளிக்க முடியும். <ul style="list-style-type: none">வீட்டிலேயே சமைத்த உணவுகளையே பொருளடக்கம்	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு															
			<p>இணை உணவாக வழங்க வேண்டும். தளர்நடை பருவ குழந்தைகளுக்கு (1-3) வயது தேவையான கலோரி அளவு 1200 கலோரி, தேவையான புரத அளவு 18 கிராம்.</p> <table><tr><th>உணவு வகைகள்</th><th>உணவு பொருள்கள்</th><th>ஊட்டச்சத்து அதிகம் உள்ள உணவு பொருள்கள்</th></tr><tr><td>தானியங்கள்</td><td>அரிசி மற்றும் அரிசி சார்ந்த பொருள்கள்</td><td>சக்தி</td></tr><tr><td>பயறு வகைகள்</td><td>பச்சை பயறு, உளுந்து</td><td>புரதம் மற்றும் சக்தி</td></tr><tr><td>எண்ணெய் வித்துக்கள்</td><td>தேங்காய் வித்து</td><td>சக்தி,புரதம் மற்றும் தாது உப்புகள்</td></tr><tr><td>கம்பு வகைகள்</td><td>கேழ்வரகு, கம்பு</td><td>தாது உப்புகள்</td></tr></table>	உணவு வகைகள்	உணவு பொருள்கள்	ஊட்டச்சத்து அதிகம் உள்ள உணவு பொருள்கள்	தானியங்கள்	அரிசி மற்றும் அரிசி சார்ந்த பொருள்கள்	சக்தி	பயறு வகைகள்	பச்சை பயறு, உளுந்து	புரதம் மற்றும் சக்தி	எண்ணெய் வித்துக்கள்	தேங்காய் வித்து	சக்தி,புரதம் மற்றும் தாது உப்புகள்	கம்பு வகைகள்	கேழ்வரகு, கம்பு	தாது உப்புகள்				
உணவு வகைகள்	உணவு பொருள்கள்	ஊட்டச்சத்து அதிகம் உள்ள உணவு பொருள்கள்																				
தானியங்கள்	அரிசி மற்றும் அரிசி சார்ந்த பொருள்கள்	சக்தி																				
பயறு வகைகள்	பச்சை பயறு, உளுந்து	புரதம் மற்றும் சக்தி																				
எண்ணெய் வித்துக்கள்	தேங்காய் வித்து	சக்தி,புரதம் மற்றும் தாது உப்புகள்																				
கம்பு வகைகள்	கேழ்வரகு, கம்பு	தாது உப்புகள்																				

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	பச்சைக் காய்கறிகள்	அனைத்து காய்கறிகள்	வைட்டமிங்கள்	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
			பொருளடக்கம்						
8	4 நிமிடங்கள்	குடற்புழு தொற்று ஏற்படுவதை தடுக்கும் வழிமுறைகள் பற்றி வரிசைப்படுத்துக.	குடற்புழு தொற்று ஏற்படுவதை தடுக்கும் வழிமுறைகள்; சுத்தம் என்பது முக்கியமான ஒன்று ஆகும். குழந்தைகளுக்கு தன்சுத்த பழக்க வழக்கங்களை ஊக்குவிப்பதன் மூலம் குடற்புழு தொற்று ஏற்படுவதை தடுக்க முடியும் <ul style="list-style-type: none">• குழந்தைகளை தினமும் சோப்பினை பயன்படுத்தி கைகளை கழுவும் பழக்கத்தை ஊக்குவிக்க வேண்டும்.• குழந்தைகளுக்கு சுத்தமான காய்ச்சிய குடிநீரைப்ருக தர வேண்டும்.• குழந்தைகளின் பொம்மைகளை தினமும் சுத்தம் செய்ய வேண்டும்.• குழந்தைகள் வெளியில் செல்லும் போது காலணி அணிந்து செல்ல ஊக்குவிக்க வேண்டும்.• குழந்தைகளை காய்ந்த இடங்களில் விளையாட அனுமதிக்க வேண்டும்.• குழந்தைகளின் படுக்கை விரிப்புகள், தலையணை விரிப்புகளை அடிக்கடி சுத்தம் செய்ய வேண்டும்.• குழந்தையின் நகங்களை சுத்தமாக			விளக்குதல்	கவனித்தல்	தகவல் அட்டை	குடற்புழு தொற்று ஏற்படாமல் தடுக்கும் வழிமுறைகள் என்ன?

