

**DISSERTATION
ON
“ASSESS THE EFFECTIVENESS OF MULTIMODAL
INTERVENTION ON COMPREHENSIVE HOME
CARE MANAGEMENT OF PRETERM BABY AMONG
MOTHERS OF PRETERM AT PAEDIATRIC
TERTIARY CARE HOSPITAL, CHENNAI-08.”**

**M.Sc (NURSING) DEGREE EXAMINATION
BRANCH- II CHILD HEALTH NURSING**

**COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE, CHENNAI – 600 003.**



A dissertation submitted to
**THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY,
CHENNAI – 600 032.**

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

OCTOBER 2020

**DISSERTATION
ON
A STUDY TO ASSESS THE EFFECTIVENESS OF
MULTIMODAL INTERVENTION ON
COMPREHENSIVE HOME CARE MANAGEMENT
OF PRETERM BABY AMONG MOTHERS OF
PRETERM AT PEDIATRIC TERTIARY CARE
HOSPITAL, CHENNAI.**

Examination : M.Sc (Nursing) Degree Examination
Examination month and year : October 2020
Branch & Course : II-CHILD HEALTH NURSING
Register No : 301816253
Institution : COLLEGE OF NURSING,
MADRAS MEDICAL COLLEGE,
CHENNAI – 600 003

Sd: _____
Internal Examiner

Sd: _____
External Examiner

Date:

Date:

**THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY,
CHENNAI – 600 032.**

CERTIFICATE

This is to certify that this dissertation titled, “**A STUDY TO ASSESS THE EFFECTIVENESS OF MULTIMODAL INTERVENTION ON COMPREHENSIVE HOME CARE MANAGEMENT OF PRETERM BABY AMONG THE MOTHERS OF PRETERM AT PEDIATRIC TERTIARY CARE HOSPITAL, CHENNAI-08**” is a bonafide work done by **Mrs.RAJESWARI G**, 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. in partial fulfillment of the requirements for award degree of **MASTER OF SCIENCE IN NURSING, BRANCH-II, CHILD HEALTH NURSING** under our guidance and supervision during academic year from 2018-2020.

Mrs.A.Thahira Begum, M.Sc.(N)., MBA.,MPhil.,
Principal,
College of Nursing,
Madras Medical College ,
Chennai- 03.

Dr.E.Theranirajan, MD.,
DCH.,MRCPH(UK),FRCP(UK).
Dean,
Madras Medical College ,
Chennai- 03.

**“A STUDY TO ASSESS THE EFFECTIVENESS OF
MULTIMODAL INTERVENTION ON
COMPREHENSIVE HOME CARE MANAGEMENT
OF PRETERM BABY AMONG THE MOTHERS OF
PRETERM AT PEDIATRIC TERTIARY CARE
HOSPITAL, CHENNAI-08.”**

Approved by the dissertation committee on 12.11.2019

CLINICAL SPECIALITY GUIDE

Mrs.Seetharaman Vijayalakshmi,MSc(N),MBA., _____
Reader,
Department of child Health Nursing,
College of Nursing,
Madras Medical College,
Chennai-600 003.

PRINCIPAL

Mrs.A.Thahira Begum, M.Sc(N), M.B.A., M.Phil., _____
Principal,
College of Nursing,
Madras Medical College,
Chennai -600 003.

DEAN

Dr.E.Theranirajan, MD., DCH.,
MRCPH(UK),FRCP(UK), _____
Dean,
Madras Medical College,
Chennai-03

A Dissertation submitted to
**THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY,
CHENNAI – 600 032.**

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

OCTOBER 2020

ACKNOWLEDGEMENT

“I thank you lord, with all my heart, I sing praise to you before the Gods. I face your holy Temple, bow down, and praise your name because your constant love and faithfulness”.

The satisfaction and pleasure that accompany the successful completion of any task would be incomplete without mentioning the people who it possible, whose constant guidance and encouragement rewards any effort with success. I consider it a privilege to express my gratitude and respect to all those who guided and inspired me in the completion of this project.

I express my sincere gratitude to **Dr.E.Theranirajan, MD,DCH,MRCPCH (UK), FRCH (UK), Dean**, Madras Medical College-03 for his support and providing required facilities for the successful completion of this study.

I wish to express my sincere thanks to **Dr.R.Jayanthi, M.D., FRCP (Glasg), Former Dean**, Madras Medical College, Chennai for providing necessary facilities and extending support to conduct this study.

I extend my sincere thanks and gratitude to **Dr.Ezhilarasi., MD, (DCH).,** Director of Institute of Child Health and Hspital for children. Egmore, Chennai-08. For providing required facilities for the successful completion of this study.

I convey respect and unlimited thanks to **Dr.C.N.Kamalarathnam, MD(pead), DCH, DM,(Neonatology)** Head of the department of Neonatology. Institute of child health, Egmore Chennai-03. For grand permission me to conduct the study and provided necessary support throught my Data collection period.

I express my genuine gratitude to the **Institutional Ethics Committee** of Madras Medical College for giving me an approval to conduct this study.

I immensely owe my gratitude and whole hearted thanks to **Mrs.A.Thahira Begum, M.Sc.(N)., MBA, M.Phil., Principal**, College of Nursing, Madras Medical College, Chennai-3. For her support, constant encouragement and valuable suggestion's helped in the fruitful outcome of this study.

I express sincere grateful thanks to **Mrs.Seetharaman Vijayalakshmi M.Sc (N)., MBA., Reader**, Department of Child Health Nursing, College of Nursing, Madras Medical College, Chennai-3. For their encouragement, valuable suggestions, motivation, support and advice given in this study which helped me to complete the study.

I am extremely grateful to **Dr.Shankar Shanmugam, R.N, M.Sc.(N), Ph.D, MBA,CCHO., Reader in Nursing (Reasearch)**, College of Nursing, Madras Medical College, Chennai-03. For timely assistance in guidance and support in pursuing this study.

I wish to express my sincere thanks to **Mr.A.Senthilkumaran, M.Sc(N)., Lecture**, MR. P. Anbazhgan, MS.c(N), Mrs.K. Rajeswari, M.Sc(N)., and **Mrs.P.Anjali, M.Sc(N)., Nursing Tutors**, Department of Child Health Nursing, College of Nursing, Madras Medical College, Chennai- 03.for their great support, constant motivation and willingness to help all the time for the fruitful outcome of this study.

I express my sense of gratitude to **Dr.G.Mala, M.Sc(N)., Ph.D.,Nursing Tutor (Retd)**, **Mrs.Tamilselvi M.Sc(N)., and Mr.K.Kannan, M.Sc(N).,MBA., Nursing Tutors**, College of Nursing,

Madras Medical College, Chennai-03. For their valuable guidance and abundant support. For completion of this study.

I express my thanks to all the **Faculty of college of Nursing** of the College of Nursing Madras Medical College, Chennai-3 of the support and assistance given by them in all possible manners to complete the study.

I express my thanks to **Dr.R.Sudha, M.sc(N), Ph.D.**, Principal, College of Nursing, M.A. Chidambaram College and **Dr.Nesa Sathya Sai Satchy, M.Sc.(N), Ph.D.**, Apollo college of Nursing, Vanagaram. Chennai. Chennai for validating the tool of this study.

It is my pleasure and privilege to express my deep sense of gratitude to all staff especially staff Nurse **Mrs.Shanthi** in -charge staff in Neonatology, Institute of Child Health, Chennai-8. For the support and encouragement to finish this study.

I have the special word of appreciation to **Mr.A.Venkatesan, M.Sc., MPhil., (Statistics) P.G.D.C.A., Ph.D.**, Lecturer in Statistics, Madras Medical College, Chennai-3. For guiding me in the statistical analysis and interpretation of data.

I extend my thanks to **Mr.Ravi, M.A., MLIS, Librarian**, College of Nursing, Madras Medical College, Chennai-3, for his co-operation and assistance which built the sound knowledge for this study.

I thank **Mr.Jas Ahamed Aslam**, Shajee Computers, Chennai-3 for his help and utilizing patience in printing the manuscript and completing the dissertation work.

I owe my heartfelt gratitude to my Parents **Mr.Ganesan, Mrs.Renukaganesan**, Brother and Sister for their prayer, constant support and ever memorable help throughout this study.

My whole hearted thanks and gratitude to my Husband **Mr.R.Parthasarathy** and my son **P.Hariharan**, and Daughter **P.Shakthi Vaishnavi** and my Mother-in-law **R.Amirtha Gowri** for their constant support and prayer for successful completion of this study.

As a final note, my sincere thanks and gratitude to **All My Department Friends** and **Class Friends** those who directly or indirectly helped in successful completion of this study.

CONTENTS

CHAPTER NO	TITLE	PAGE NO
Chapter-I	INTRODUCTION	
	Need for the study	
	Statement of the problem	
	Objectives	
	Operational Definitions	
	Hypotheses	
	Assumptions	
	Delimitations	
	Conceptual Frame Work	
Chapter-II	REVIEW OF LITERATURE	
	Section –A Literature Review related to Knowledge and Practice of Preterm Care.	
	Section-B Literature Review related to Home Care Aspects of Preterm Care.	
	Section-C Literature Review related to multimodal intervention program	
Chapter-III	METHODOLOGY	
	Research Approach	
	Research Design	
	Setting of the study	
	Population	
	Sample size	
	Sampling Technique	
	Criteria for sample selection	

CHAPTER NO	TITLE	PAGE NO
	Schematic representation of research study	
	Description of the Instruments Section-1 Deals with socio- demographic variables Section-2 Consists of questionnaire	
	Score interpretation	
	Content Validity	
	Reliability of Tools	
	Pilot study	
	Data collection procedure	
	Ethical Consideration	
	Plan for data analysis Descriptive statics Inferential statistics	
Chapter- IV	ANALYSIS AND INTERPRETATION OF DATA	
Chapter- V	DISCUSSION	
Chapter -VI	SUMMARY AND RECOMMENDATIONS	
	Major finding of the study	
	Implications to Nursing	
	Nursing Education	
	Nursing Practice	
	Nursing Administration	
	Nursing Research	
	Recommendations	
	Conclusion	
	BIBLIOGRAPHY	

LIST OF TABLES

SI.NO	PARTICULARS
1.1	Preterm statistics according to the WHO (2019) in India
1.2.	Ratio of preterm birth at Global level, National level, state level (2018)
3.1	score interpretation
3.2	Intervention Protocol
4.1	Mothers demographic variables
4.2	Child's demographic variables
4.3.1	Each Domain wise pretest percentage of knowledge
4.3.2	Pretest level of knowledge
4.3.3	Pretest level of knowledge score Interpretation
4.4.1	Each statement pretest level of practice score on home care management
4.4.2	overall pretest practice score
4.4.3	Pretest level of practice checklist score
4.4.4	Practice score Interpretation
4.5.1	Each Domainwise Mothers Posttest Percentage Of Knowledge On Home Care Management Of Preterm Babies
4.5.2	Overall Posttest level of knowledge score
4.5.3	Posttest level of knowledge
4.6.1.	Each Statement Mothers Posttest Percentage Of Practice On Home Care Management Of Preterm Babies
4.6.2	Overall Posttest level of practice score
4.6.3	Posttest level of practice checklist score
4.7.1	Comparison of pretest and posttest knowledge score
4.7.2	Comparison Of Overall Knowledge Score Before And After

SI.NO	PARTICULARS
	Multimodal Intervention
4.8	Each domain wise pretest and posttest percentage of knowledge
4.9	Comparison of pretest and posttest level of knowledge score
4.10	Effectiveness of multimodal intervention and generalized of knowledge gain score
4.11	Comparison of overall practice score before and after multimodal intervention
4.12	Each domain wise pretest and posttest percentage of practice
4.13	Comparison of pretest and posttest level of practice score
4.14	Effectiveness of multimodal intervention and generalization of practice gain score
4.15	Association between mothers posttest level of knowledge score and their demographic variables
4.16	Association between mothers posttest level of knowledge and their clinical variables
4.17	Asssocation between mothers posttest level of knowledge level of practice score and their demographic variables
4.18	Association between mothers posttest level of practice and their clinical variables

LIST OF FIGURES

SI NO	PARTICULARS
1.1	Role of pediatric nurse
1.2	System theory modal
1.3	Conceptual frame work
3.1	Schematic representation of the study
4.1	Percentage distribution of mothers according to their age
4.2	Percentage distribution of educational status of the mother according to their grade
4.3	Percentage distribution of occupational status of the mother
4.4	Percentage distribution of religious status of mother
4.5	Percentage distribution of mother monthly income
4.6	Percentage distribution of type of family
4.7	Percentage distribution of mother's area of residence
4.8	Percentage distribution of health issues of mother
4.9	Percentage distribution of sex of the baby
4.10	Percentage distribution of age of the child
4.11	Percentage distribution of birth order of the child
4.12	Percentage distribution of mode of delivery of baby
4.13	Percentage distribution of pretest level of knowledge on home care of preterm baby
4.14	Percentage distribution of mother's pretest level of practice
4.15	Percentage distribution of mother's post level of knowledge score
4.16	Percentage distribution of mother's posttest level of practice score

SI NO	PARTICULARS
1.1	Role of pediatric nurse
4.17	Simple bar with 2 standard error diagram compares the mothers pretest and posttest knowledge score
4.18	Percentage distribution of pre and posttest level of knowledge among the mother's preterm
4.19	Simple bar with 2 standard error diagram compares the mother's pretest and posttest score
4.20	Percentage distribution of association between posttest level of practice score with mothers age
4.21	Percentage distribution of association f posttest level of practice score with mother's educational status
4.22	Percentage distribution of association between mother's posttest level of practice score and type of family
4.23	Percentage distribution between posttest level of practice score and age of the child
4.24	Percentage distribution of association between posttest level of practice score and gestational weeks

APPENDICES

Appendix I	Certificate for approval by institutional Ethics committee
Appendix II	Letter seeking permission to conduct the study
Appendix III	Content validity certificate-I
Appendix IV	Content validity certificate-II
Appendix V	Informed consent form
Appendix VI	Certificate for Tamil and English Editing
Appendix VII	Tools for data collection in English
Appendix VIII	Tools for data collection in Tamil
Appendix VIII	Practicing checklist
Appendix IX	Lesson plan in English
Appendix X	Lesson plan in Tamil
Appendix XI	Booklet in Tamil and English
Appendix XII	Photographs

ABBREVIATIONS

ANCOVA	Analysis of Co Variance
CI	Class Interval
CNS	Central Nervous System
DNA	De-oxyribo Nucleic Acid
EBM	Expressed Breast Milk
HB	Hepatitis B vaccine
IMR	Infant Mortality Rate
ICH	Institute of Child Health
LBW	Low Birth Weight
KMC	Kangaroo Mother Care
NICU	Neonatal Intensive Care Unit
NMR	Neonatal Mortality Rate
NPI	Neonatal Perception Index
PSS	Parental Perception Scale
ROP	Retinopathy Of Prematurity
SD	Standard Deviation
SPSS	Statistical Product and Services Solutions
WHO	World Health Organizations

ABSTRACT

INTRODUCTION

Prematurity as defined as babies born before 37 weeks of gestation. Since offers less time of growth and development in the uterus of mother. The aim of the study to evaluate the effectiveness of multimodal intervention on comprehensive home care management of preterm baby.

OBJECTIVES

To assess the pretest and posttest knowledge and practice regarding care of preterm babies among the mothers of preterm, to evaluate the effectiveness of multimodal intervention program on management of preterm baby, to find out the association between the posttest knowledge and practice scores of mothers and child with socio-demographic variables.

METHODOLOGY

A quantitative research approach with quasi experimental study with one group pre and posttest design was undertaken on 60 mothers of preterm newborn at Institute of Child Health and hospital for children, Egmore, Chennai. The samples were selected by purposive sampling technique. Data were collected by the use of semi-structured questionnaire and checklist used for assess the knowledge and practice of multimodal intervention program. Posttest done with same questionnaire. Data were analyzed by using descriptive and inferential statistics.

RESULTS

Findings revealed that the overall mean score in the pretest was (7.90±2.03) which is 52.67% of the total score revealing that the

mothers had poor knowledge and practice regarding comprehensive home care preterm newborn whereas the overall posttest knowledge and practice score was (12.15 ± 1.23) which is 81.00% of the total score revealing excellent score. Highly significant difference was found between pre and posttest knowledge scores. Statistical analysis of data revealed that Multimodal intervention program was effective in improving knowledge of the mother regarding comprehensive home care of preterm newborn.

CONCLUSION

Maternal knowledge and practice regarding home care management of preterm was low before enrolment, but after initiation mothers were happily practicing in care of preterm with assurance to continue same from home.

CHAPTER-1 INTRODUCTION

“The most beautiful necklace a mother can wear is not Gold or gemstones but her child’s arms around her neck”.

–George Herbert

“If we are to teach real peace in the world, and if we are carry on a real war against war, we shall have to begin with children.

- Mahatma Gandhi

A Neonate is the God’s divine gift to a mother. Hence the birth of a neonate is one of the most awe inspiring and marvelous and joyful events that occur in every woman’s life time. The cry of neonate is the only means of communication and brings a message that “I need care”. This also aims at keeping the newborn safe from the environmental and practical harms.

The newborn baby is an amazing gift of nature, the consequence of 40 weeks of life in humid, comfortable and liquefied intra-uterine environment. After its birth the extra uterine life presents a challenge to the newborn baby, because the newborn baby undergoes a conventional sequence of events to become accustomed to the extra uterine life. However, they remain at risk to airway obstacle, hypothermia and infection. When the baby is born much in advance than expected and when it is very little and weak, the challenges to regulate the extra-uterine life is greater than for normal babies. In general, the nearer they are to the normal term newborn term newborn in gestational age and birth weight, the easier will be their regulations to the external environment. The degree of risk depends principally on their level of ripeness. So the gestational age of a baby is the single most significant determinant of its probability of survival.

Preterm children are born too early. According to health care professional preterm is defined as babies who are not in mother uterus for full term of 38-42 weeks and also those births less than the 37 week if pregnancy are called premature birth and such a baby is considered preterm.

Ghai (2004) stated that newborn period encompasses that first four weeks of extrauterine life. It is an important link in the chain of events from conception to adulthood. The physical and mental wellbeing of an individual depends on the current management of events in the perinatal period. The morbidity and mortality rates in newborn infants are high. In India almost 7 out of 100 babies do not see their first birthday and nearly 65% of these infant deaths occur in the neonatal period namely, the first 4 weeks of life. Low birth weight is the most important determinant of neonatal deaths occurring among low birth weight infants.

These preterm babies are classified into four subtypes according to weeks of pregnancy.

1. **Late preterm babies**-delivered amongst between 34 and 36 weeks.
2. **Moderately preterm babies**- delivered amongst between 32-34 weeks.
3. **Very preterm babies**-delivered amongst lesser than 28-32 weeks.
4. **Extremely preterm babies**-delivered earlier than 28 weeks.

Maximum preterm babies born in the period of late preterm.

The causes for preterm deliveries include diabetes, hypertension, maternal stress and infection. Influences such as improper pregnancy preparation, early or late pregnancies ending in premature deliveries. Dissimilar pregnancy-related difficulties upsurge the danger of

premature deliveries with the feature of undermined cervix which opens before time, uterine delivery imperfections, premature births in past times. Infectivity of genitourinary tract of infectivity of membranes carrying amniotic fluid in mother's womb, pregnant mother malnourishment in the antenatal or post natal pregnancy, induced hypertension and albuminuria which progress after the month of 5th month of antenatal period and early membranes separation. The additional influences below that enhance the threat for premature labor consists of early prime gravid below sixteen years and elderly multigravida of more than thirty five year racial predominance of the United states of American blacks, absence of care in pregnancy, poor's with lower education, lesser income with profile jobs and consumption of tobacco products, usage of narcotics or CNS stimulants dependence drugs.