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	<p>வெட்ட வேண்டும்.</p> <ul style="list-style-type: none"> குழந்தைகளின் படுக்கை விரிப்புகள்,தலையணை விரிப்புகளை பொருளடக்கம் 	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
9	3 நிமிடங்கள் 2 நிமிடங்கள்	சரிவிகித உணவைப் பற்றி விவரி.	<p>அடிக்கடி சுத்தம் செய்ய வேண்டும்,குழந்தையின் நகங்களை சுத்தமாக வெட்ட வேண்டும்.</p> <ul style="list-style-type: none"> குழந்தையின் துண்டினை மற்றவருடன் பயன்படுத்த கூடாது. வீட்டினை கிருமி நாசினியை கொண்டு சுத்தம் செய்ய வேண்டும். <p>சரிவிகித உணவு; மனிதன் ஆரோக்கியமான வாழ்க்கையை வாழ்வதற்கு ஊட்டச்சத்து இன்றியமையாதது ஆகும்.உடலுக்கு தேவையான சத்தினை வழங்குவதன் மூலம் உடலின் ஊட்டச்சத்து தேவையை நிவர்த்தி செய்ய முடியும். சரிவிகித உணவு என்பது பலவகையான உணவுப்பொருள்கள் சரியான விகிதத்தில் இருப்பது ஆகும்.உடல் நலத்தை முறையாக பராமரிக்க குறிப்பிட்ட அளவு ஊட்டச்சத்து நிறைந்த உணவுப் பொருள்களை உட்கொள்வதன் மூலம் உடல் நலிவதில் இருந்து குழந்தைகளை காக்கலாம்.</p> <p>மாவுச்சத்து மற்றும் கொழுப்புச்சத்து நிறைந்த உணவுப்பொருள்கள்;முழு தானியங்கள், பயறு வகைகள்,கம்பு,பருப்பு வகைகள், எண்ணெய்</p>	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	சரிவிகித உணவு என்றால் என்ன?

வ.எண்	கால அளவு	சிறப்பு குறிக்கோள்	வித்துகள், கிழங்குகள்,காய்கறிகளிலிருந்து பெறப்படும் எண்ணெய் வகைகள். புரதச்சத்து நிறைந்த உணவுப்பொருள்கள்; பொருளடக்கம்	ஆய்வாளர் செயல்பாடு	கற்பவர்களின் செயல்பாடு	ஒலி ஒளி காட்சி சாதனங்கள்	மதிப்பீடு
10	2 நிமிடங்கள்	ஊட்டச்சத்து குறைப்பாட்டின் பக்கவிளைவுகளை பட்டியலிடுக.	<p>பருப்பு வகைகள்,பால் மற்றும் பால் சார்ந்த பொருள்கள், இறைச்சி மற்றும் மீன். வைட்டமின் மற்றும் தாது உப்புகள் நிறைந்த உணவு பொருள்கள்; பச்சைக் காய்கறிகள், பழங்கள்,முட்டை,பால் மற்றும் பால் சார்ந்த பொருள்கள்.</p> <p>பக்கவிளைவுகள்;</p> <ul style="list-style-type: none"> • சுவாசப்பாதை நோய்தொற்று • வயிற்றுப்பிடிப்பு • காசநோய் • தட்டம்மை • இதய செயலிழப்பு • உணவை உட்கிரகிக்கும் தன்மை குறைவு • மின்பகு பொருள் குறைப்பாடு 	விளக்குதல்	கவனித்தல்	தகவல் அட்டை	ஊட்டச்சத்து குறைபாட்டின் பக்கவிளைவுகள் யாவை?

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முடிவுரை;

நல்ல ஊட்டச்சத்து என்பது குழந்தைகளின் இன்றைய மற்றும் எதிர்கால வளர்ச்சிக்கு இன்றியமையாத ஒன்று ஆகும். குழந்தைப் பருவத்தில் நல்ல ஊட்டச்சத்துள்ள உணவு முறைகள், வாழ்க்கை முறையில் மாற்றங்களை ஊட்டச்சத்து மற்றும் உடல் நலம் பற்றிய நேர்மறையான தாக்கங்களை ஏற்படுத்துவதன் மூலம் தேசத்திற்கான ஒரு முழு மனிதனை உருவாக்க முடியும்.

ஊட்டச்சத்து குறைபாட்டினை
தடுக்கும் முறை பற்றிய தகவல்
அட்டை



ஊட்டச்சத்து குறைபாடு



ஊட்டச்சத்து பற்றாக்குறை

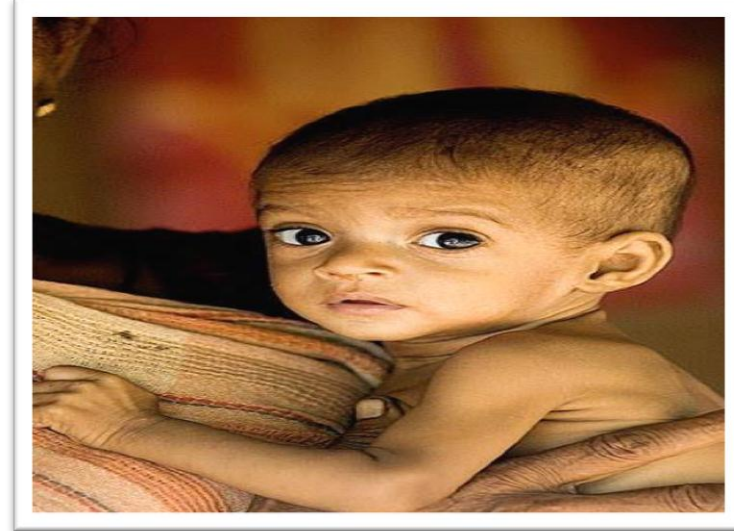


உடல் பருமன்

ஊட்டச்சத்து குறைபாட்டின் வகைகள்



குறுகிய கால ஊட்டச்சத்து குறைபாடு

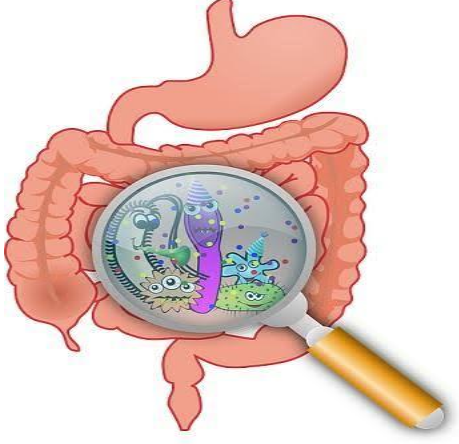


நீடித்த நாள் ஊட்டச்சத்து குறைபாடு



நுண்ணுட்டச்சத்துகுறைபாடு

ஊட்டச்சத்து குறைப்பாட்டிற்கான காரணங்கள்

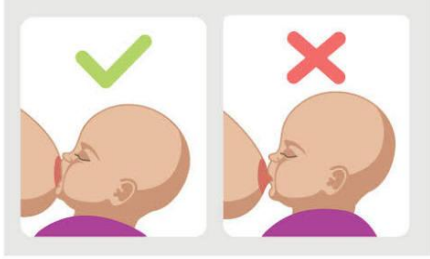


நுண் மற்றும் பெரிய அளவிலான நோய்கள்



குறைவான ஊட்டச்சத்து பொருள்களை

உறிஞ்சும் திறன்



குறைவான அளவு தாய் பால் கொடுத்தல்

சுற்றுப்புற சுகாதாரமின்மை



தீங்கான உணவு பொருள்கள்

கார்ப்ப காலத்தின் போது தேவையான

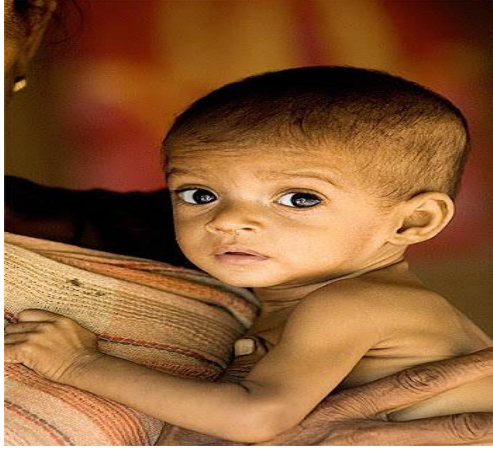
அளவு உணவு உட்கொள்ளாமை



சரிவிகித உணவு உட்கொள்ளாமை



ஊட்டச்சத்து குறைப்பாட்டின் அறிகுறிகள்



வளர்ச்சி குறைபாடு



வறட்சியான சருமம் மற்றும் ரோமம்



ஈறுகளில் இரத்தம் வடிதல்



சோர்வு, மயக்கம்

ஊட்டச்சத்து குறைப்பாட்டினை தடுக்கும் வழிமுறைகள்



சுகாதாரமான நீர்



சுகாதாரமுள்ள உணவு பொருள்கள்



நோய்த்தொற்று வராமல் தடுத்தல்



தாய்பால் கொடுக்க ஊக்கமளித்தல்



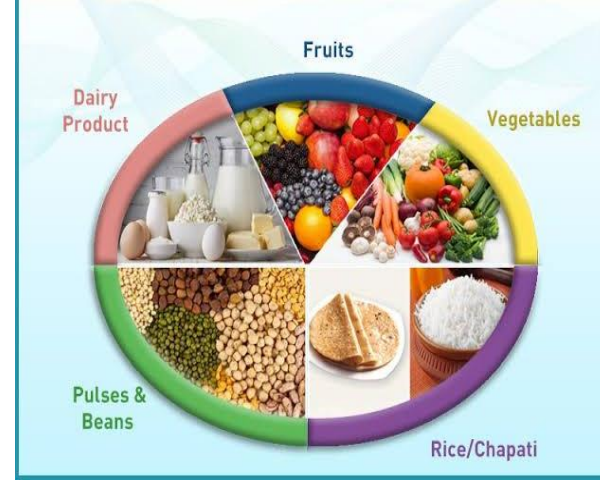
தனசுத்தம் பேணுதல்



தரமானபால்மறக்கடிக்கும் உணவு வகைகள்



உறக்கத்தை ஊக்குவித்தல்



சரிவிகித உணவு

குடற்புழு தொற்று ஏற்படுவதை தடுத்தல்.



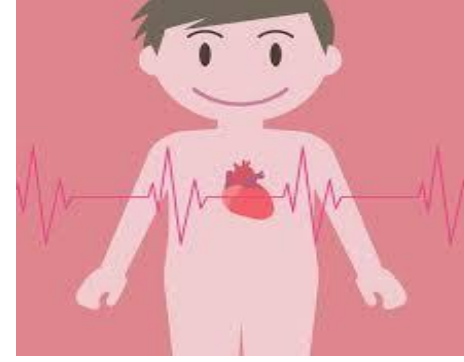
ஊட்டச்சத்து குறைப்பாட்டின் பக்க விளைவுகள்

குருதி சர்க்கரை குறைவு

இதய செயலிழப்பு