The characterizes feature of preterm neonates are small size with excessively large head, shriller looking, less plump appearance because of absence of adipose tissues, lanugo wrapped on more parts of body surface, hypothermia due to deficiency of deposited fat in the body, strenuous tachypnea, feeding complications due to absence of sucking reflex, enlarged clitoris in female neonates, neuromuscular tone not as good as term babies and fewer movement than forty weeks normal newborn, in male neonates soft undersized scrotum with absence of ridges and congenital absence of descend in testes, lenient stretchable ear cartilage and slender, soft, glossy skin with visible vein below skin.

. **American Nursing: an Introduction study** implies that Neonatal Intensive care available for babies in almost every area of the country. Specialist and subspecialist pediatricians, pediatric nurses, respiratory therapists, social workers, physical and occupational therapist, nutritionists, and a host of others respond to the needs of babies and the demands of their parents. During twenty first century,

initially the research and innovation continue to transform the lives of these babies, giving many more of them the potential for healthy, long, and possibly even notable lives.

Young-Mee Ahn, Nam-Hee Kim (2007) conducted a comparative analysis between the perception of parents with premature infants in NICU and parents with full-term newborns, and in the process to evaluate the effects of NICU educational support on parents. A quantitative design was employed to compare parental perception of neonates using the Neonatal perception Index. Results showed the lowest NPI score among full term and NICU parents. However, no difference in direction of NPI scores was observed. NICU education improved NPI and decreases PSS in fathers but not in mothers.

Mothers as the principal care-givers, may suffer from culturally-grounded, psychoemotional disturbances after giving birth to a preterm infant, the quality of Information, education, and communication through multimodal intervention program enhances parental role and decrease parenteral stress.

Pediatric Nurses play a pivotal and varies role in many developing countries healthcare facilities, including providing parental education and ongoing newborn care. Most notably, it is nurses who are providing skilled attendance during birth, performing newborn care, stabilization of at-risk and sick newborn. In addition, nurses provide counseling to mothers about care of preterm babies at home.

WHO recommendations on interventions to improve preterm birth outcomes provide specific recommendations for example Thermal care, (e.g. Kangaroo Mother Care), Feeding support, hygienic cord and skin care, and early detection and treatment of infections and complications.

SOME OF THE MOST FAMOUS NAMES OF PRETERM BABIES

Albert Einstein (1875-1955) - Theoretical physics' German

Isaac Newton (1643-1727)- English mathematician.

Winston Churchill (1877-1965)-British politician-UK.

Sidney Poiter (Bahamian American actor and film director) US.

Anna Pavlova (principal artist of the imperial Russian ballet).

Table No. 1.1: Preterm statistics according to the WHO (2019) in India

YEAR	IMR	MMR
2015-2016	33	163
2016-2017	23	118
2017-2018	24	147
2018-2019	22	137

NEED FOR THE STUDY

7th November is observed as world prematurity day. It is time to rethink and raise awareness for the challenges of preterm birth.

Preterm birth, defined as childbirth occurring at less than 37 weeks completed weeks or 259 days of gestation, is a chief contributing factor of neonatal mortality and morbidity and has long-term adverse significances for health. Compared to normal full term neonates, the preterm neonates expend a huge energy expenditure to maintain normal equilibrium of all the system frequently in less than ideal circumstances because preterm babies have a greater chance of getting respiratory distress, cerebral palsy, dyslexia, and sensory deficits

equated with the babies born at full term. The diseased pattern with preemies frequently goes to future life, causing in huge bodily, mental and financial costs.

The rate of premature birth about the world is increasing fast. Prematurity contributes to 28% of all preterm neonate death in the first week of life though most of the early preemies mortality is due to congenital malformations. In developing countries preterm deliveries are very common compared to 5% to 7% in developed countries. These due to prematurity were tend to increasing in developing countries nowadays resulting in the major foundation of neonatal mortality and the second frequent cause of mortality in children under the age of five. More or less 13 million premature neonates are born worldwide. Nearly 11 million of these premature neonates are born in Africa and Asia, where numerous neonates do not have admittance to valuable care.

ACCORDING TO WHO

- ❖ Every year, an estimated 15 million babies are born preterm (37 completed weeks of gestation), and this number is rising.
- ❖ Preterm birth complications are the leading cause of death among children under 5 years of age, responsible for approximately 1 million deaths in 2015
- ❖ Three-quarters of these deaths could be prevented with current, cost-effective interventions.
- ❖ Across 184 countries, the rate of preterm birth ranges from 5% to 18% of babies born.

More than three quarters of premature babies can be saves with feasible, cost-effective care, such as essential care during child birth and in the postnatal periods for every mother and baby, provision of

antenatal steroid injections (given to pregnant women at risk of preterm labour and under set criteria to strengthen the baby’s lungs), kangaroo mother care (the baby is placed on the mother’s chest with skin-to-skin contact and frequent breastfeeding) and antibiotics to treat newborn infections. For example, continuity of midwifery-led care in settings where there are effective midwifery services has been shown to reduce the risk of prematurity by around 24%.

Table No.1.2: Ratio of preterm birth at Global level, National level, state level (2018)

Category	Global level	National level	State level
Preterm birth	87/1000 live birth	34/1000 live birth	17/1000 live birth

WHO (2019) has developed new guidelines with recommendations for improving outcomes of preterm birth. This set of key interventions can improve the chances of survival and health outcomes for preterm infants. The guidelines emphasis interventions provided to the mother-for example steroid injections before birth, antibiotics when her water breaks before the onset of labour, and magnesium sulfate to prevent neurological impairment of the child in future- as well as interventions for the newborn baby- for example thermal care, feeding support, kangaroo mother care, safe oxygen use, and other treatments to help babies breathe more easily.

In 2019, WHO and UNICEF published survive and thrive: transforming care for every small and sick newborn. This report highlights how countries can strengthen care to support babies born too soon, including through increased investment, round the clock care for newborns and better partnership with families.

Marly Veroneza et al.,(2017), conducted a descriptive, exploratory, and qualitative study, using the methodological framework of convergent care research, with seven mothers of premature babies admitted to a hospital in southern Brazil. Analysis resulted in three categories portraying the path and the adaptation process of the mothers to the care of their premature babies, from preparation for discharge to overcoming her fears and insecurities concerning home. It is important for mothers in this initial and critical stage of hospitalization of preterm infants to receive assistance, especially in terms of receptiveness and ongoing care, as a strategy to promote maternal autonomy and home.

Hence the researcher to this study is to create awareness among mothers and enhance their knowledge, attitude and skill in rendering comprehensive home care management of preterm baby in home setting.

ROLE OF PEDIATRIC NURSE

The role of pediatric nurse is constantly changing. These changes are a result of expanding medical and nursing practices, emerging practices, emerging challenges in different aspects of child care, consumer demands and technological advancements. The pediatric nurse is responsible for promoting the health and well being of the child and family. Both **caring** and **curing**.

Caring is a continuous process in both wellness and illness. It refers helping, guiding, and counseling. **Curing** refers to the act of diagnosis and management usually during illness.



Fig-1:1: Role of Paediatric Nurse

STATEMENT OF THE PROBLEM

A study to assess the effectiveness multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm at pediatric tertiary care hospital, Chennai.

OBJECTIVES

1. To assess the pretest knowledge and practice regarding care of preterm babies among the mothers of preterm.
2. To assess the posttest knowledge and practice regarding care of preterm babies among the mothers of preterm.
3. To evaluate the effectiveness of multimodal intervention on management of preterm baby.
4. To find out the association between the posttest knowledge and practice scores of mothers with socio-demographic variables.

OPERATIONAL DEFINITIONS

Assess

It refers to evaluate the effectiveness of home care of preterm babies among mothers of preterm.

Effectiveness

In this study it refers to the outcome of home care management of preterm babies.

Multimodal Intervention

In this study it refers to combined activities of health teaching refers to care of preterm, 1. Demonstration of techniques of Kangaroo mother care, eye care and umbilical cord care. 2. Flash card regarding techniques of breast feeding and 3. Booklet contains comprehensive home care management of preterm baby.

Comprehensive Home Care Management

It consists of about preterm, thermoregulation, technique of breast feeding, eye care, umbilical cord care, skin care, elimination care, immunization and follow-up of preterm babies.

Preterm Babies

It refers to preterm babies born before 37 weeks of gestational age who were admitted in NICU in ICH at Egmore, Chennai 08.

NICU (Neonatal Intensive Care Unit)

It is one of the units giving specialized care to Newborn babies at ICH at Egmore, Chennai-08.

HYPOTHESES

H1- There is significant difference between pretest and posttest knowledge and practice of mothers regarding home care management of preterm baby.

H2- There is significant association between the pretest and posttest knowledge and practice of preterm mothers regarding home care management of preterm baby.

ASSUMPTIONS

1. The preterm mother has significant knowledge and practice regarding home management of care preterm baby.
2. Adequate knowledge on preterm care may reduce the mortality and morbidity rate of preterm babies

DELIMITATIONS

Following limitations are set for the study

1. This study is limited to mothers of preterm babies.
2. The mothers available during the study period.
3. Mothers willing to participate in the study.
4. They could understand, read and speak Tamil and English.
5. This study is limited to Institute of child health and hospital for children, Egmore, Chennai-08.
6. Data collections is limited for the duration of 4 weeks.

CONCEPTUAL FRAME WORK

The conceptual frame work based on the Ludwig von Bertalanffy's General system of theory of law.

Ludwig von Bertalanffy's General System Theory (1968) is known in various areas of in health care sciences, such as health care practices and in nursing. Bertalanffy's General Systems theory provides new development and foundations. This means that in modern health care delivery, new theories can be introduced to form modern approaches to improve the general system through better information, communication and feedback. However, the theory acknowledges the challenges that may come along with the implementation of new general models. In this study multimodal intervention like booklet, flash card, and demonstration was applied to teach the mothers of preterm babies regarding preterm care.

Currently nurses rely on models and theories that have been applied by other specialists in governing nursing practices within the unit of a family.

General system theory of system would be a useful tool providing, on the one hand, models that can be used in, and transferred to, different fields, and safeguarding, on the other hand, from vague analogies which often have marred the progress in these fields.

Von Bertalanffy's explained that any system has 4 major aspect.

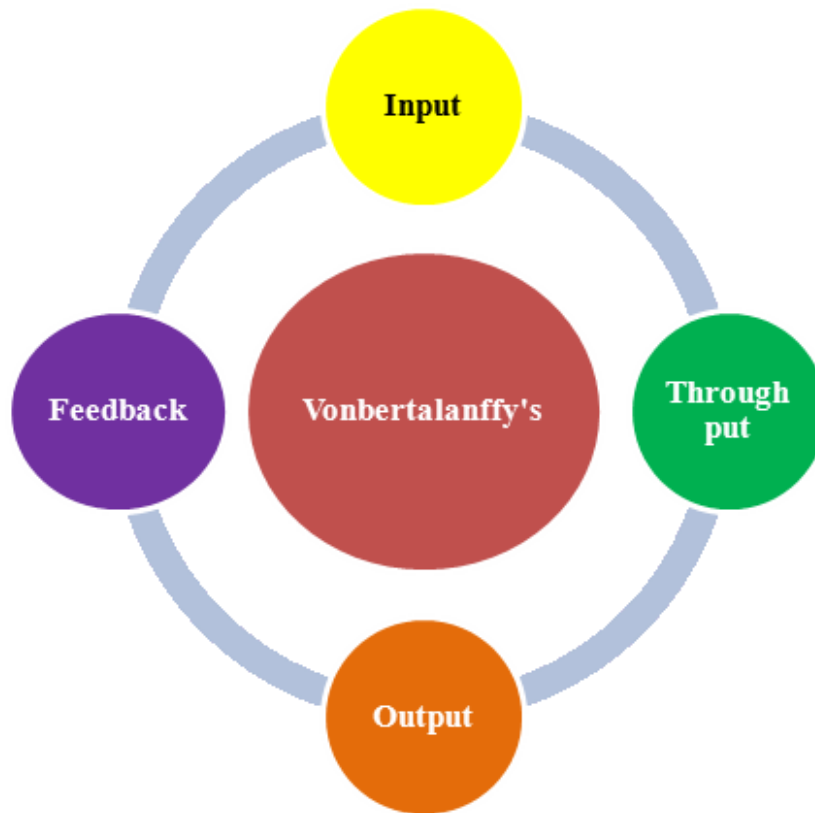


Fig 1.2: General System Theory Modal

INPUT

It is the type of information, the input is the assessment of existing level of knowledge regarding preterm care among mothers like thermoregulation, breastfeeding, eye care, umbilical cord care, skin care, elimination care, immunization and follow up care etc.,

1. Preterm care
2. Thermoregulation (KMC)
3. Assisst in Breast feeding
4. Eye care
5. Umbilical cord care
6. Skin care

7. Elimination care
8. Immunization.
9. Follow up care.

THROUGHPUT

Throughput it is the operation phase or manipulation and activity phase. It is the process that allows the input to be changed in the study through is the multimodal intervention programme/lecture cum demonstration regarding preterm care of the mother.

OUTPUT

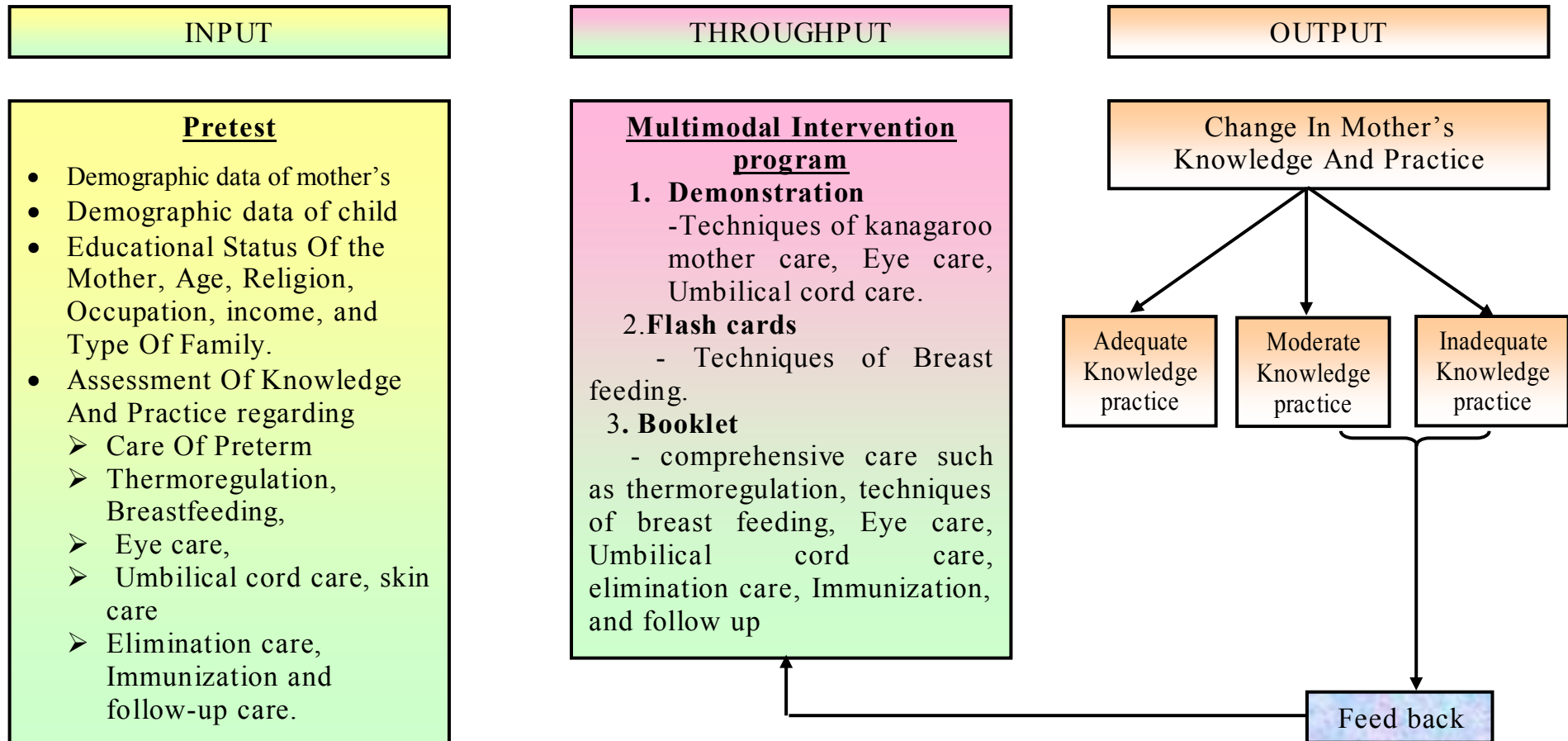
It is any information that leaves the system and extends the environmental through system boundaries. It is level of knowledge either Knowledge after teaching programed..



FEEDBACK

It is the process by which information is received from each of the level of the system. Which is feedback into the input to guide evaluation. This will give allow to either increase or restrict its input, of the output, the evaluation done by the same questionnaire and the result is indicates the need for follow up care in home set up. Feedback strengthen the input.

CONCEPTUAL FRAME WORK OF GENERAL SYSTEM THEORY LUDWIG VAN BERTALAFFY'S- 1968



CHAPTER-II REVIEW OF LITERATURE

Review of literature is traditionally understood as a systematic and critical view of most important scholarly literature on the particular topic. Review of literature is defined as a broad, systematic, comprehensive, in-depth and critical review of scholarly publications, unpublished scholarly printed materials, audiovisual materials and personal communications.

The chapter reveals the literature review that provides foundation on which new evidence is added and usually conducted before the data are collected. Researcher generally undertakes a literature review to familiarize the topic under study using various factors. The factors influencing the study it is presented under the following headings.

Section–A Review of literature related to Knowledge and Practice regarding care of preterm baby.

Section-B Review of literature related to Home Care aspects of preterm baby.

Section –C Review of literature related to effectiveness of multimodal intervention program.

SECTION -A

A Review of literature related to Knowledge and Practice regarding care of preterm baby.

SECTION-B

- ❖ Literature review related to thermoregulation of preterm baby.
- ❖ Literature review related to breast feeding of preterm babies

- ❖ Literature review related to umbilical cord care of preterm baby.
- ❖ Literature review related to preterm baby eye care.
- ❖ Literature review related to immunizations of preterm baby.
- ❖ Literature review related to preterm follow up care.

LITERATURE RELATED TO KNOWLEDGE AND PRACTICE IN CARE OF PRETERM BABIES

Alberta Yemotoo Lomotey et al., (2019) conducted the study to experience of mothers with preterm babies at a mother and baby unit a descriptive phenomenological study to describe the lived experiences of mothers with preterm babies at a mother and baby unit of a tertiary hospital ten mothers were purposively sampled. To describe their experience of had preterm babies. Recorded in-depth individual interview were transcribed verbatim; codes were generated and inductively organized into the themes. four themes were actively generated: 'Emotional experience of mothers. 'Mother –baby interaction, 'perception on care and support' and 'Challenges within Mother and baby unit environment. Mothers anxious about the premature delivery and were afraid of possible infant death. They cherished interaction with their babies during kangaroo mother care and breast feeding. mother applauded the nurses for their professional competence.

Alda Ravarian et al., (2019) studied to determine factors influencing the numbers of times neonate intensive care unit admitted preterm infants attend neonatal follow-up and early intervention service during first year of life. A parent report questionnaire was administered via phone after the first birthday of preterm infants. Number of attending times to service recorded. Another questionnaire advised the cause of not attending the NFEI services. This study has defined some predictors of poor follow up and early intervention service utilizations

in a high risk group of infants suggested addressing and tacking by policy makers.

Ali aldiraei et.al (2019) studied aim to evaluate mothers knowledge of caring for premature infants post discharge from NICU it is quantitative based cross sectional design study was used to survey 120 mothers of preterm neonates at the time of discharge by face to face interview. The result showed that only about 58.4% of mothers of premature babies had good knowledge about health care needs for premature infants. There was no statistically significant different between the level of knowledge and mothers socio demographic characterists the study emphasis the necessity of thoughtful exchange of health information between team members and mother and establishing pre and post discharge plans with mothers to star their healthy transition of preterm neonatal to home and to ameliorate family concerns.