இரத்தக்கசிவு



இரத்தசோகை



A

நன்றி





செவிலியர் கல்லூரி,
சென்னை மருத்துவ
கல்லூரி,
சென்னை-600003.



ஊட்டச்சத்து குறைப்பாட்டினை தடுக்கும் முறை
பற்றியவிளக்கக் கையேடு



அ.சந்தியா,
இரண்டாம் ஆண்டு செவிலிய மாணவிமுதுகலை
பட்டப்படிப்பு

ஊட்டச்சத்துக் குறைபாடு

முன்னுரை;

ஊட்டச்சத்து குறைப்பாட்டால் குழந்தைகள் நோய்தொற்றால் பாதிக்கப்படுகின்றனர். ஊட்டச்சத்து குறைப்பாட்டால் குழந்தைகளின் இறப்பு விகிதம் அதிகமாக உள்ளது. இக்குறைப்பாட்டால் குழந்தைகள் போதுமான அளவு மன மற்றும் உடல் வளர்ச்சி அடையாமல் பாதிக்கப்படுகின்றனர். குழந்தை பருவத்தில் ஏற்படும் ஊட்டச்சத்து குறைப்பாட்டால் வளர்ச்சி தடைப்படுகிறது. ஊட்டச்சத்து குறைப்பாட்டை தடுக்கும் வழிமுறைகள் மற்றும் இதர காரணிகளான வயிற்றுபோக்கு, தட்டம்மை மற்ற நோய்தொற்றுகளிலிருந்து பாதுகாப்பதால் குழந்தைகளின் ஊட்டச்சத்து நிலையை ஊக்குவிக்க முடியும். பிரத்யேகமாக முதல் 6 மாதங்கள் தாய்ப்பால் கொடுப்பது மிகவும் முக்கியம். உலகளவில் 54 சதவிகிதம் குழந்தைகள் பாதிக்கப்படுகின்றனர். மற்றொரு அறிக்கையில் உலக சுகாதார நிறுவனத்தின் அறிக்கைப்படி 35% குழந்தைகள் உடல் எடை குறைவான ஊட்டச்சத்து குறைப்பாட்டால் பாதிக்கப்படுகின்றனர்.

வரையறை:

ஊட்டச்சத்துக் குறைபாடு என்பது குறைவான அளவு மற்றும் அளவுக்கு அதிகமான புரதம் மற்றும் கலோரி உள்ள உணவு பொருள்களை உண்ணுவதாலும் ஏற்படுகிறது. ஊட்டச்சத்து குறைபாடு பொதுவாக குறுகிய மற்றும் நீண்ட கால மீளமுடியாத எதிர்மறையான உடல் குறைபாட்டை உண்டாக்குகிறது. ஊட்டச்சத்துக் குறைபாடு இரண்டு வகைப்படும்.

ஊட்டச்சத்து பற்றாக்குறை

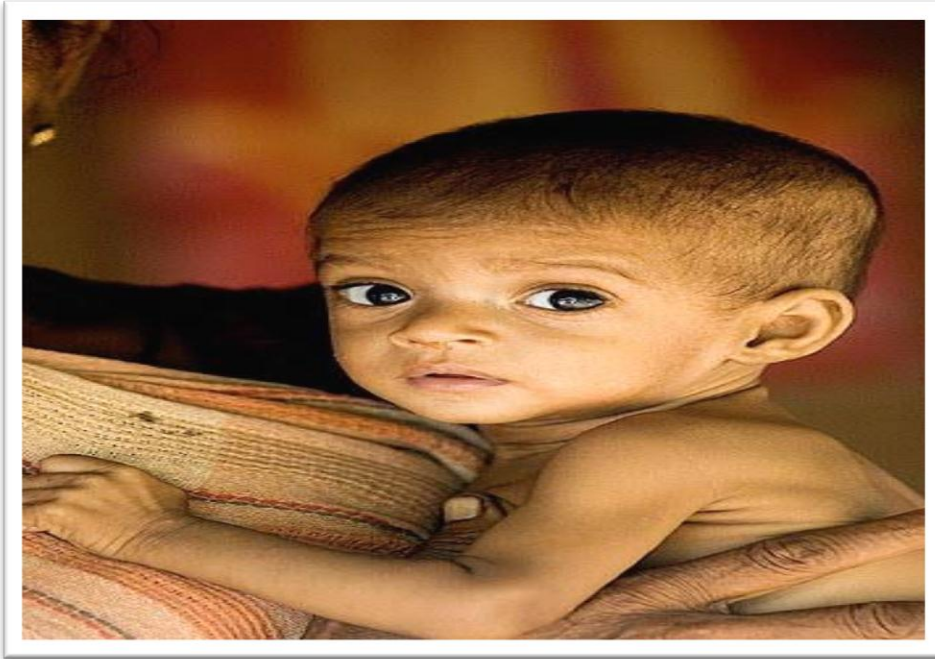
உடல் பருமன்



வகைகள்:குறுகிய கால ஊட்டச்சத்து குறைபாடு என்பது திடீரென ஏற்படும் உடல் எடைக்குறைவு.



நீடித்த நாள் ஊட்டச்சத்து குறைபாடு
ஊட்டச்சத்து குறைபாட்டால் குழந்தைகள் நீண்ட
நாள்களாக பாதிக்கபடுகின்றனர்.



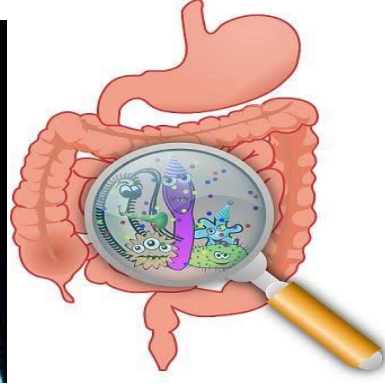
வளர்ச்சி குறைபாடு நுண்ணுட்டச்சத்துகுறைபாடு

நுண்ணுட்டச்சத்து குறைபாடு என்பது வைட்டமின் மற்றும் தாது உப்பு குறைபாட்டால் ஏற்படுகிறது



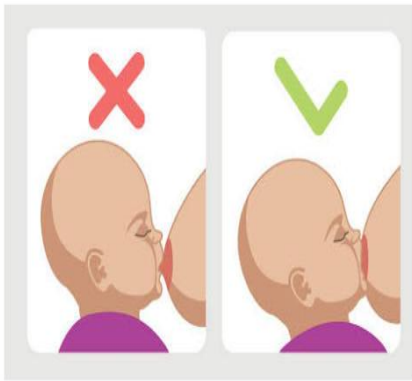
ஊட்டச்சத்து குறைபாட்டிற்கான காரணங்கள்:

குறைவான நுண்மற்றும் பெரிய அளவிலான நோய்கள்,
ஊட்டச்சத்து பொருள்களை உறிஞ்சும் திறன்.