Julia petty et al., (2019) conducted the study to aim explore the existing knowledge base learning needs of community health professionals to further understand how they can adequately support parents in the community with premature babies. A aimed method approach was used comprising a questionnaire, semi structured interviews and secondary data analysis. Thematic analysis revealed important insight into the knowledge and learning needs necessary to support parents of premature babies in the community. Three main themes emerged to development of prior knowledge; the important of practice based learning; learning and training needs. The results showed that tailored resources for community based health professionals on the specific needs of the premature baby would enhance provisions of optimal support for parents.

Ratesh kumar shah et al., (2018) conducted the study was to find out knowledge, attitudes and practice of kangaroo mother care among

health worker. This cross sectional study carries out in their teaching hospitals the result showed response rate of the nurses who participated in the survey was 65%. All of the doctors and 95.3% of the nurses who participated in the survey had knowledge about KMC 37.7% of the doctors and 48.8% of the nurses thought that this method's only use for neonates with LBW three fourth of the doctors and half of the nurses agreed that KMC is practiced regularly in their ward 22% participated not practicing KMC regularly could be lack of knowledge general knowledge and attitudes of majority of doctors and nurses towards KMC was good, however its practices.

Shada Numayan albishryet al., (2018) studies to evaluate the effectiveness of kangaroo mother care on premature health progressions in the neonatal care unit a quasi-experimental design to chosen using data collected via the kangaroo mother care assessment flow sheet a convenient sample of thirty premature neonates was fulfilled inclusion criteria. The study result showed that the survival rate of study group is very high and after KMC was noted, no statistical difference before and after KMC but the data showed that the health status of neonates was stabilized, also findings showed that weight gain increases from 1.36kg in the first attempt to 1.48kg in fifth attempt. KMC maintains all premature neonatal length of stay in current study was high compared to other global studies. There is a necessity to implement KMC at all Ministry of health hospitals to develop a protocols and guidelines for implementation of KMC.

Lavanya Subhashini et al., (2016), a study to assess mother perception of health care needs of preterm neonates in intensive care unit. Thirty mothers whose preterm child was being provided care in NICU were studies an interview questionnaire tool was mothers of critical new born child in intensive care units are anxious for information about the child condition provision of appropriate and

adequate information and counseling to mothers are essential for quality preterm care.

Margaret ontita et al., (2016) studied to assess knowledge and practice recommended for care of preterm baby birth weight and preterm in Kenya National hospital, at Nairobi. A prospective cohort study structure questionnaire, key informant interview and observational checklist were used to collect data. The result showed that knowledge on thermoregulation was insufficient with 52.9% reporting that they had not been counseled on KMC and 54% of mothers on ensuring their infant were in a warm room. Majority on KMC and 94.1% lacked knowledge that pre-lacteal feeds are detriment to the infant. A weak association excised between gestational and maternal knowledge.

Priyanka bsansal,merlin james (2016) studied a to assess the knowledge of postnatal regarding essential care to develop to disseminate an information guidelines on the same. A questionnaire non experimental approach with a descriptive design was adopted the tool was structured interview schedule. The study findings revealed that majority 68% of the postnatal mothers had average knowledge scores whereas rest 20% of the subject had poor knowledge regarding essential newborn care an information guidelines regarding essential newborn care was disseminated to postnatal mothers.

Nasrinkhalesi et al., (2015) studied has done for evaluation of awareness of parents about problem of premature infants. In NICU. This study was a descriptive study data were collected by a questionnaire for evaluation of awareness and knowledge of parents about problems of prematurity and then analyzed by using descriptive analytical statistical methods and SPSS software. Based on result, there was a significant relation between age and total score of questionnaire the most awareness in parents was about doing of hygienic principle when they entered to

NICU. Parents had little knowledge about some NICU principles and premature infant's needs and care.

Alexander sawyer et al., (2014) studied about to develop and evaluate a questionnaire measure parents experience and satisfaction with care during very preterm birth. 30 item of questionnaire was developed and posted to parents. Psychometric analyses suggested a 17 item questionnaire with their subscales (1) staff professionalism and empathy (2) information and explanation and (3) confidence on staff. The findings are suggested that it is a reliable and valid measure. The total score may be useful to compare hospitals and differing practices, whereas individual aspects of the care environment can be evaluate using the subscales.

Gabriet seidman et al., (2010) the systematic sought to identify the most frequently reported barriers to KMC practice for mothers, fathers and health practitioners, as well as the most frequently reported enablers to practice for mothers the searched nine electronic database and relevant reference list for publications reporting barriers or enablers to KMC practice they finding suggest that mother can understand and enjoy KMC, and it has benefits for mothers, infants and families. However, continuous KMC may be physically and emotionally difficult and often requires support from family members, health practitioners or the members.

LITERATURE REVIEW RELATED TO THERMOREGULATION OF PRETERM BABY:

Urmila k.v., ravikumar, usha kaurunakaran (2018) conduted the study to assess the knowledge, attitude and practice of kangaroo mother care among post natal mothers of low birth weight (LBW) and preterm babies before and after teaching sessions. A cross sectional study 201 mothers whose neonates were admitted in NICU mothers were interviewed at enrolment to assess their knowledge of KMC and record

of KMC and were then oriented on its practice. Data about their perceptions attitudes and practices of KMC were recorded at recruitment (95.4%) mothers didn't know about KMC. 80% of mothers could follow the verbal instructions in first sitting. 92.8% of mothers reflected photo exhibitions would have been better than verbal explanation. 91.8% of mothers thought that KMC is beneficial for their babies and 89% thought it was benefits for them too. At discharge 99% were willing to continue KMC at home with 93% willing to practice at night. 100% would recommend KMC to other mothers. All of them were practicing intermittent KMC and believed that other family members especially grandmothers could also be KMC providers as well.

Akillu Abraham roba et al., (2017) a descriptive cross sectional study the aim of the study was to assess the acceptability knowledge, attitude and practice among postnatal mothers of preterm and LBW babies, data were collected by interviewing mothers by questionnaire. The majority of mothers felt positive regarding implementation of KMC for it corrects the temperature, increases attachment and improve the growth of their small babies. Mothers practiced KMC in hospitals and also willing to continue at home.

Mahboobeh Namnabati, sedigheh talakoub., (2016) conducted the study about the implementation of KMC perspective barrier a descriptive study was conducted on 96 infants and nurses working in the NICU data were collected in two sessions. Questionnaire analyzed by t-test through SPSS. KMC was implantation for 32 min in a day mothers related barriers were the not present in the implantation of KMC as mother fear of touching their infants, another barrier was the mother barrier is organizational barriers and the need for a physician's order for implementation of KMC, policy makers must provide facilities equipment for applying KMC practices for mothers and improve the protocol of KMC in the NICU.

Sinmayee kumara devi, kalpana Badhei (2015), conducted a Quasi experimental study with pre and post without control group design and the samples were selected by purposive sampling technique. Data were collected by the use of structured closed ended questionnaire and analyzed by using descriptive and inferential statistics. Findings revealed that the overall mean score in the pretest mothers had poor knowledge regarding care of newborn on prevention of hypothermia whereas the overall post knowledge score was excellent. Statistical analysis of data revealed that STP was effective in improving knowledge of the mother regarding care of newborn to prevent hypothermia.

Alpanamaji Bera, Jagabandhu Ghosh, (2014), studied about to assess the effect of KMC on vital physiological parameters of low birth weight newborn before and after KMC in hospital settings. Mother's baby pairs selected through purposive sampling. Data from mothers and babies were analyzed. Improvement occurred in all 4 recorded physiological parameters during the KMC sessions (hypothermia, bradycardia, tachycardia and low spo2) were corrected during KMC sessions babies showed significant improvement in vital physiological parameters on all 3 days KMC can improved care of LBW babies.

LITERATURE REVIEW RELATED TO PRETERM BREAST FEEDING

Nega Degefa et al., (2019) conducted the study regarding positioning and attachment during breast feeding among lactation mothers a cross sectional study was employed among mothers visited the postnatal and immunizations unit. Data were collected through observational and client exist interview. A structured and pretested questionnaire was developed by reviewing prior studies done in same topic. There was a poor positioning among prime Para mothers then multipara mothers. A poor attachment was also more apparent among prime Para mothers and those who have no formal education deserve

more attention, support and direction to make sure they they achieving proper poisoning and attachment during breastfeeding at the first and early feeds.

Sowmini. p et al., (2016) conducted study regarding perceptions and practices regarding breast feeding among postnatal mothers a cross sectional study conducted using a structured form importance of breast feeding was known to most mothers. While initiations of breast feeding within one hour of birth were done by majority of mothers, few had discarded colostrum and adopted practical feeding. Importance of breast feeding was known to most mothers. Few perceptions related to breast milk and feeding with myths and disabilities should be rectified by health educations.

Sai sunil Kishore.M., et al (2008) studied to assess their breast feeding practices, knowledge regarding usefulness of breastfeeding and factors influencing the breastfeeding practices. Semi structured questionnaire about time at ignition of breastfeeding, duration of EBF and their understanding about usefulness of breastfeeding were assessed out of the 77 mothers,30% and 10% exclusively breastfeed their infants till 4 and 6 months of age respectively. There was good attachment in 42% mother infant were held in correct poisoning by 60 % mothers. Thirty-nine percent of the mothers had satisfactory breastfeeding knowledge. Breastfeeding counseling emphasis on correct technique can improve the FBF rate.

D.Sign et al., (2009) this was a prospective longitudinal study carried out in a recognized baby friendly hospital is practiced in all neonates. Assessment of growth parameters included recording of weight. LBW infants, small for gestational age and preterm on being exclusively breastfeed by their own mothers, gained weight and had an increase in their head circumference and length almost comparable to

the standards fetal infant growth norms. Exclusive breast feeding results in adequate growth in low birth weight babies including preterm.

LITERATURE REVIEW RELATED TO PRETERM BABY UMBILICAL CORD CARE

Marie dolors loperz-Medina et al., (2019) this study was to explore the umbilical cord separation time, predictors and healing complications from birth until the newborn was one month old. A quantitative longitudinal observational analytical study by stratified random sample was adopted. The mean umbilical separation time; 6.61 days. Incidence of omphalities was 3.7% granuloma was 8.6%. umbilical separation time predicators were wetting recurrence, birth weight, intra partum antibiotics, birth season and Apgar <9. The finding support dry umbilical cord cares is a safe practices that soon detaches the umbilical cord.

Patrica s. coffey & Siobhan c. Brown (2017) conducted the study about umbilical cord care in low and middle income countries. Neonatal sepsis is the third leading cause of death for infants in their first month of life. They were searched domestic and international database for articles. Findings from thirds review suggest that documentation of cord practices is not consistent through low and middle income countries. Yet existing literature depicts a firm tradition of umbilical card care in every culture. The desire to promote healing and hasten cord separation is the underlying beliefs related to application of substances to the umbilical cord.

Kellys evens,Jeffrey George et al., (2004) conducted the study regarding umbilical card care in the preterm infants influences cord bacterial colonization's or detachment the purpose of the study was to compare alcohol versus natural drying for umbilical cord care in preterm infants and to examine its effects on bacterial colonization's and cord detachment. A total 109 infants were analyzed revealed that the median cord detachment time was significantly shorter in natural group compare

to the alcohol group. Based on the study it appears that natural drying is safe and effective means of umbilical cord in preterm infants.

Marco pezzati et al., (2003) conducted the study related to umbilical cord care in premature baby infants evaluate the effectiveness of 2 cord care regimens(salicylic sugar powder vs chlorhexidine as a 4% detergent water solution) on the cord separation time and other outcomes in preterm infants. A prospective, randomized controlled trial was conducted. The cord separation time was significant lower in infant who infants treated with salicylic sugar powder then infants who were treated with cholrhexidine. In developed countries salicylic sugar powder can be used effectively and safely for umbilical cord of preterm infants.

LITERATURE REVIEW RELATED TO PRETERM BABY EYE CARE

Marilyn Aitaet.al., (2015) A randomized controlled trial of eye shields and earmuffs to reduce pain response of preterm infants. The purpose of this study was to evaluate the pain response of 28-32 weeks gestational age preterm infants during a heel lance following a 4-h period where they had worn eye shields and earmuffs as a light and noise reduction intervention. ANCOVA indicated did not show a significant reduction in their pain response during the procedure in comparison to those who did not it. Confounders such as a handling in the hours preceding the painful procedure and the time it took to collect the blood might have influenced the results.

Baraiah Mohd-Ali and Ahmad Asmath (2011) studies related to understand the pattern of visual development in preterm children. Follow up data collected included gender, current age, birth weight and current weight, record of fundus examination and strabismus. This study concludes that children with ROP developed myopia with age and those

without ROP become more hyperopic. Degree of myopia is associated with severity of ROP and birth weight.

Sharma S et al., (2010) effect of kajal application and fuel used in kitchen on ocular health in school children(6-15years). Cross sectional study children were randomly selected and test performed were visual acuity (Snellen's eye), cover test, ocular motility and external examination by torch after collection data were analyzed. The study explores that the use of dong/wood fuel is not good for eye health. A small tikka on the forehead can be put if it is necessary because of traditional reason of warding off the evil eye. The aim of health education activities should propagated awareness regarding eye care and to teach the essentials of ocular hygiene and eye healthcare.

LITERATURE REVIEW RELATED TO PRETERM BABY IMMUNIZATIONS

Heliyon (2019) conducted the study about a successful preterm vaccination program in a neonate. The main aim of the study is to determine whether vaccine given at the correct chronological age and whether there was side effect of logical problems. 60 % infants were included 95% received their 6 weeks vaccination 68% received the vaccine on the time, 10% early and 17% late. Reasons for delay included oxygen dependence and concerns about sepsis. There were no side effects. It is possible to implement a successful vaccination program for preterm infants in low resourceful settings.

Irene Nakatudde et al., (2019) conducted the study to evaluate the timeliness of vaccination and associated factors among preterm infants. A mixed method study vaccination dates of preterm infants aged 6-24 months were obtained from child health cards. Additional data were collected using questionnaire. Cox regression analysis was used identify factors associated with vaccinations timeliness. Qualitative

findings revealed that lack of knowledge and poor attitudes of health workers and care givers, gaps in documentation of vaccination status and inadequate communication by health worker hindered timely vaccination.

Prachi shailesh Gandhi, Vaidehidande (2017) conducted the study to assess the knowledge and practices of initiation of immunizations on mothers and low birth weight babies were assessed using 2 validated questionnaire on discharge. In the second phases, a different set of mothers were assessed similarly but counseled specifically to initiate the immunizations irrespective of the weight and chronological age. There was a significant lack of knowledge in investigators 50% of mothers agreed that immunizations can be initiated at birth if birth weight is < 2 kg respectively. Post counseling a favorable change was observed in mother's knowledge but not practice.

Sheila bhavne et al., (2009) conducted study to assess the immune response of preterm and low birth weight babies to hepatitis B vaccine. Open trial method was adopted 100 babies were enrolled in four groups according to the gestational age. A recombinant DNA HB vaccine was given at 0, 1, 2 and 12 month schedule. Adverse event were monitored. Preterm and low birth weight babies had higher GMT as compared with full term babies till one month after third dose. The vaccine was well tolerated and safe and there were no adverse reactions. Immune response of preterm, LBW and full term babies to the new generation recombinant DNA-HB vaccine uniformly good. High and long term zero protective levels are achieved after the second dose itself.

LITERATURE REVIEW RELATED TO PRETERM FOLLOW UP CARE

Susan.c et al (2020) a study to examine whether the hospital to home: optimizing the preterm infants environment intervention reduced birth hospitalizations charges yielding net saving after adjusting for

intervention costs. Randomized control group had birth hospitalization data. Linear regression, propensity scoring and regression analysis were used to describe charge differences. Lower birth hospitalizations charges and the net cost savings of hospital to home infants support implementation of hospital to home as standard of care.

Albert Yemotsoo Lomotey et al., (2019) a descriptive phenomenological study approach describe the lived experiences of mothers. Ten mothers were purposively sampled recorded in depth individual interviews were transcribed verbatim; codes were generated and inductively organized into themes four themes were actively generated. Emotional experience of mothers, mothers baby interactions, perception on care and support and challenges within mothers and baby unit environment mothers were anxious about the premature delivery and were afraid of possible infant's death. They expressed concerns about inadequate accommodation, high cost of care, the frequency and duration of mother-baby interactions.

Shahinrose et al., (2017) a descriptive phenomenological study explores mother's experience of caring for their late preterm infants in the community. Eleven mothers were interviewed transcripts were analyzed using an interpretative thematic approach. The mother hospitals experience informed their perspective that being a late preterm infant was not a "big deal", and they tended to treat their infant as normal. After discharge mothers report their lack of preparation to meet the special needs of their late preterm infants. New models and pathways of care for late preterm infants and their families need to be responsive to the spectrum of feeding issues encountered, limit duplication of services, and ensure consistent and effective care that parents will accept.

REVIEW LITERATURE RELATED TO EFFECTIVENESS OF MULTIMODAL INTERVENTION PROGRAM

Karthika ponni et al.,(2019), conducted study to analyse the effectiveness of multimodal sensory stimulation in improving the motor outcome of the preterm infant at one month of corrected age. A quasi experimental study (pre and post test design) was conducted in Sri Ramachandra Medical Centre, And Hospital. Who were medically stable and referred for early stimulation, were recruited in the study by convenient sampling. Base line parameters were assessed and mothers were counselled about milestone development. They were then taught to perform touch, kinaesthetic, vision, auditory, vestibular and proprioceptive therapy under guidance of the therapist. On discharge, a pamphlet was given to the mothers and were educated to the continue therapy. The result shows that mean pre-therapy and post-therapy values of the preterm group had a significant improvement. Multimodal stimulation is effective in improving the motor outcomes of the preterm infants, at one month of corrected age.

CHAPTER-III METHODOLOGY

“Methods and procedures are really the heart of the research activities should be described with as much as detail as provide and the continuity them should be apparent”

Research methodology is a way to solve the problem systematically. It is a procedure in which the Research starts from initial identification of the problem to find conclusion. Methodology of research organizes all the components of the study in a way that is most likely to lead to valid answer to the problems that have been posed.

This chapter deals with methodology adopted by the investigator with an aim to evaluate the effectiveness of multimodal intervention on comprehensive home care management among mothers of preterm. It includes research approach, research design, setting of the study, population, sample size, sampling techniques, data collection procedures, description of the tool and plan for data analyses.

RESEARCH APPROACHE

A quantitative research approach was considered to be the most appropriate for this study. So it was adopted in order to assess the effectiveness of multimodal intervention on comprehensive home care management of preterm baby among mothers of preterm baby.

RESEARCH DESIGN

Research design is the overall plan for addressing a research questions including specification for enhancing the study's integrity.

A quasi experimental design with one group pre and posttest research design was adopted to assess the effectiveness of multimodal

intervention program on knowledge and practice regarding home care management of preterm babies among mothers of preterm.

SETTING OF THE STUDY

The study setting is the physical location and condition in which data collections takes places in a study.

This study was conducted in the Neonatology units. Of Institute of Child Health and Hospital for children.,Egmore, Chennai. which is attached to Madras Medical College, Chennai-03. This is 835 bedded Hospital give treatment of children from Newborn stage to Adolescence period from various part of the Tamil Nadu and nearby states. ICH the NICU more than 70% of preterm infants admitted to special care nursery spent time in NICU.

Mother of these neonates could be located next to the NICU and in the rooming in wards.

POPULATION

The population of this study is about the mother of preterm. The entire population is the aggregated of cases in which the researcher is interested and would like to generalize the study result.

TARGET POPULATION

Preterm babies born between 28 and 37 weeks of gestational age with low birth weight babies.

ACCESSIBLE POPULATION

Preterm babies born between 28-37 weeks gestation and admitted from 20.01.2020 to 15.02.2020 into the neonatal care units of ICH, Egmore, Chennai.

SAMPLING

Sampling is the process of taking a subject that is representation of the entire population. In the study the sample comprises of 60 mothers who were having preterm babies admitted in Neonatology unit of ICH, Egmore, Chennai-8.

SAMPLING TECHNIQUE

Samples selected by purposive sampling techniques used for the study based on the inclusion and exclusion criteria.

RESEARCH VARIABLES

Independent variables: It refers to multimodal intervention program on improving the knowledge among mother on preterm care.

Dependent variables: It refers to level of knowledge on preterm care among mothers of preterm babies.

CRITERIA FOR SAMPLE SELECTION

Inclusion Criteria

- ❖ Mothers who have preterm baby in NICU admission.
- ❖ Mothers who were selected the discharge day of their preterm infants.
- ❖ Mothers who are available and willing to participate in this study.
- ❖ Mothers who are able to read and understand Tamil and English.

Exclusion Criteria

- ❖ The mothers who
- ❖ Babies had sick and ventilator support.
- ❖ Babies had congenital malformations

- ❖ Mother not willing to participate in this study.
- ❖ Do not understand, read or speak in Tamil and English.

DESCRIPTION OF THE INSTRUMENTS

The semi structured interview questionnaire was prepared by the investigator based on the extensive review of literature experts and investigators personal experience.

The semi structured interview questionnaire consists of two sections.

Section -1

It deals with the demographic variables of the subject that includes mother's age, education religion, occupation, type of family, place of residence, and family history of preterm. And demographic variables of child age, sex, birth weight, gestational week, birth order, mode of delivery, associate problems.

Section-2

It consists of multiple choice questions which were prepared to assess the knowledge among mothers of preterm. The questions were related to knowledge aspects of preterm care, thermoregulation, breast feeding, eye care, umbilical cord care, skin care, elimination care, immunization and follow up care. The same questionnaire and checklist was used to assess the posttest.

SCORE INTERPRETATION

An interview schedule was used to knowledge among mothers on preterm care. It contains 37 multiple choice questions with 9 sub divisions.

Table No. 3.1: score interpretation

S. No	Knowledge aspects	Total No. of items	score
1.	Preterm care	4	4
2.	Thermoregulation	4	4
3.	Techniques of Breast feeding	5	5
4.	Eye care	3	3
5.	Umbilical cord care	4	4
6.	Skin care	4	4
7.	Elimination care	4	4
8.	Immunizations	4	4
9.	Follow up care	5	5
Total Items and Awarded score		37	37

The scores given for preterm care as follows

The correct answer-1 score

For wrong answer -0 score

Based on the scores, the level of knowledge and practice on preterm care

Inadequate knowledge 1-12.

Moderate knowledge 13-24.

Adequate knowledge 25-37.

CONTENT VALIDITY

Validity refers to the degree to which an instruments measures what it supposed to be measuring to ensure the content validity the instruments was given to experts along with the introduction, need for

the study, significant of the study, methodology, procedure manuals and tools.

Validity of the tool was assessed using content validity. Content validity was determined by experts from nursing and Medical. They suggested certain modification in tool. After the modifications they agreed this tool for assessing effectiveness of multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm babies.

The experts were requested to give adequacy and appropriateness of tool. Based on their opinion and suggestions the tool was finalized to do data collection.

RELIABILITY OF TOOL

Reliability is the degree to which an assessment tool procedures stable and consistent result, it also defines the consistency of the result deliveries in a test, ensuring that the various items measuring the different constructs delivers consistent score.

After construction of questionnaire for the study reliability was tested.

Reliability of the tool was assessed by using Test retest method and inter-rater method. Knowledge score reliability correlation coefficient value was 0.84 and practice score reliability correlation coefficient value was 0.89. This correlation coefficient is very high and it is good too for assessing effectiveness of multimodal intervention on comprehensive home care management of preterm baby among mothers of preterm babies.

PILOT STUDY

It is the preliminary trial to the actual study. Pilot testing is the administration of the collection instrument with a small set of respondent from the population. If problems occur in the pilot test, it is likely that similar problems will arise in full scale administration. The purpose of pilot testing is to identify problems with the data collection instruments and find possible solution. Pilot test is the trial administration of newly developed instruments to identify flows and assess time requirements.

A pilot study was conducted on 06.1.2020 to 11.1.2020 for 6 mothers of preterm babies in the NICU, ICH, Egmore, Chennai. Pretest done on the day of discharge by using the planned interview schedule after pretest 45 min. lecture cum demonstration given regarding preterm care by using flash cards, charts, and booklet. And individual booklet was issued to their own use.

After 5 days the mothers knowledge and practice assessed with same questionnaire. These samples not included in the main study.

DATA COLLECTION PROCEDURE

For data collection, the written Permission obtained from the Director, Institute of Child Health and Hospital for Children, Egmore, Chennai. As per director's direction formal permission was obtained from Head of the Department of Neonatologist prior to the data collection. The data collection was done from 20.01.2020 to 15.02.2020. In this study, all mothers of preterm neonates who got admission in NICU of ICH. who fulfilled the inclusion and exclusion criteria. The investigator first established a good rapport with mothers of preterm neonates. The purposes of the interview separately in their own language in separate places. Informed consent was obtained from them. Secrecy was assured to the mothers to get their full cooperation. Average time

limits of 20-25minutes were taken for each sample for the interview schedule. After the pretest the mother were gathered and seated comfortably Mother-baby care room 40-45 minutes health teaching given regarding care of Preterm baby, Thermoregulation, Breast feeding, Eye care, Umbilical cord care, Skin care, Elimination care, Immunization and Follow up care. With the help of demonstration, flash cards, and booklet. And individual booklet was issued to their own purpose.

After the health teaching 15 minutes were allocated for demonstration of KMC care, breastfeeding techniques,, eye care, umbilical cord care etc., the post test and practice were assessed with checklist was during follow up care of baby at well baby clinic.

Table No. 3.2 : Intervention Protocol

S. No	Protocol	Pre-exprimental group
1.	Place	Neonatal Intensive Care Unit, Institute of child health and hospital for children. Egmore, Chennai-08.
2.	Intervention	Multimodal intervention program
3.	Duration	4 weeks
4.	Frequency	8-4
5.	Time	30-45 min
6.	Administrator	Investigator
7.	Recipient	Mother of preterm baby's

ETHICAL CONSIDERATION

The study was conducted after getting approval from the Ethical committee. Madras Medical College, Chennai. EC Reg.No.ECR/270/Inst./TN/2013/RR-16/ No.11112019. Consent of each subject was obtained from mothers before starting the data collection.

Assurance was given to them that secrecy, privacy, dignity, religion, culture belief and ethical values were respected during the process of data collection.

PLAN FOR DATA ANALYSIS

After scoring the results were tabulated, both Descriptive and Inferential statistics are employed to analyzed collected data.

DISCRIPTIVE STATISTICS INCLUDES

Demographic variables were given in frequencies with their percentage and test of association was done to assess selected demographic data to knowledge and practice.

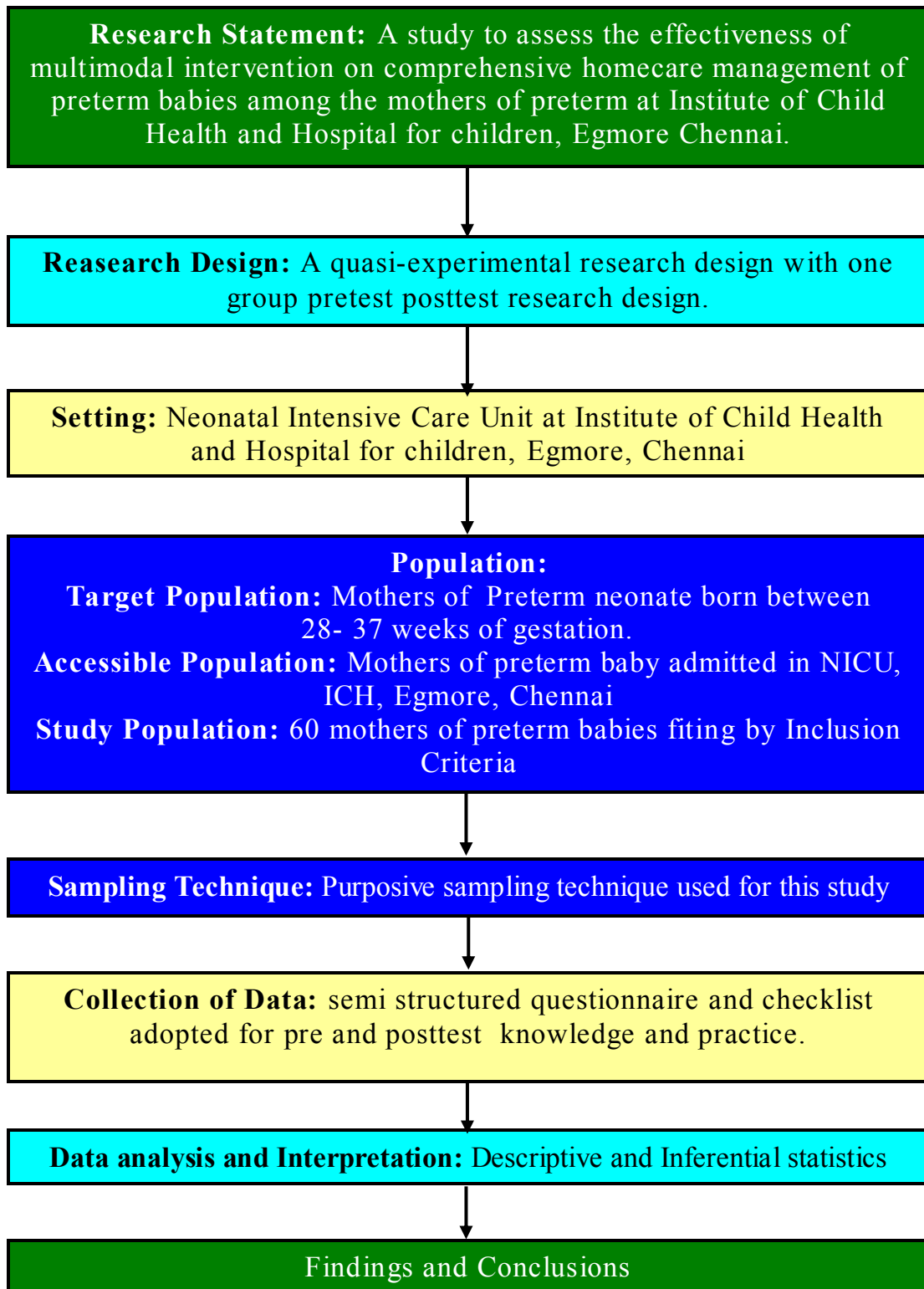
Mean is used to analysis the data.

INFERENCEAL STATISTICS INCLUDES

Chi square test is used to find out significant association between programme demographic variable and knowledge scores.

Paired't' test is used to analysis the effectiveness of Multimodal Intervention programme.

FIG- : SCHEMATIC REPRESENTATION OF RESEARCH STUDY



CHAPTER-IV ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the description of the sample, analysis and interpretation of data collected from mothers of preterm neonate regarding comprehensive home care management of preterm baby. The data were analyzed according to the objectives and hypotheses of the study.

Table-4.1: Mothers Demographic Variables

Demographic Variables		Number of mothers	%
Age	< 20 years	0	0.00%
	21 -25 years	36	60.00%
	26 -30 years	19	31.67%
	> 30 years	5	8.33%
Education status	Informal education	4	6.67%
	Primary education	27	45.00%
	Secondary education	24	40.00%
	Graduate	5	8.33%
Occupation status	Employed	7	11.67%
	Unemployed	53	88.33%
Religion	Hindu	50	83.33%
	Christian	6	10.00%
	Muslim	4	6.67%
Family Monthly Income	< Rs.5000	8	13.33%
	Rs.5001-10000	35	58.33%
	Rs.10001-20000	11	18.34%
	> Rs.20000	6	10.00%

Demographic Variables		Number of mothers	%
Type of family	Nuclear family	37	61.67%
	Joint family	20	33.33%
	Extended family	3	5.00%
Area of Residence	Rural	21	35.00%
	Urban	10	16.67%
	Suburban	29	48.33%
Presence of any problem in your health	Diabetes mellitus	2	3.33%
	Hypertension	3	5.00%
	Anaemia	5	8.34%
	Any other specify	50	83.33%

Table-4.1: shows the demographic information of mothers of preterm babies. Out of 60 mothers, more than 30 years are 8.33%, 31.67% of mothers are between 26-30 years, 60.00% of mothers are between 21-25 years. Regarding educational status, 45% of the mothers completed primary education, 40% of mothers completed secondary education, 8.33% of mothers graduated and 8.33% of mothers had informal education. Regarding occupational status, 88.33% were unemployed and 11.67% were employed. Regarding religion, 83.33% of mothers belong to Hindu, 10% of mothers belong to Christian and 6.67% of mothers belong to Muslim. Majority of mothers are from nuclear families (61.67%), joint families (33.33%) and only 5% of mothers belong to extended families.

Majority of mothers live in suburban areas (48.33%), mothers living in rural places (35.00%) and 16.67% of mothers live in urban places. Out of 60, majority of mothers did not have any medical issues like diabetes mellitus, hypertension, and anaemia. 8.34% of mothers had anaemia, 5% of mothers had hypertension and 3.33% of mothers had diabetes mellitus.

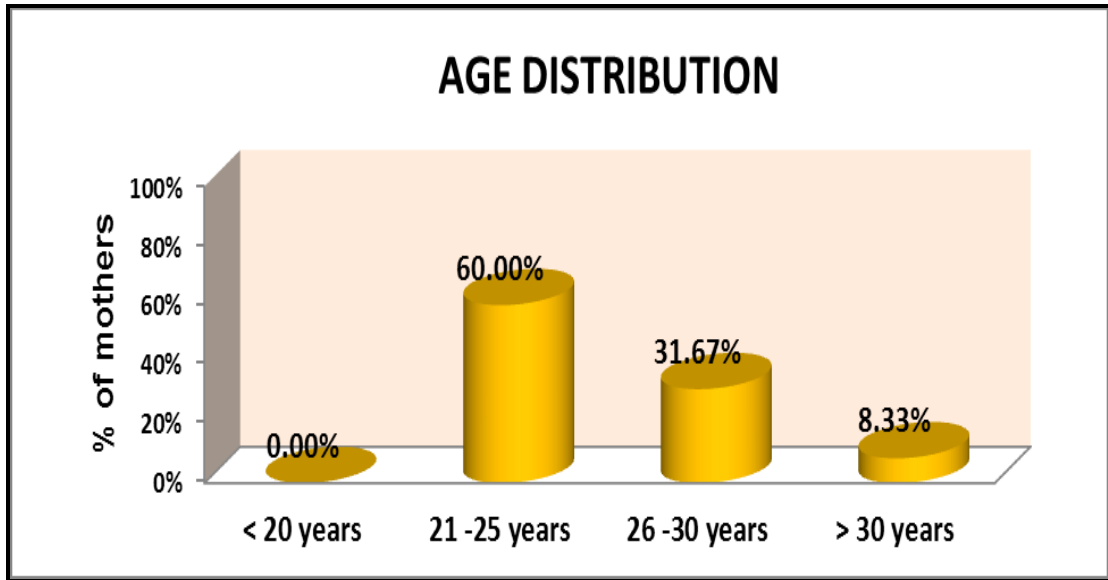


Fig4.1: Bar diagram showing percentage distribution of mothers according to their age

Out of 60 mothers more than 30 years are 8.33%, 31.67% of mothers are age between 26-30 years, 60.00% of mothers age between 21-25 years.

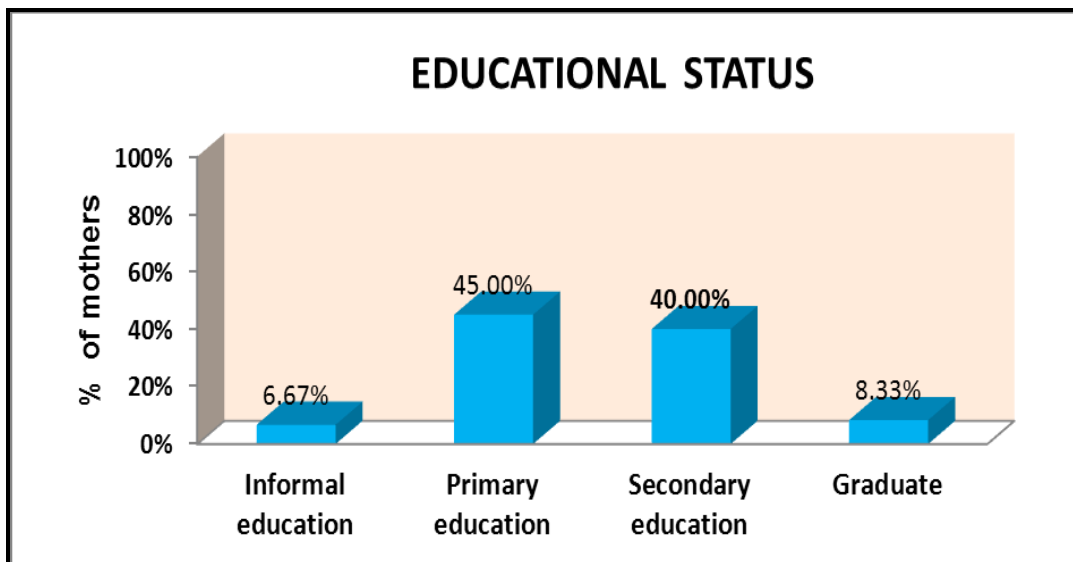


Fig 4.2: Simple Bar diagram showing percentage distribution of educational status of the mother according to their grade

Pertaining to educational status 45% of the mothers are completed primary education, 40% of mothers completed secondary education, 8.33% of mothers graduate and 8.33% of mothers had informal education.

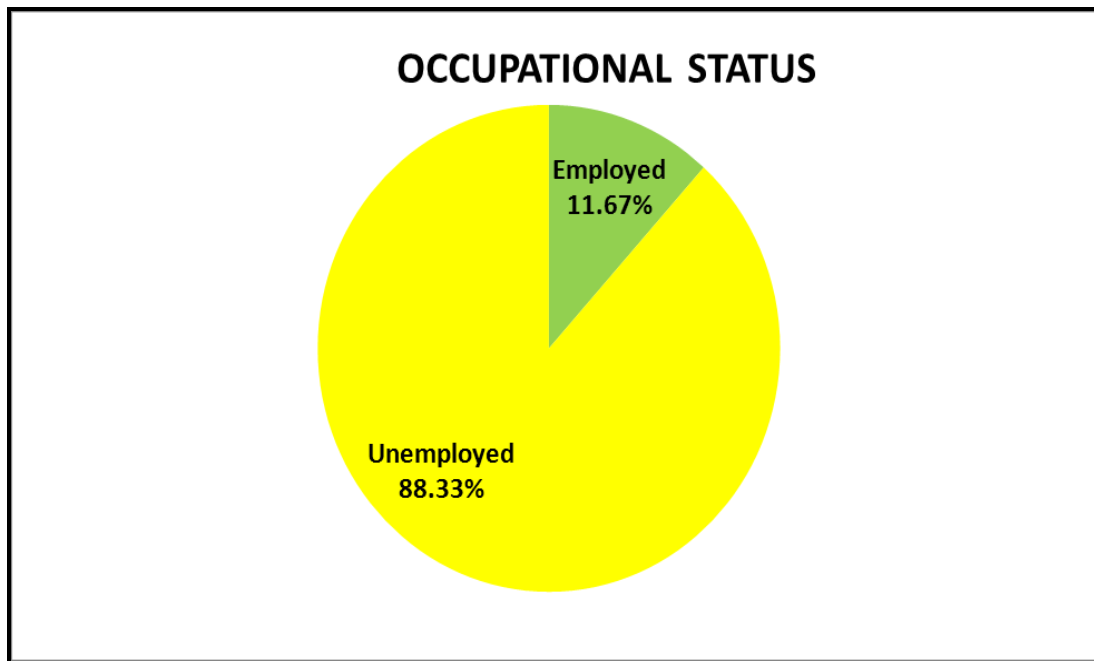


Fig 4.3: Pie diagram showing percentage distribution of occupational status of mother.