குறைவான அளவு தாய் பால் கொடுத்தல்,
பொருள்கள்,

தீங்கான உணவு



சுற்றுப்புற சுகாதாரமின்மை,
மற்றும்



போதுமான அளவு ஓய்வு

உற்஑்கம்இல்லாமை,வறுமை



தாய்வழி காரணிகள்:

தாய் வயது, தாய்உடல்

அளவு கர்ப்ப காலத்தின் போது தேவையான
உட்கொள்ளாமை

சரிவிகித உணவு

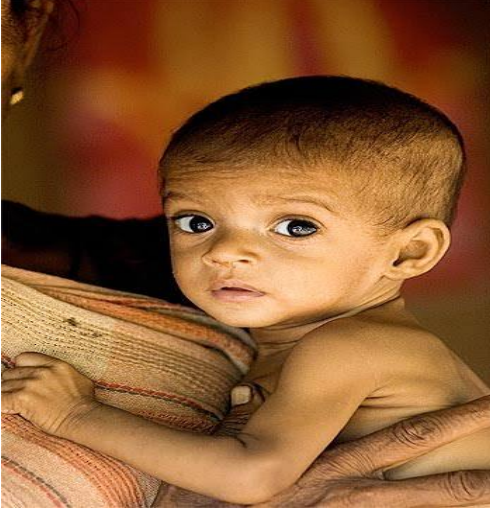
அளவு உணவு உட்கொள்ளாமை.



ஊட்டச்சத்து குறைப்பாட்டிற்கான அறிகுறிகள்:

வளர்ச்சி குறைபாடு

வறட்சியான சருமம்மற்றும் ரோமம்



உடல் எடை இழப்பு



இரத்தசோகை



ஈறுகளில் இரத்தம் வடிதல்



சோர்வு, மயக்கம்



ஊட்டச்சத்து குறைப்பாட்டினை தடுக்கும் வழி முறைகள்: சுகாதாரமுள்ள உணவு பொருள்கள்:

- சுகாதாரமுள்ள உணவு பொருள்களை உண்பதால் குடல் சார்ந்த நோய்கள்மற்றும் நோய்தொற்று ஏற்படுவதை தடுக்கலாம்.
- பச்சை காய்கறிகளை மற்றும்பழங்களை உணவில் சேர்த்துக் கொள்ள வேண்டும்.
- காய்கறிகளை சமைப்பதற்கு முன் நன்கு கழுவ வேண்டும்.
- பாத்திரங்களை சுத்தமாக கழுவ வேண்டும்.



சுகாதாரமான நீர்:

- சுத்தமான நீரை அருந்துவதால் வயிற்றுபோக்கை தவிர்க்கலாம்.
- தண்ணீரை சுத்தமான பாத்திரத்தில் சேகரித்துமூடிவைக்க வேண்டும்.
- காய்ச்சிய நீரை குடிக்க வேண்டும்.
- பாத்திரங்களை சுத்தமாக கழுவ வேண்டும்.
- தண்ணீர் ஆதாரத்தை வாரம் ஒரு முறை சுத்தம் செய்ய வேண்டும்.
- வயிற்றுபோக்கு ஏற்பட முக்கிய காரணம் அசுத்தமான நீர் மற்றும்சுற்றுப்புற சுகாதாரம்.



நோய்த்தொற்று வராமல் தடுத்தல்:

- குழந்தைகளின் கை மற்றும் பொம்மைகளை சுத்தம் செய்ய வேண்டும்.
- தடுப்பூசி போட வேண்டும்.
- அதிக மக்கள் கூட்டம் உள்ள இடங்களை தவிர்க்கவும்.
- மலம் கழித்த பிறகு குழந்தையின் கைகளை சோப்பினை பயன்படுத்தி கழுவ வேண்டும்,சுத்தமாக கை கழுவவில்லையெனில் குழந்தைக்கு வயிற்றுப்போக்கு ஏற்பட வாய்ப்பு உள்ளது.



தன்சுத்தம் பேணுதல்:

- கைகால்களை சுத்தமாக கழுவ வேண்டும்.
- நகங்களை வெட்ட வேண்டும்
- தினமும் குளிக்க வேண்டும்
- சாப்பிடுவதற்கு முன்பும் சாப்பிட்ட பின்பும் கைகளை கழுவ வேண்டும்
- கழிவறை பயன்படுத்திய பின்பு கைகளை கழுவ வேண்டும்
- பாதங்களை சுத்தமாக கழுவ வேண்டும்,வெளியில் செல்லும் போது காலணி அணிந்து செல்ல வேண்டும் குடற்புழு தொற்று ஏற்பட முக்கிய காரணமாக அமைகிறது.