Concerning occupational status 88.33% unemployed and 11.67% of mothers employed.

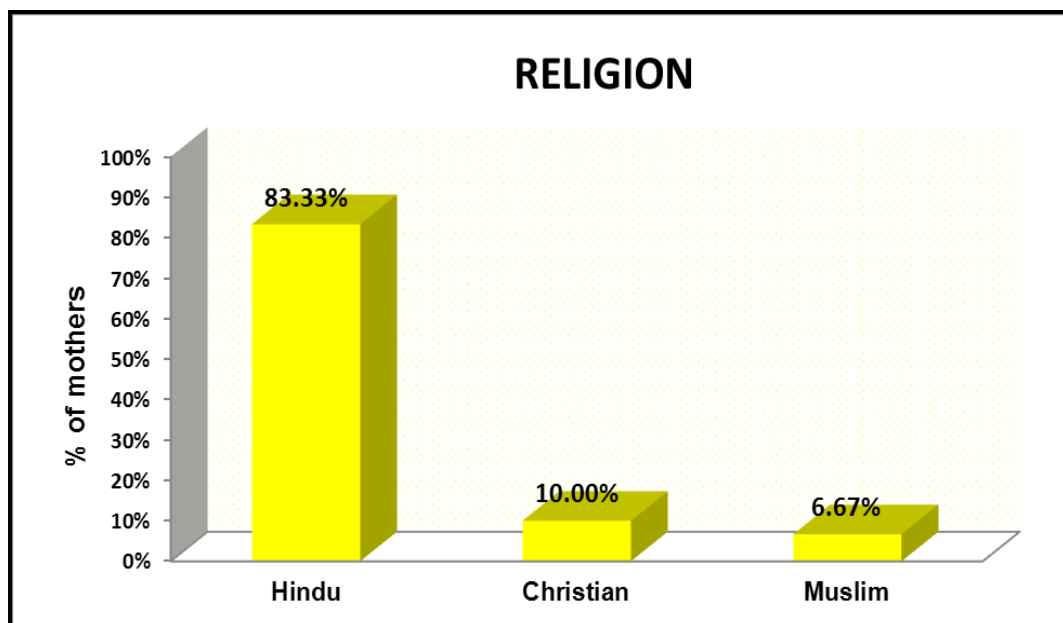


Fig 4.4 :Simple Bar diagram showing percentage distribution of religious

Out of 60 mothers 83.33% of mothers belongs to Hindu, 10% of mothers belongs to Christian and 6.67% of mothers belongs to Muslim.

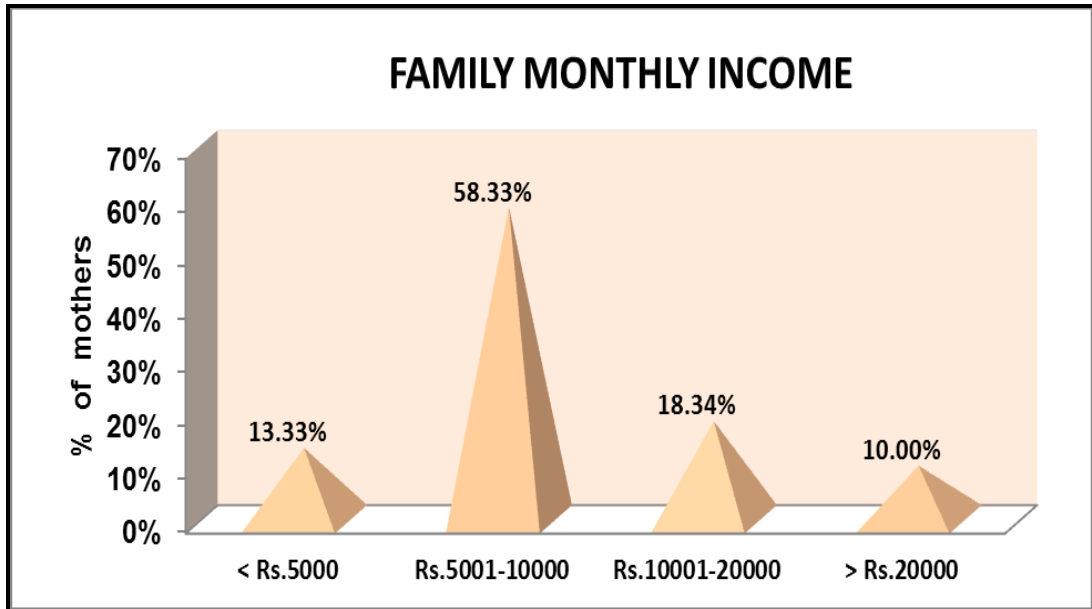


Fig4.5: Bar diagram showing percentage distribution of Family monthly income.

Concerning family monthly income 58.33% of mothers income Rs.5001-10000, 18.34% of mothers family income Rs.10001-20000, 13.33% of mothers family income less than Rs. 5000 and 10% of mothers family income Rs.20000.

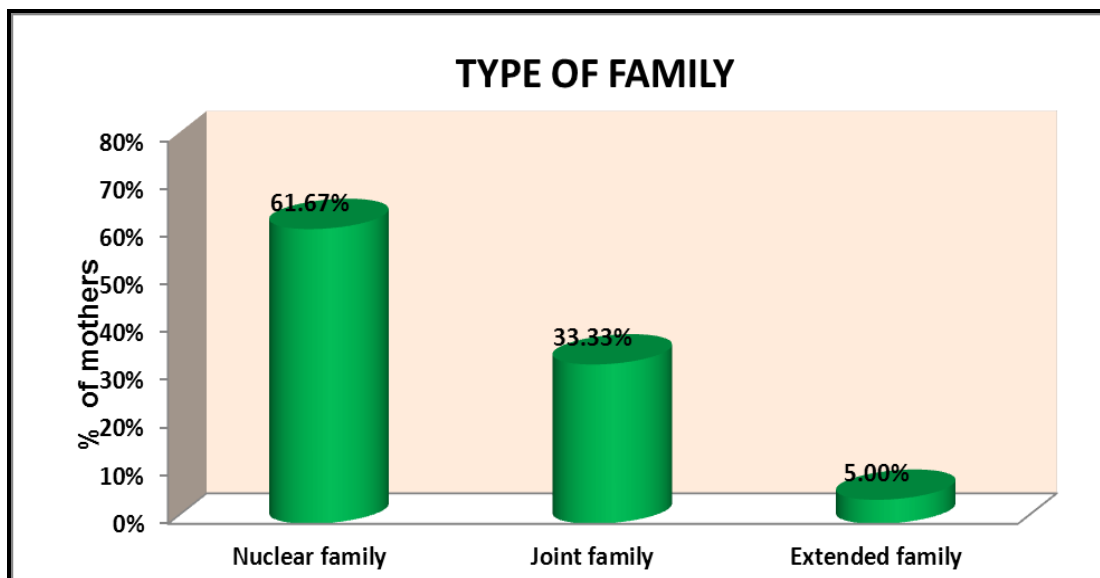


Fig 4.6: Bar diagram showing percentage distribution of type of family

Majority of mothers from nuclear family 61.67%, joint family mothers 33.33% and only 5 % of mothers belongs to extended family.

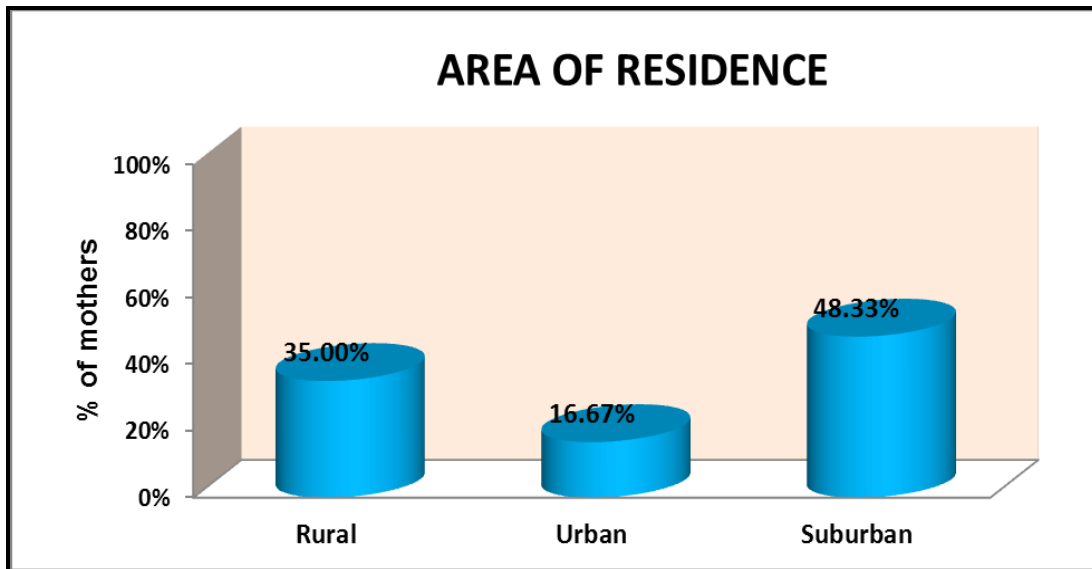


Fig 4.7 : Bar diagram showing the percentage distribution of area of residence

Majority of mothers living in suburban 48.33%, and 35% of mothers living in rural places and 16.67% of mothers living urban places.

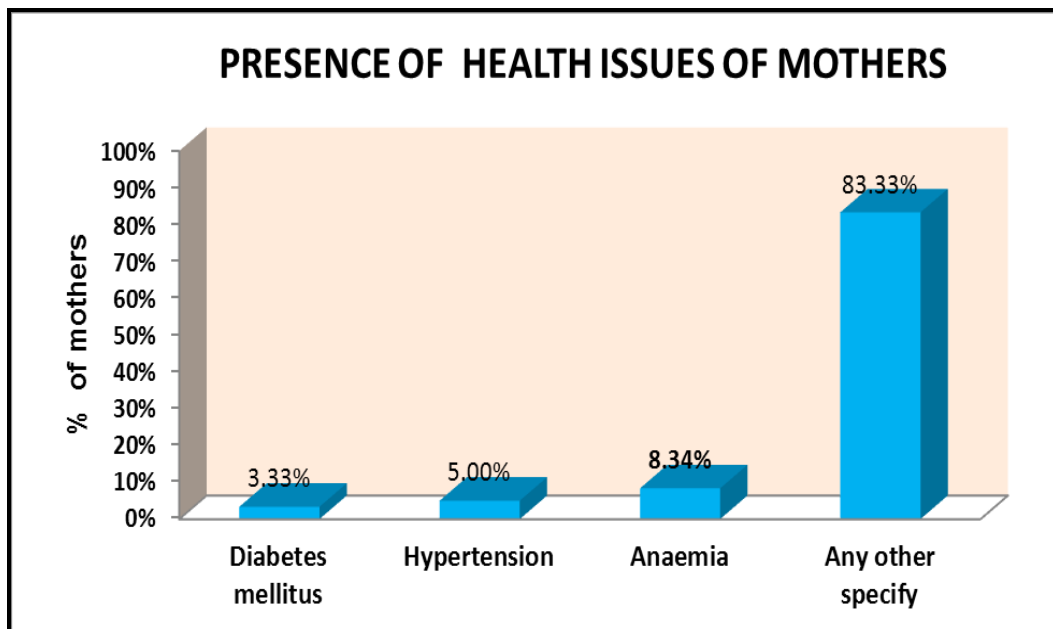


Fig 4.8 : Simple Bar diagram showing percentage distribution of medical problems of mothers

Majority of mothers had no any medical issues like diabetes mellitus, hypertension, and anaemia. 8.34 % of mothers had anaemia, 5% of mothers had hypertension and 3.33% of mothers had diabetes mellitus.

Table-4.2: Childs Demographic Variables

Demographic Variables		Number of children	%
Age of the child	< 10 days	13	21.67%
	11-20 days	16	26.66%
	21-28 days	31	51.67%
Sex of the baby	Girl	32	53.33%
	Boy	28	46.67%
Birth weight of the baby	501-1000gms	0	0.00%
	1001-1500gms	51	85.00%
	1501-2000gms	6	10.00%
	> 2000gms	3	5.00%
Baby delivered at	< 28 weeks	0	0.00%
	28-32 weeks	27	45.00%
	32- 37 weeks	33	55.00%
Birth order of the child	First child	36	60.00%
	Second child	21	35.00%
	More than 2 child	3	5.00%
Any associated problem during birth?	Yes	9	15.00%
	No	51	85.00%
Mode of delivery	Normal	54	90.00%
	Caesarean sections	6	10.00%
	Forceps	0	0.00%
	Vacuum	0	0.00%
Mother's Source of support	Family members	55	91.67%
	Friends	3	5.00%
	Neighbours	2	3.33%
Do you have any habits?	Yes	0	0.00%
	No	60	100.00%

Demographic Variables		Number of children	%
Source of Health care related Information	Doctor	6	10.00%
	Nurses	19	31.67%
	Relatives/ multimedia	35	58.33%
Is there any family history of preterm?	Yes	11	18.33%
	No	49	81.67%

Table-4.2 : shows the demographic information of preterm babies. Out of 60 babies 51.67% of baby's age between 21-28 days, 26.66% of babies age between the age of group of 11-20 days and 21.67% of babies age less than 10 days. Out of 60 babies 53.33% girl baby and 46.67% boy baby. Regarding birth weight 85% of babies birth weight between 1001-1500gms, 10 % of baby birth weight between 1501-2000gms and 5% of babies' birth weight more than 2000gms. Regarding birth order of the child 60 % of the babies first child, 35 % of babies second child and 5 % of babies more than two child. Regarding family history or preterm 81.67% of mothers had no family history of preterm and 18.33% of mothers had family history of preterm baby.

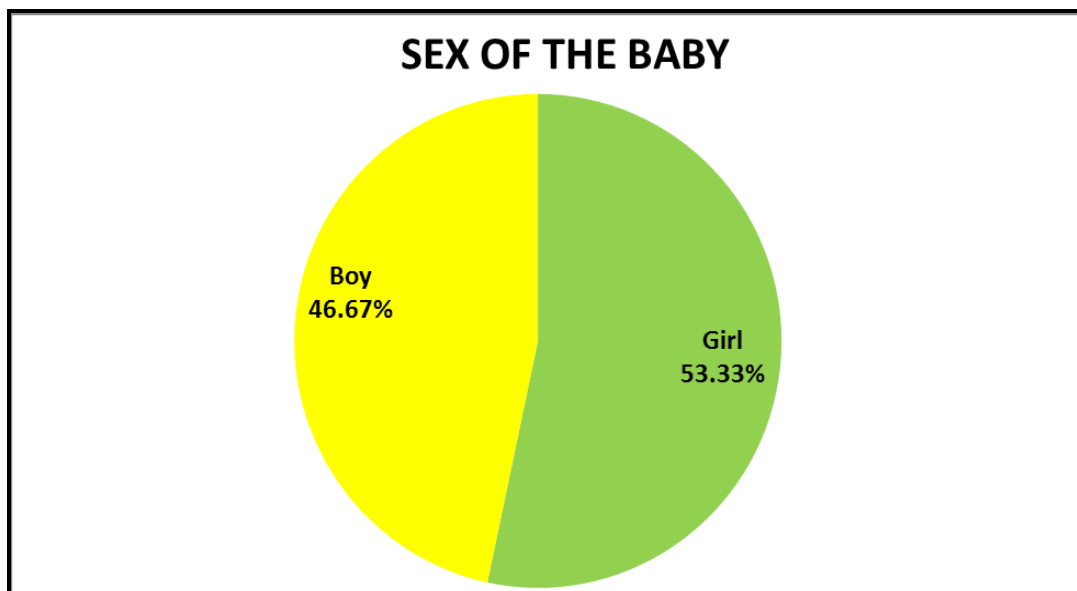


Fig 4.9: pie diagram showing percentage distribution of sex of the baby

Out of 60 babies' 53.33% girl babies and 46.67% boy babies.

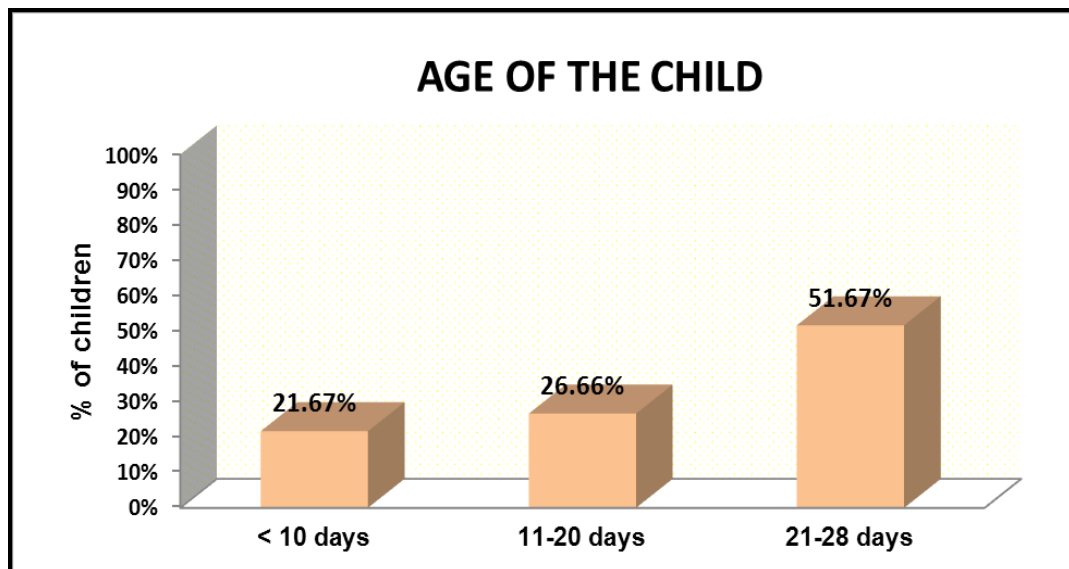


Fig4.10 : Simple Bar diagram showing percentage distribution of the Childs age

Out of 60 babies 51.67% of babies' age between 21-28 days, 26.66% of babies age between the age of group of 11-20 days and 21.67% of babies' age less than 10 days.

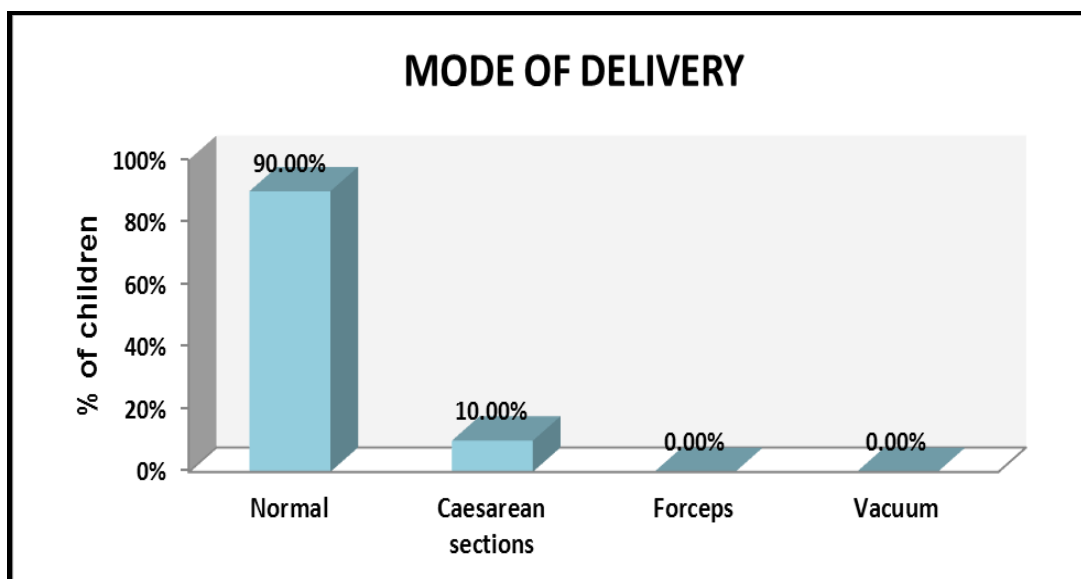


Fig 4.11: Simple Bar diagram showing percentage distribution of mode of delivery of babies

Pertaining to mode of delivery 90 % of babies delivered by normal, 10% of babies delivered by caesarean.

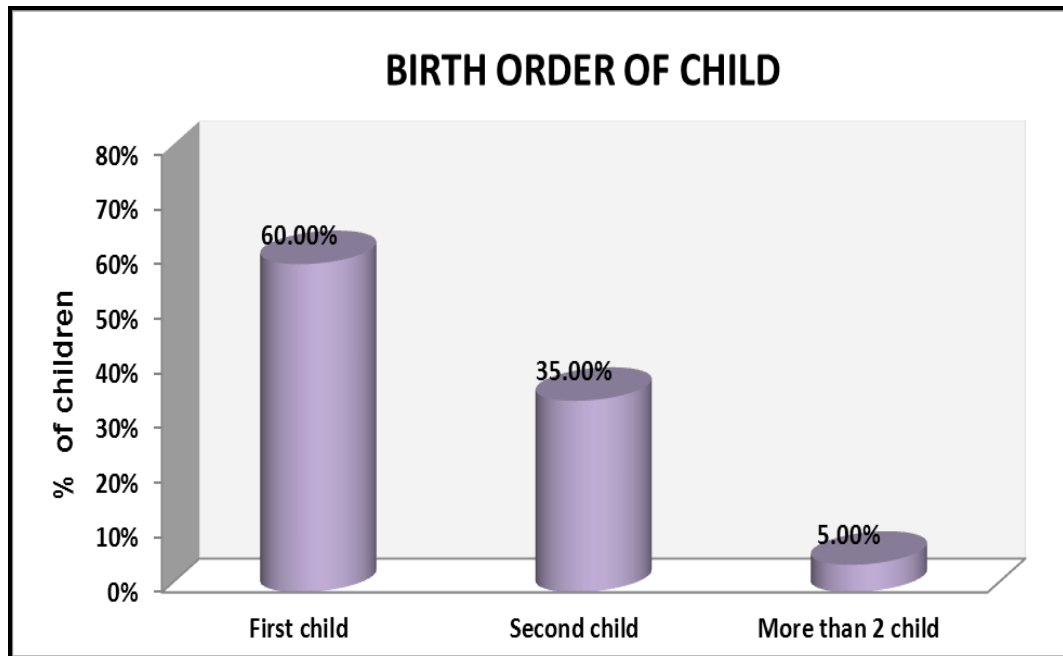


Fig4.12: Bar diagram showing percentage distribution of birth order of the child

As regards birth order of the child 60 % of the babies first child, 35 % of babies second child and 5 % of babies more than two child.

OBJECTIVE 1: TO ASSESS THE PRE-TEST KNOWLEDGE AND PRACTICE AMONG THE MOTHERS OF PRETERM BABY

Table-4.3.1 : Each Domainwise Mothers Pretest Percentage Of Knowledge On Home Care Mangement Of Preterm Babies

Knowledge regarding	No. of questions	Min – Max score	Knowledge score		
			Mean	SD	% of mean score
Preterm care	4	0 - 4	2.03	1.22	50.75%
Feeding of babies	5	0 - 5	2.38	1.04	47.60%
Thermoregulation	4	0 - 4	1.08	1.06	27.00%
Skin care	4	0 - 4	2.12	1.01	53.00%
Umbilical cord care	4	0 - 4	1.42	1.05	35.50%
Eye care	3	0 - 4	1.88	1.25	62.67%
Elimination care	4	0 - 4	2.07	1.12	51.75%
Immunization	4	0 - 4	2.28	1.35	57.00%
Follow-up care	5	0 - 5	2.25	1.67	45.00%
Total	37	0 - 37	17.52	3.52	47.35%

Table-4.3.1: shows each domain wise pre-test percentage of knowledge on home care management preterm baby among the mothers of preterm babies. Maximum mothers of preterm on knowledge in Eye care (62.67%) and minimum knowledge score in Thermoregulation (27.00%). Overall pretest percentage of knowledge score is 47.35%

Table-4.3.2: Pretest Level Of Knowledge

Level of knowledge	No. of mothers	%
Inadequate knowledge	39	65.0%
Moderate knowledge	21	35.0%
Adequate knowledge	0	0.0%
Total	60	100%

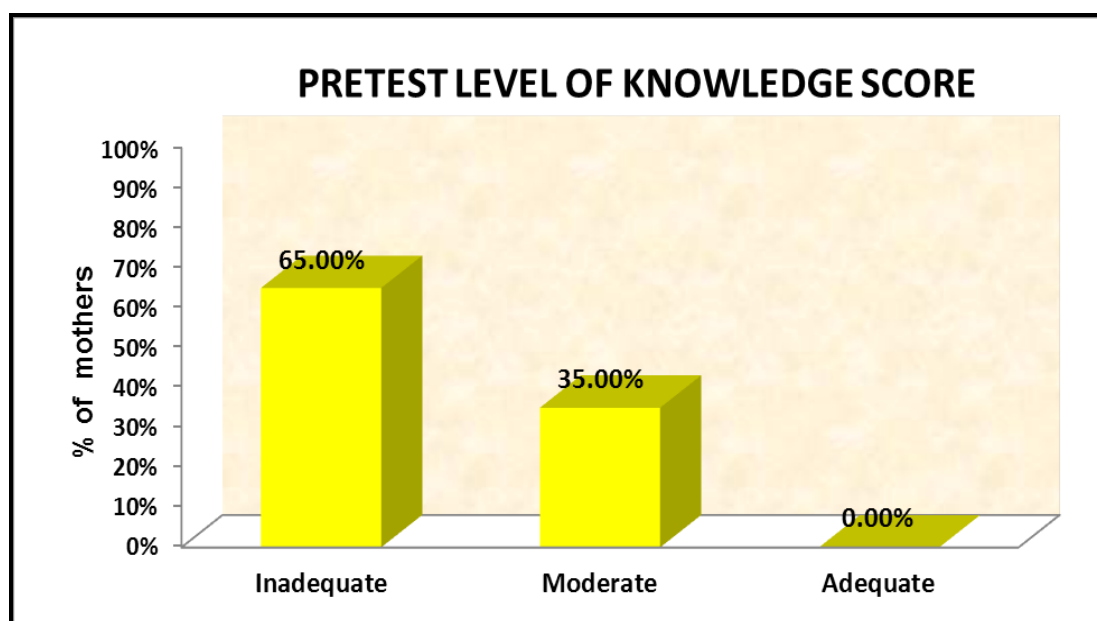


Fig 4.13 :Simple bar diagram showing percentage distribution of the mothers pretest level of knowledge on home care management of preterm baby.

In this study 65.0% of mothers were had inadequate knowledge and 35.0% of them had moderate knowledge score and none of them had adequate knowledge score.

Table-4.3.3: Knowledge score interpretation:

Min=0 Max=1 Total questions=37 Maximum marks= 37

S. No.	Grade	Percentage	Marks
1.	Inadequate knowledge	0 – 50 %	≤ 18
2	Moderate knowledge	50 – 75%	19-27
3	Adequate knowledge	76 – 100%	28-37

Table-4.4.1: Each Statement Mothers Pretest Percentage Of Practice On Home Care Mangement Of Preterm Babies

S. No	Statement	Number of mothers	%
1	Do you wash your hands before and after touching the baby?	35	58.33%
2	Do you practicing kangaroo mother care at home?	26	43.33%
3	Do you cover the child with proper clothing?	30	50.00%
4	Your family members involve in KMC?	23	38.33%
5	Do you clean up and freshen baby daily?	28	46.67%
6	Do you hold the baby properly?	31	51.67%
7	Do you continue exclusive breast feeding?	37	61.67%
8	Do you burp baby after feeding?	28	46.67%
9	Do you change the baby diaper every 4 hourly?	24	40.00%
10	Do you clean up baby eyes twice a day?	35	58.33%
11	Do you place diapers below the umbilical cord?	27	45.00%
12	Do you clean nappy area after defecation?	32	53.33%
13	Do you take care of your baby sensitive skin?	32	53.33%
14	Do you immunize your child with BCG, OPV and hep B vaccine?	45	75.00%
15	Do you follow medical advice?	40	66.67%
	Overall	31.6	52.67%

Above table-4.4.1: shows the each practice wise pre-test percentage of checklist on home care management preterm baby among the mothers of preterm . They are had maximum practice score for immunize child with BCG, OPV and hep-B vaccine (68.33%) and minimum practice score in involvement family members in KMC care (38.33%). Overall pretest percentage of practice score is 52.67%

Table-4.4.2 : Overall Pretest Practice Score

	No. of questions	Min – Max score	practice score	
			Mean \pm SD score	%
Overall score	15	0 -15	7.90 \pm 2.03	52.67%

Table-4.4.3: Pretest Level Of Practice Checklist Score

Level of practice	No. of mothers	%
Poor	36	60.0%
Moderate	24	40.0%
Good	0	0.0%
Total	60	100%

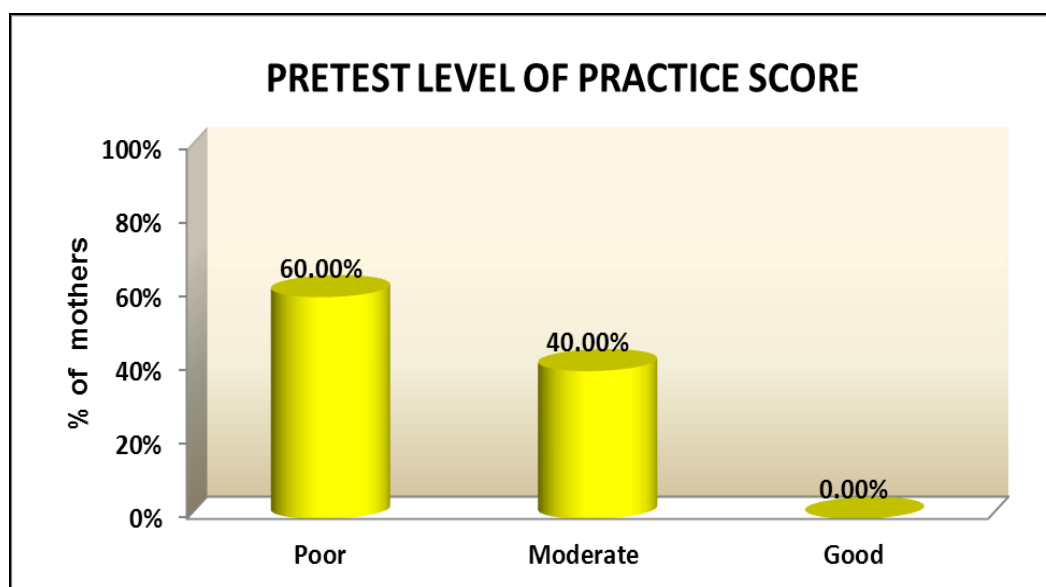


Fig 4.14: Bar diagram showing the mothers pretest level of practice on home care management of preterm baby.

In this study 60.0% of mothers are had poor practice score and 40.0% of them had moderate practice score and none of them are had Good practice score.

Table-4.4.4: Practice Score Interpretation

Min=0 Max=1 Total questions=15 Maximum marks= 15

S No.	Grade	Percentage	Marks
1.	Inadequate knowledge	0 – 50 %	≤ 7
2	Moderate knowledge	50 – 75%	8-12
3	Adequate knowledge	76 – 100%	13-15

OBJECTIVE-2: TO ASSESS THE POSTTEST KNOWLEDGE AND PRACTICE AMONG THE MOTHERS OF PRETERM BABY.

Table-4.5.1: Each Domainwise Mothers Posttest Percentage Of Knowledge On Home Care Mangement Of Preterm Babies

Knowledge regarding	No. of questions	Min – Max score	Knowledge score		
			Mean	SD	% of mean score
Preterm care	4	0 -4	3.22	1.01	80.50%
Feeding of babies	5	0 - 5	3.95	1.06	79.00%
Thermoregulation	4	0 - 4	2.98	1.11	74.50%
Skin care	4	0 - 4	3.17	1.03	79.25%
Umbilical cord care	4	0 - 4	3.15	1.04	78.75%
Eye care	3	0 - 4	2.58	1.01	86.00%
Elimination care	4	0 - 4	3.33	1.05	83.25%
Immunization	4	0 - 4	3.38	1.32	84.50%
Follow-up care	5	0 - 5	3.78	1.04	75.60%
Total	37	0 - 37	29.55	2.42	79.86%

Table-4.5.1:shows each domain wise post-test percentage of knowledge on home care management preterm baby among the mothers of preterm. maximum knowledge on Eye care(86.00%) and minimum knowledge score in Thermoregulation (74.50%). Overall pretest percentage of knowledge score is 79.86%

Table-4.5.2: Overall Posttest Knowledge Score

	No. of questions	Min – Max score	knowledge score	
			Mean \pm SD score	%
Overall score	30	0 -30	29.55 \pm 2.42	79.86%

Table-4.5.2: shows post-test percentage of knowledge on home care management preterm baby among the mothers of preterm babies. Overall post-test percentage of knowledge score is 79.86% among mothers.

Table-4.5.3: Posttest Level Of Knowledge

Level of Knowledge	No. of parents	%
Inadequate knowledge	0	0.0%
Moderate knowledge	13	21.67%
Adequate knowledge	47	78.33%
Total	60	100.00%

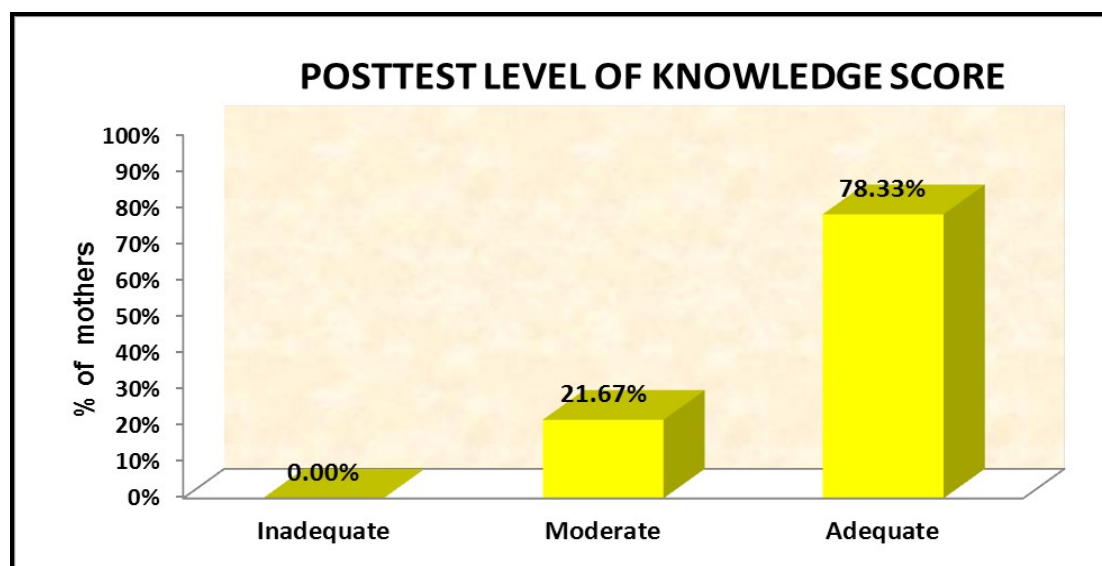


Fig No.4.15 : simple bar diagram shows percentage distribution of the mothers posttest level of knowledge on home care management preterm baby.

In this study level of knowledge score 21.67% of them had moderate level of knowledge and 78.33% of them are had adequate level of knowledge score.

Table-4.6.1: Each Statement Mothers Posttest Percentage Of Practice On Home Care Mangement Of Preterm Babies

S. No	Statement	Number of mothers	%
1	Do you wash your hands before and after touching the baby?	52	86.67%
2	Do you practicing kangaroo mother care at home?	49	81.67%
3	Do you cover the child with proper clothing?	48	80.00%
4	Your family members involve in KMC?	46	76.67%
5	Do you clean up and freshen baby daily?	48	80.00%
6	Do you hold the baby properly?	47	78.33%
7	Do you continue exclusive breast feeding?	52	86.67%
8	Do you burp baby after feeding?	49	81.67%
9	Do you change the baby diaper every 4 hourly?	46	76.67%
10	Do you clean up baby eyes twice a day?	47	78.33%
11	Do you place diapers below the umbilical cord?	46	76.67%
12	Do you clean nappy area after defecation?	45	75.00%
13	Do you take care of your baby sensitive skin?	47	78.33%
14	Do you immunize your child with BCG, OPV and hep-B vaccine?	54	90.00%
15	Do you follow medical advice?	53	88.33%
	Overall	48.6	81.00%

Above table-4.6.1 : shows the each practice wise post-test on home care management preterm baby among the mothers of preterm. They are having maximum practice score on immunization of child with BCG, OPV and hep B vaccine. (90.00%) and minimum practice score clean nappy area after defecation, (75.00%). Overall post-test percentage of practice score is 81.00%.

Table-4.6.2: Overall Posttest Practice Score

	No. of questions	Min – Max score	Practice score	
			Mean \pm SD score	%
Overall score	15	0 -15	12.15 \pm 1.23	81.00%

Table-4.6.2 : shows, post-test percentage of practice on home care management preterm baby among the mothers of preterm babies. Overall post-test percentage of practice score is 79.86% among mothers.

Table-4.6.3: Posttest Level Of Practice Checklist Score

Level of practice	No. of mothers	%
Poor	0	0.00%
Moderate	12	20.00%
Good	48	80.00%
Total	60	100.00%

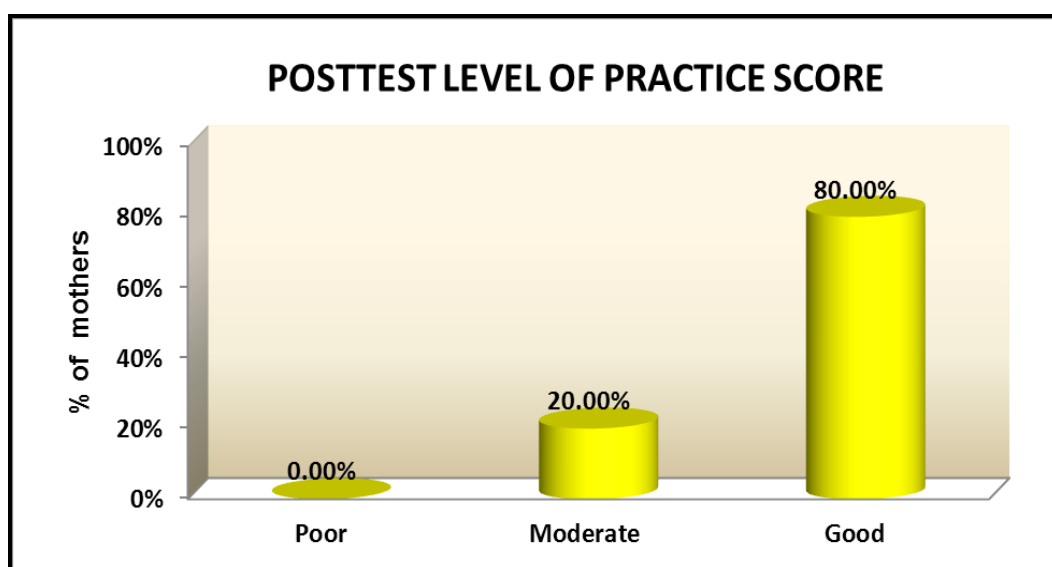


Fig4.16: Bar diagram showing percentage distribution of posttest level of practice score.