தாய்ப்பால் கொடுக்க ஊக்கமளித்தல்:

- பிறந்த குழந்தைக்கு முதல் ஆறு மாதங்கள் கண்டிப்பாக தாய்ப்பால் கொடுக்க வேண்டும்.

தாய்ப்பால் கொடுத்தலின் பயன்:

- குழந்தையின் வளர்ச்சி மற்றும் ஊட்டச்சத்து நிலையை ஊக்குவிக்கிறது.
- வயிற்றுபோக்குமற்றும் நுரையீரலில் ஏற்படும் நோய்தொற்றிலிருந்து பாதுகாக்கிறது
- குழந்தைகளின் அறிவுத்திறனை அதிகரிக்கிறது
- குழந்தைகளுக்கு நோய் எதிர்ப்பு திறனை அதிகரிக்கிறது.



தரமான பால்மறக்கடிக்கும் உணவு வகைகள்:

தளர்நடைபருவ குழந்தைகளின் எடை (9-13) கிலோ இருக்க வேண்டும் ஒரு நாளைக்கு 1200

கலோரி மற்றும் புரதம் 18 கிராம் தேவைப்படுகிறது.

பால்மறக்கடிக்கும் உணவுகள்:

- அரிசி மாவு
- பார்லி
- பிஸ்கட்
- வேகவைத்த சாதம்
- கோதுமை,
- வாழைப்பழம் மற்றும் முட்டை



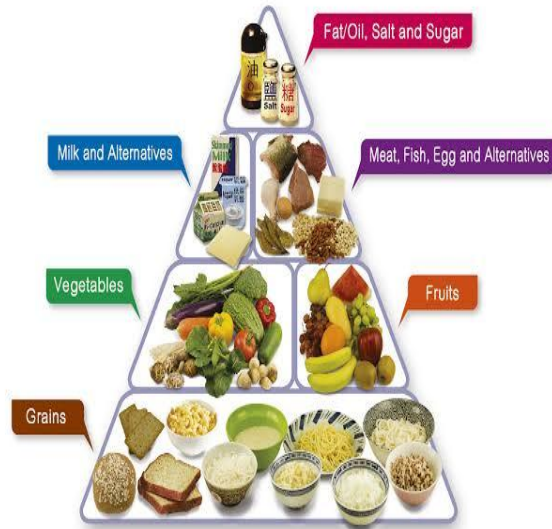
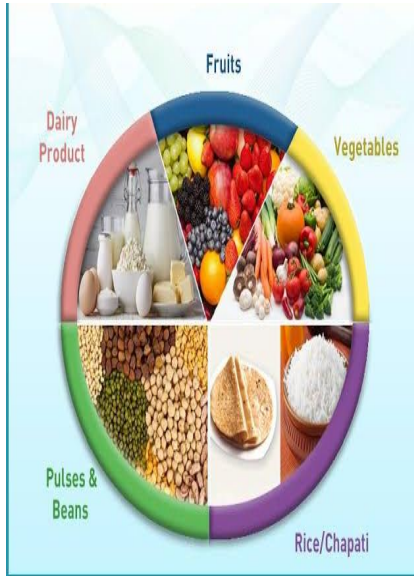
உறக்கத்தை ஊக்குவித்தல்:

- தளர்நடைபருவ குழந்தைக்கு ஒரு நாளைக்கு 12-14 மணி நேரம் உறக்கம் தேவை.



சரிவிகித உணவு :

சரிவிகித உணவு என்பது உணவில் சமமான அளவில் கலோரி, புரதம், நார்ச்சத்து மற்றும் வைட்டமின்கள் சரியான விகிதத்தில் இருப்பது ஆகும்.



குடற்புழு தொற்று ஏற்படுவதை தடுத்தல்.

- குழந்தையின் கைகளை சோப்பினை பயன்படுத்தி கழுவ வேண்டும்,
- தளர்நடைபருவ குழந்தைக்கு ஒரு நாளைக்கு 12-14 மணி நேரம் உறக்கம் தேவை.காய்ச்சிய நீரை குடிக்க வேண்டும்.
- தலையனை உறை மற்றும்படுக்கை விரிப்புகளை அடிக்கடிதுவைக்க வேண்டும்.
- குழந்தையின் பொம்மைகளை சுத்தம் செய்ய வேண்டும்.
- குழந்தைகள் வெளியில் செல்லும் போது காலணி அணிந்து செல்ல வேண்டும்.
- குழந்தைகளை மண்ணில் விளையாட அனுமதிக்காதீர்கள்.



பக்கவிளைவு:

குருதி சர்க்கரை குறைவு



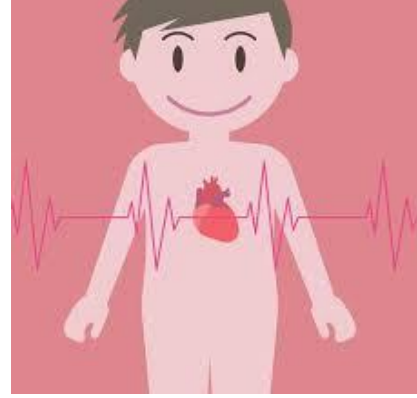
இரத்தக்கசிவு



நடுக்கம்



இதய செயலிழப்பு



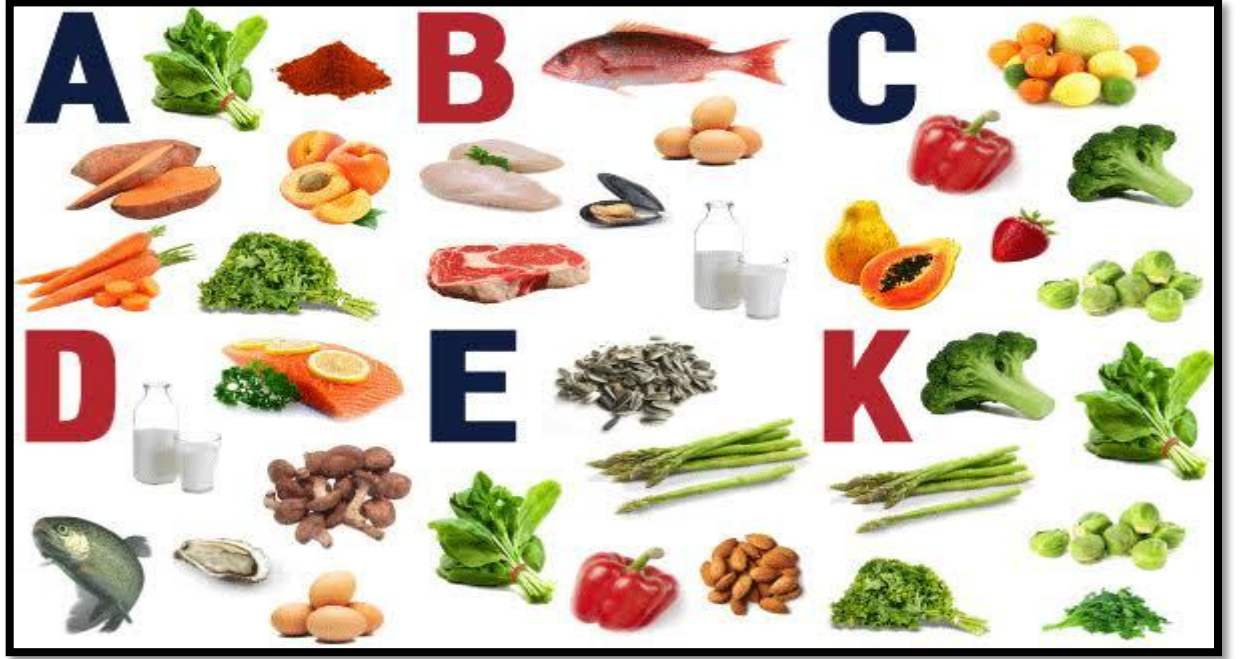
இரத்தசோகை



நுரையீரல் சார்ந்த நோய்கள்



வைட்டமின்கள் நிறைந்துள்ள உணவுப் பொருள்கள்.



புரதச்சத்து நிறைந்துள்ள உணவுப்
பொருள்கள்.



சிறந்த மருந்து உணவு,
உணவே சிறந்த மருந்தாகும்.



நன்றி

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அ.சந்தியா

செவிலியர் முதுகலை பட்டப்படிப்பு இரண்டாம் ஆண்டு

செவிலியர் கல்லூரி

சென்னை மருத்துவ கல்லூரி

சென்னை.







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INTRODUCTION Children are the precious possession of the family, community, and country. A child is precious and beautiful source of joy and happiness, focus of love and care, subject of dreams for the future. Children are the future of society and mothers are the guardian of that future. First and foremost, health, safety and nutrition for the young child is written as the basic needs on behalf of young children everywhere. Ultimately, it is the children who benefit from having parents to understand and know how to protect and promote their safety and well being by knowing regarding nutrition. Nutrition is the source of provision of energy to cells and organisms and the material necessary to support life. Many common health problems can be prevented or... (only first 800 chars shown)



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