Majority of mother 80.00% had Good practice score and 20.0% of mother had moderate practice score

OBJECTIVE-3: TO EVALUATE THE EFFECTIVENESS OF MULTIMODAL INTERVENTION ON MANAGEMENT OF PRETERM BABY

Table-4.7.1: Comparison Of Pretest And Posttest Knowledge Score

S. No	Knowledge on	Pretest		osttest		Mean Difference	Student's paired t-test
		Mean	SD	Mean	SD		
1	Preterm care	2.03	1.22	3.22	1.01	1.19	t=9.32 P=0.001*** DF= 59 , Significant
2	Feeding of babies	2.38	1.04	3.95	1.06	1.57	t=9.28 P=0.001*** DF= 59 , Significant
3	Thermoregulation	1.08	1.06	2.98	1.11	1.90	t=10.91 P=0.001*** DF= 59 , Significant
4	Skin care	2.12	1.01	3.17	1.03	1.05	t=10.02 P=0.001*** DF= 59 , Significant
5	Umbilical cord care	1.42	1.05	3.15	1.04	1.73	t=11.86 P=0.001*** DF= 59 , Significant
6	Eye care	1.88	1.25	2.58	1.01	0.70	t=3.93 P=0.001*** DF= 59 , Significant
7	Elimination care	2.07	1.12	3.33	1.05	1.26	t=13.60 P=0.001*** DF= 59 , Significant
8	Immunization	2.28	1.35	3.38	1.32	1.10	t=17.89 P=0.001*** DF= 59 , Significant

S. No	Knowledge on	Pretest		osttest		Mean Difference	Student's paired t-test
		Mean	SD	Mean	SD		
9	Follow-up care	2.25	1.67	3.78	1.04	1.53	t=7.19 P=0.001*** DF= 59 , Significant
	Total	17.52	3.52	29.55	2.42	12.03	t=24.88 P=0.001*** DF= 59 , Significant

* significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table-4.7.1: shows the comparison of pre and posttest knowledge score regarding care of preterm babies among mothers. Considering Knowledge and practice regarding preterm care, in pretest, mothers are had 2.03 score whereas in posttest they are had 3.22 score. Difference is 1.19. This difference is large and it is statistically significant difference.

Regard Feeding of babies, in pretest, mothers had 2.38 score whereas in posttest they had 3.95 score. Difference is 1.57. This difference is large and it is statistically significant difference.

In view of Thermoregulation, in pretest, mothers had 1.08 score whereas in posttest they had 2.98 score. Difference is 1.90. This difference is large and it is statistically significant difference.

Considering Skin care, in pretest, mothers had 2.12 score whereas in posttest they had 3.17 score. Difference is 1.03. This difference is large and it is statistically significant difference.

Regard Umbilical cord care, in pretest, mothers had 1.42 score whereas in posttest they had 3.15 score. Difference is 1.73. This difference is large and it is statistically significant difference.

Considering Eye care, in pretest, mothers had 1.88 score whereas in posttest they had 2.58 score. Difference is 1.01. This difference is large and it is statistically significant difference.

Considering Elimination care, in pretest, mothers had 2.07 score whereas in posttest they had 3.33 score. Difference is 1.05. This difference is large and it is statistically significant difference.

To observe Immunization, in pretest, mothers had 2.2 score whereas in posttest they had 3.38 score. Difference is 1.32. This difference is large and it is statistically significant difference.

Considering Follow-up care, in pretest, mothers had 2.25 score whereas in posttest they had 3.78 score. Difference is 1.04. 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-4.7.2: Comparison Of Overall Knowledge Score Before And After Multimodal Intervention

	No. of mothers	Pretest Mean±SD	Posttest Mean±SD	Mean difference Mean±SD	Student's paired t-test
Overall Knowledge Score	60	17.52 ± 3.52	29.55 ± 2.42	12.03 ± 3.75	t=24.88 P=0.001*** DF = 59, significant

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

Table-4.7.2 : shows the comparison of overall knowledge before and after the administration of multimodal intervention.

On an average, mothers are improved their knowledge score from 17.52 to 29.55 after the administration of multimodal intervention. Or we can say, in pretest they are able to answer only 17 questions before administration of multimodal intervention, they are able to answer up to 19 questions. Due to Multi modal intervention programme they are able to answer 12 more questions correctly. This difference is statistically significant. Statistical significance was calculated by using student's paired 't' test.

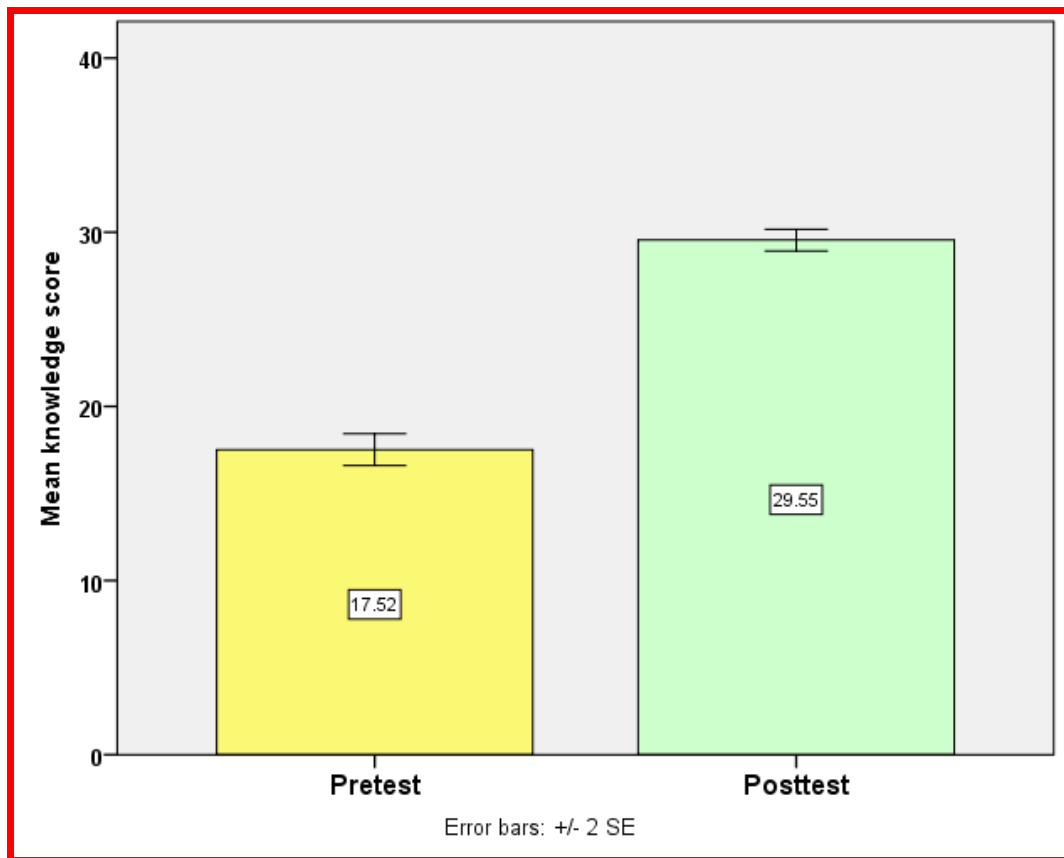


Fig 4.17 : Simple bar with 2 standard error diagram compares the mothers pretest and posttest knowledge score

Table-4.8: Each Domainwise Pretest And Posttest Percentage Of Knowledge

S. No.	Domains	Posttest Knowledge	Pretest knowledge	% of knowledge gain
1	Preterm care	80.50%	50.75%	29.75%
2	Feeding of babies	79.00%	47.60%	31.40%
3	Thermoregulation	74.50%	27.00%	47.50%
4	Skin care	79.25%	53.00%	26.25%
5	Umbilical cord care	78.75%	35.50%	43.25%
6	Eye care	86.00%	62.67%	23.33%
7	Elimination care	83.25%	51.75%	31.50%
8	Immunization	84.50%	57.00%	27.50%
9	Follow-up care	75.60%	45.00%	30.60%
	Overall	79.86%	47.35%	32.51%

Table-4.8: shows each domain wise knowledge gain score among the preterm babies mothers

Table-4.9 : Comparison Of Pretest And Posttest Level Of Knowledge Score

Level of knowledge	Pretest		Posttest		Extended McNemar's test
	n	%	N	%	
Inadequate knowledge	39	65.0%	0	0.0%	$\chi^2=53.87$ $P=0.001^{***}$ DF-2 (S)
Moderate knowledge	21	35.0%	13	21.67%	
Adequate knowledge	0	0.0%	47	78.33%	
Total	60	100.0%	60	100.0%	

***very high significant at $p < 0.001$ level

Table-4.9: shows the pretest and post-test level of knowledge among mothers of preterm neonate

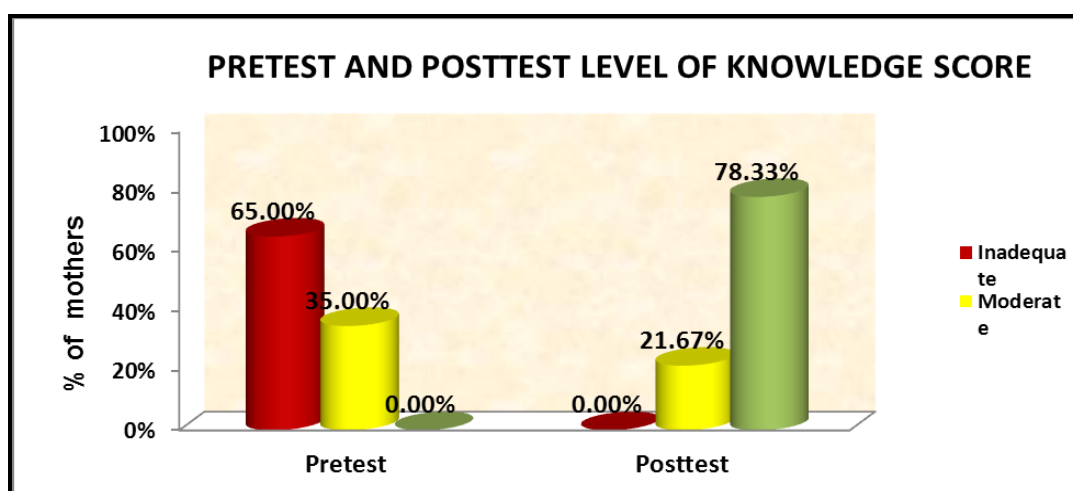


Fig 4.18: Multiple bar diagram showing pretest and post-test level of knowledge score among the mothers of preterm neonate.

Before intervention, 65.0% of the mother had inadequate level of knowledge score, 35.0% of them had moderate level of knowledge score and none of them are had adequate level of knowledge score. After intervention, 21.67% of them had moderate level of knowledge score and 78.33% of them had adequate level of knowledge score. none of the mothers had inadequate level of knowledge and . Level of knowledge and gain of between pretest and posttest was calculated using Extended McNemar's chi-square test.

Table-4.10 : Effectiveness Of Multimodal Intervention 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	37	17.52	12.03 (11.07 – 13.00)	32.51% (29.92% – 35.13%)
Posttest	37	29.55		

Table-4.10 : shows the effectiveness of multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm neonate. On an average, in posttest after multimodal intervention program, mothers gained 32.51% more knowledge score than pretest score.

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

Table-4.11 : Comparison Of Overall Practice Score Before And After Multimodal Intervention

	No. of mothers	Pretest Mean±SD	Posttest Mean±SD	Mean difference Mean±SD	Student's paired t-test
Overall Practice Score	60	7.90 ± 2.07	12.15 ± 1.98	4.25 ± 1.11	t=29.54 P=0.001*** DF = 59, significant

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

Table 4.11: shows the comparison of overall practice before and after the administration of multimodal intervention. On an average, mothers are improved their practice score from 7.90 to 12.15 after the administration of multimodal intervention. Or we can say, in pretest they are able to practice correctly only 8 questions before administration of multimodal intervention, they are able to practice correctly up to 12 questions. Due to intervention they are able to answer 4 more checklist correctly. This difference is statistically significant. Statistical significance was calculated by using student's paired 't' test.

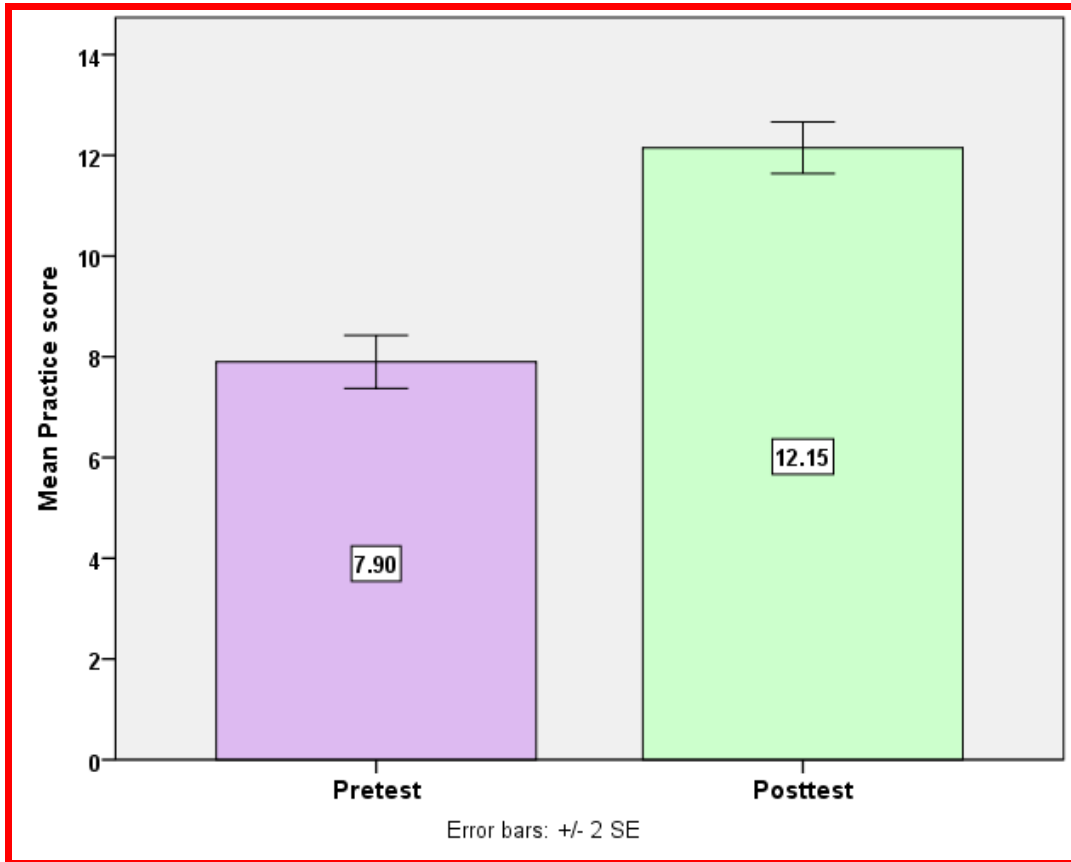


Fig 4.19: Simple bar with 2 standard error diagram compares the mothers pretest and posttest practice score

Table-4.12 : Each Domainwise Pretest And Posttest Percentage Of Practice

S. No	Domains	Posttest Practice	Pretest practice	% of practice gain
1	Do you wash your hands before and after touching the baby?	86.67%	58.33%	28.34%
2	Do you practicing kangaroo mother care at home?	81.67%	43.33%	38.34%
3	Do you cover the child with proper clothing?	80.00%	50.00%	30.00%
4	Your family members involve in KMC?	76.67%	38.33%	38.34%
5	Do you clean up and freshen baby daily?	80.00%	46.67%	33.33%
6	Do you hold the baby properly?	78.33%	51.67%	26.66%
7	Do you continue exclusive breast feeding?	86.67%	61.67%	25.00%
8	Do you burp baby after feeding?	81.67%	46.67%	35.00%
9	Do you change the baby diaper every 4 hourly?	76.67%	40.00%	36.67%
10	Do you clean up baby eyes twice a day?	78.33%	58.33%	20.00%
11	Do you place diapers below the umbilical cord?	76.67%	45.00%	31.67%
12	Do you clean nappy area after defecation?	75.00%	53.33%	21.67%
13	Do you take care of your baby sensitive skin?	78.33%	53.33%	25.00%
14	Do you immunize your child with BCG, OPV and hep B vaccine?	90.00%	75.00%	15.00%
15	Do you follow medical advice?	88.33%	66.67%	21.66%
	Overall	81.00%	52.67%	28.33%

Table 4.12: shows each domain wise practice gain score among the preterm babies mothers over all pretest practice score 52.67% and post score is 81%.

Table-4.13: Comparison Of Pretest And Posttest Level Of Practice Score

Level of practice	Pretest		Posttest		Extended McNemar's test
	N	%	n	%	
Poor	36	60.00%	0	0.00%	$\chi^2=55.34$ $P=0.001^{***}$ DF=2 (S)
Moderate	24	40.00%	12	20.00%	
Good	0	0.00%	48	80.00%	
Total	60	100.0%	60	100.0%	

*** very high significant at $p < 0.001$ level

Table-4.13: shows the pretest and post-test level of practice among preterm babies' mothers

Before intervention, 60.0% of the mothers had poor level of practice score, 40.0% of them had moderate level of practice score and none of them had good level of practice score. After intervention, 20.00% of them had moderate level of practice score and 80.00% of them had good level of practice score.

Level of practice gain of between pretest and posttest was calculated using Extended McNemar's chi-square test.

Table-4.14 : Effectiveness Of Multimodal Intervention And Generalization Of Practice Gain Score

	Max score	Mean score	Mean Difference of practice gain score with 95% Confidence interval	Percentage Difference of practice gain score with 95% Confidence interval
Pretest	15	7.90	4.25 (3.96 – 4.54)	28.33% (26.40% –30.27%)
Posttest	15	12.15		

Table-4.14: shows the effectiveness of multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm Neonate. On an average, in posttest after multimodal intervention, mothers are gained 28.33% more practice score than pretest score.

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

OBJECTIVE-4: TO FIND OUT THE ASSOCIATION BETWEEN THE POSTTEST KNOWLEDGE AND PRACTICE SCORES OF WITH DEMOGRAPHIC VARIABLES OF MOTHERS OF PRETERM BABY.

Table-4.15 : Association Between Mothers Posttest Level Of Knowledge Score And Their Demographic Variables

Demographic Variables		Posttest level of knowledge score						n	Chi square test
		Inadequate		Moderate		Adequate			
		N	%	n	%	n	%		
Age	< 20 years	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=7.28$ P=0.05* (S)
	21 -25 years	0	0.00%	12	27.78%	24	72.22%	36	
	26 -30 years	0	0.00%	1	5.26%	18	94.74%	19	
	> 30 years	0	0.00%	0	0.00%	5	100.00%	5	
Education status	Informal education	0	0.00%	3	75.00%	1	25.00%	4	$\chi^2=7.91$ P=0.05* (S)
	Primary education	0	0.00%	6	22.22%	21	77.78%	27	
	Secondary education	0	0.00%	3	12.50%	21	87.50%	24	
	Graduate	0	0.00%	1	20.00%	4	80.00%	5	
Occupation status	Employed	0	0.00%	1	14.29%	6	85.71%	7	$\chi^2=0.25$ P=0.61 (NS)
	Unemployed	0	0.00%	12	22.64%	41	77.36%	53	
Religion	Hindu	0	0.00%	10	20.00%	40	80.00%	50	$\chi^2=0.59$ P=0.74 (NS)
	Christian	0	0.00%	2	33.33%	4	66.67%	6	
	Muslim	0	0.00%	1	25.00%	3	75.00%	4	
Family Monthly Income	< Rs.5000	0	0.00%	1	12.50%	7	87.50%	8	$\chi^2=3.37$ P=0.38 (NS)
	Rs.5001-10000	0	0.00%	7	20.00%	28	80.00%	35	
	Rs.10001-20000	0	0.00%	2	18.18%	9	81.82%	11	
	> Rs.20000	0	0.00%	3	50.00%	3	50.00%	6	
Type of family	Nuclear family	0	0.00%	12	32.43%	25	67.57%	37	$\chi^2=8.29$ P=0.05* (S)
	Joint family	0	0.00%	0	0.00%	20	100.00%	20	
	Extended family	0	0.00%	1	33.33%	2	66.67%	3	

Demographic Variables		Posttest level of knowledge score						n	Chi square test
		Inadequate		Moderate		Adequate			
		N	%	n	%	n	%		
Area of Residence	Rural	0	0.00%	4	19.05%	17	80.95%	21	$\chi^2=0.91$ P=0.21 (NS)
	Urban	0	0.00%	2	20.00%	8	80.00%		
	Suburban	0	0.00%	7	24.14%	22	75.86%		
Presence of any problem in your health	Diabetes mellitus	0	0.00%	1	50.00%	1	50.00%	2	$\chi^2=2.85$ P=0.42 (NS)
	Hypertension	0	0.00%	0	0.00%	3	100.00%		
	Anemia	0	0.00%	2	40.00%	3	60.00%		
	Any other specify	0	0.00%	10	20.00%	40	80.00%		

Table-4.15: shows the association between mothers' posttest level of knowledge score and their demographic variables. Elder aged mothers, more educated mothers and joint family mothers are having more adequate level of knowledge score than others.

Statistical significance was calculated using Pearson chi square test.

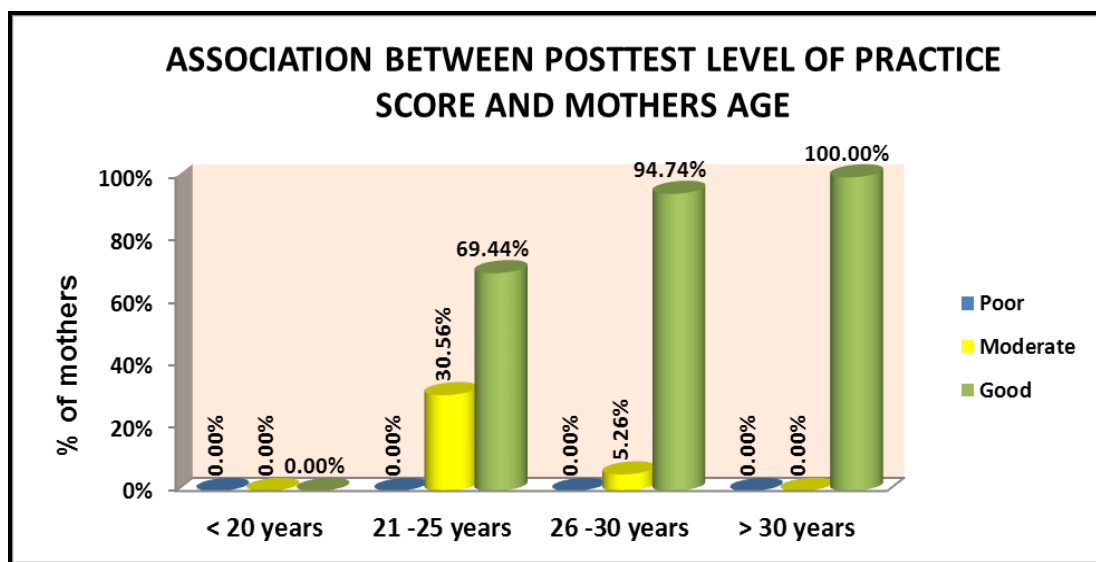


Fig 4.20: shows the association between posttest level of practice score and mothers age.

Table-4.16 : Association Between Posttest Level Of Knowledge And Child Demographic Variables

Child demographic variables		Posttest level of knowledge score						n	Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Age of the child	< 10 days	0	0.00%	6	46.15%	7	53.85%	13	$\chi^2=6.07$ P=0.05* (S)
	11-20 days	0	0.00%	3	18.75%	13	81.25%	16	
	21-28 days	0	0.00%	4	12.90%	27	87.10%	31	
Sex of the baby	Girl	0	0.00%	8	25.00%	24	75.00%	32	$\chi^2=0.44$ P=0.50 (NS)
	Boy	0	0.00%	5	17.86%	23	82.14%	28	
Birth weight of the baby	501-1000gms	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=2.00$ P=0.36 (NS)
	1001-1500gms	0	0.00%	12	23.53%	39	76.47%	51	
	1501-2000gms	0	0.00%	0	0.00%	6	100.00%	6	
	> 2000gms	0	0.00%	1	33.33%	2	66.67%	3	
Baby delivered at	< 28 weeks	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=5.88$ P=0.02* (S)
	28-32 weeks	0	0.00%	2	7.40%	25	92.60%	27	
	32- 37 weeks	0	0.00%	11	33.33%	22	66.67%	33	
Birth order of the child	First child	0	0.00%	10	27.78%	26	72.22%	36	$\chi^2=2.29$ P=0.31 (NS)
	Second child	0	0.00%	3	14.29%	18	85.71%	21	
	More than 2 child	0	0.00%	0	0.00%	3	100.00%	3	
Any associated problem during birth?	Yes	0	0.00%	1	11.11%	8	88.89%	9	$\chi^2=0.69$ P=0.40 (NS)
	No	0	0.00%	12	23.53%	39	76.47%	51	

Child demographic variables		Posttest level of knowledge score						n	Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Mode of delivery	Normal	0	0.00%	12	22.22%	42	77.78%	54	$\chi^2=0.10$ P=0.75 (NS)
	Caesarean sections	0	0.00%	1	16.67%	5	83.33%	6	
	Forceps	0	0.00%	0	0.00%	0	0.00%	0	
	Vacuum	0	0.00%	0	0.00%	0	0.00%	0	
Mother's Source of support	Family members	0	0.00%	12	21.82%	43	78.18%	55	$\chi^2=0.79$ P=0.67 (NS)
	Friends	0	0.00%	1	33.33%	2	66.67%	3	
	Neighbors	0	0.00%	0	0.00%	2	100.00%	2	
Do you have any habits?	Yes	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=0.00$ P=1.00 (NS)
	No	0	0.00%	13	21.67%	47	78.33%	60	
Source of Health care related Information	Doctor	0	0.00%	3	50.00%	3	50.00%	6	$\chi^2=3.26$ P=0.19 (NS)
	Nurses	0	0.00%	4	21.05%	15	78.95%	19	
	Relatives/multimedia	0	0.00%	6	17.14%	29	82.86%	35	
Is there any family history of preterm?	Yes	0	0.00%	2	18.18%	9	91.82%	11	$\chi^2=0.09$ P=0.75 (NS)
	No	0	0.00%	11	22.44%	38	77.56%	49	

Table-4.16: shows the association between posttest level of knowledge score and child demographic variables. 21-28 days child mothers, 28-32 weeks delivery mothers are having more adequate level of knowledge score than others.

Statistical significance was calculated using Pearson chi square test.

Table-4.17: Association Between Mothers Posttest Level Of Practice Score And Their Demographic Variables

Demographic Variables		Posttest level of practice score						n	Chi square test
		Poor		Moderate		Good			
		N	%	n	%	n	%		
Age	< 20 years	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=6.33$ P=0.05* (S)
	21 -25 years	0	0.00%	11	30.56%	25	69.44%	36	
	26 -30 years	0	0.00%	1	5.26%	18	94.74%	19	
	> 30 years	0	0.00%	0	0.00%	5	100.00%	5	
Education status	Informal education	0	0.00%	3	75.00%	1	25.00%	4	$\chi^2=8.44$ P=0.04* (S)
	Primary education	0	0.00%	5	18.52%	22	81.48%	27	
	Secondary education	0	0.00%	3	12.50%	18	87.50%	24	
	Graduate	0	0.00%	1	20.00%	42	80.00%	5	
Occupation status	Employed	0	0.00%	1	14.29%	6	85.71%	7	$\chi^2=0.16$ P=0.68 (NS)
	Unemployed	0	0.00%	11	20.75%	42	79.25%	53	
Religion	Hindu	0	0.00%	9	18.00%	41	82.00%	50	$\chi^2=0.85$ P=0.65 (NS)
	Christian	0	0.00%	2	33.33%	4	66.67%	6	
	Muslim	0	0.00%	1	25.00%	3	75.00%	4	
Family Monthly Income	< Rs.5000	0	0.00%	1	12.50%	7	87.50%	8	$\chi^2=4.47$ P=0.21 (NS)
	Rs.5001-10000	0	0.00%	7	20.00%	28	80.00%	35	
	Rs.10001-20000	0	0.00%	1	9.09%	10	90.91%	11	
	> Rs.20000	0	0.00%	3	50.00%	3	50.00%	6	

Demographic Variables		Posttest level of practice score						n	Chi square test
		Poor		Moderate		Good			
		N	%	n	%	n	%		
Type of family	Nuclear family	0	0.00%	11	29.73%	26	70.27%	37	$\chi^2=7.52$ P=0.02* (S)
	Joint family	0	0.00%	0	0.00%	20	100.00%	20	
	Extended family	0	0.00%	1	33.33%	2	66.67%	3	
Area of Residence	Rural	0	0.00%	4	19.05%	17	80.95%	21	$\chi^2=0.02$ P=0.99 (NS)
	Urban	0	0.00%	2	20.00%	8	80.00%	10	
	Suburban	0	0.00%	6	20.69%	23	79.31%	29	
Presence of any problem in your health	Diabetes mellitus	0	0.00%	1	50.00%	1	50.00%	2	$\chi^2=3.25$ P=0.36 (NS)
	Hypertension	0	0.00%	0	0.00%	3	100.00%	3	
	Anemia	0	0.00%	2	40.00%	3	60.00%	5	
	Any other specify	0	0.00%	9	18.00%	41	82.00%	50	

Table-4.17: shows the association between mother posttest level of practice score and their demographic variables. Elder aged mothers, more educated mothers and joint family mothers are having more good level of practice score than others.

Statistical significance was calculated using Pearson chi square test.

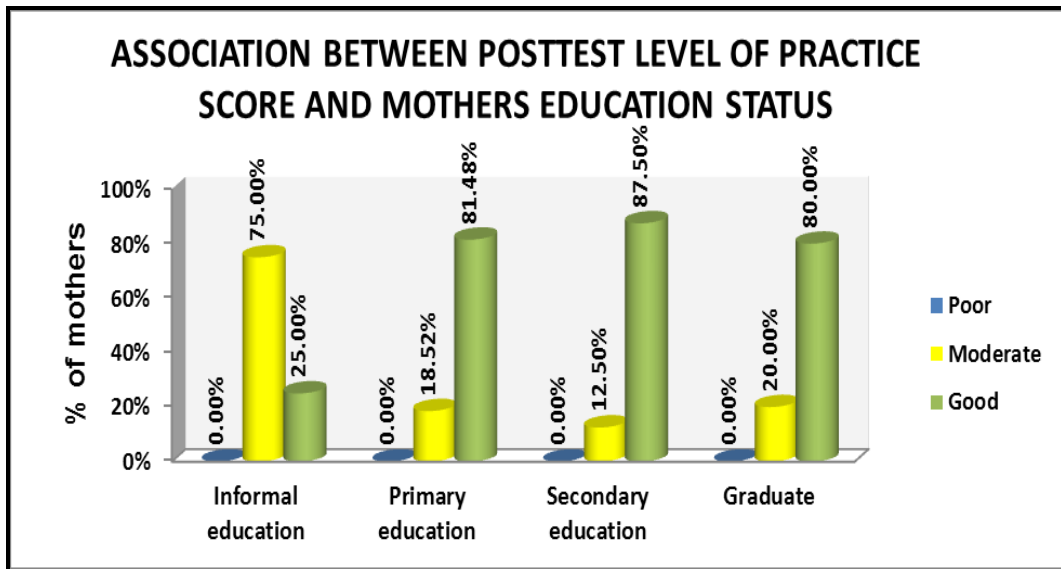


Fig 4.21: Multiple bar diagram showing percentage distribution of association between posttest level of practice score with mothers education status.

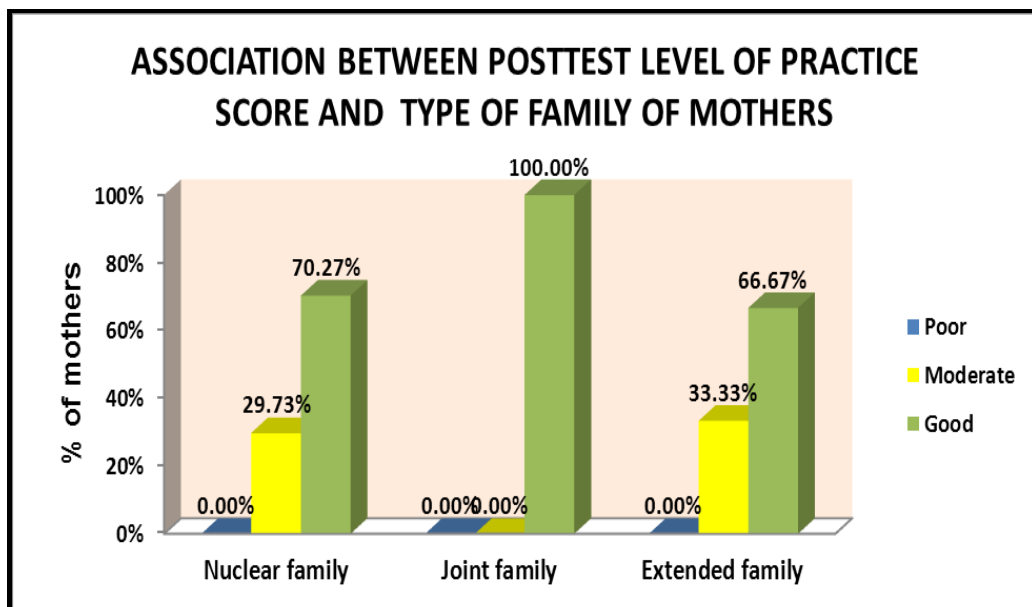


Fig4.22 : Multiple bar diagram showing percentage distribution of association between posttest level of practice score and type of family of mothers

Table-4.18: Association Between Posttest Level Of Practice And Child Demographic Variables

Demographic Variables		Posttest level of practice score						n	Chi square test
		Poor		Moderate		Good			
		n	%	n	%	n	%		
Age of the child	< 10 days	0	0.00%	6	46.15%	7	53.85%	13	$\chi^2=7.64$ P=0.02* (S)
	11-20 days	0	0.00%	3	18.75%	13	81.25%	16	
	21-28 days	0	0.00%	3	9.68%	28	91.32%	31	
Sex of the baby	Girl	0	0.00%	8	25.00%	24	75.00%	32	$\chi^2=1.07$ P=0.30 (NS)
	Boy	0	0.00%	4	14.29%	24	85.71%	28	
Birth weight of the baby	501-1000gms	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=2.65$ P=0.27 (NS)
	1001-1500gms	0	0.00%	12	23.53%	39	76.47%	51	
	1501-2000gms	0	0.00%	0	0.00%	6	100.00%	6	
	> 2000gms	0	0.00%	0	0.00%	3	100.00%	3	
Baby delivered at	< 28 weeks	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=4.86$ P=0.03* (S)
	28-32 weeks	0	0.00%	2	7.41%	25	92.59%	27	
	32- 37 weeks	0	0.00%	10	30.30%	23	69.70%	33	
Birth order of the child	First child	0	0.00%	9	25.00%	27	75.00%	36	$\chi^2=1.74$ P=0.42 (NS)
	Second child	0	0.00%	3	14.29%	18	85.71%	21	
	More than 2 child	0	0.00%	0	0.00%	3	100.00%	3	
Any associated problem during birth?	Yes	0	0.00%	1	11.11%	8	88.89%	9	$\chi^2=0.52$ P=0.47 (NS)
	No	0	0.00%	11	21.57%	40	78.43%	51	

Demographic Variables		Posttest level of practice score						n	Chi square test
		Poor		Moderate		Good			
		n	%	n	%	n	%		
Mode of delivery	Normal	0	0.00%	12	22.22%	42	77.78%	54	$\chi^2=1.66$ P=0.19 (NS)
	Caesarean sections	0	0.00%	0	0.00%	6	100.00%	6	
	Forceps	0	0.00%	0	0.00%	0	0.00%	0	
	Vacuum	0	0.00%	0	0.00%	0	0.00%	0	
Mother's Source of support	Family members	0	0.00%	12	21.82%	43	78.18%	55	$\chi^2=1.36$ P=0.50 (NS)
	Friends	0	0.00%	0	0.00%	3	100.00%	3	
	Neighbors	0	0.00%	0	0.00%	2	100.00%	2	
Do you have any habits?	Yes	0	0.00%	0	0.00%	0	0.00%	0	$\chi^2=0.00$ P=1.00 (NS)
	No	0	0.00%	12	20.00%	48	80.00%	60	
Source of Health care related Information	Doctor	0	0.00%	3	50.00%	3	50.00%	6	$\chi^2=3.76$ P=0.15 (NS)
	Nurses	0	0.00%	3	15.79%	16	84.21%	19	
	Relatives/multimedia	0	0.00%	6	17.14%	29	82.86%	35	
Is there any family history of preterm?	Yes	0	0.00%	4	36.36%	7	63.64%	11	$\chi^2=2.25$ P=0.13 (NS)
	No	0	0.00%	8	16.32%	41	83.68%	49	

Table-4.18 : shows the association between mothers posttest level of practice score and their clinical variables.

Statistical significance was calculated using pearson chi square test.

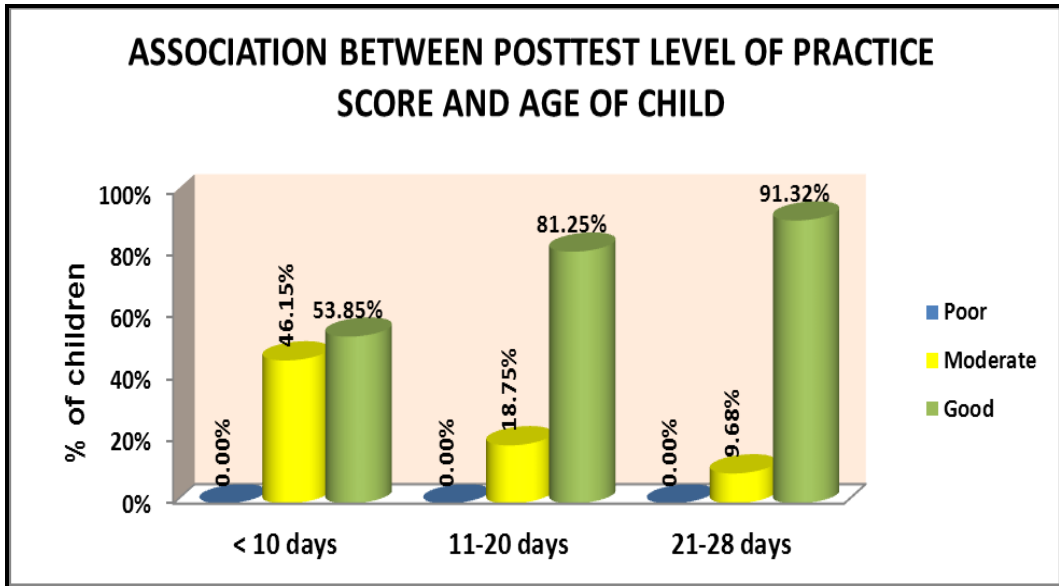


Fig4.23: Multiple bar diagram showing percentage distribution of Association between posttest level of practice score with age of child.

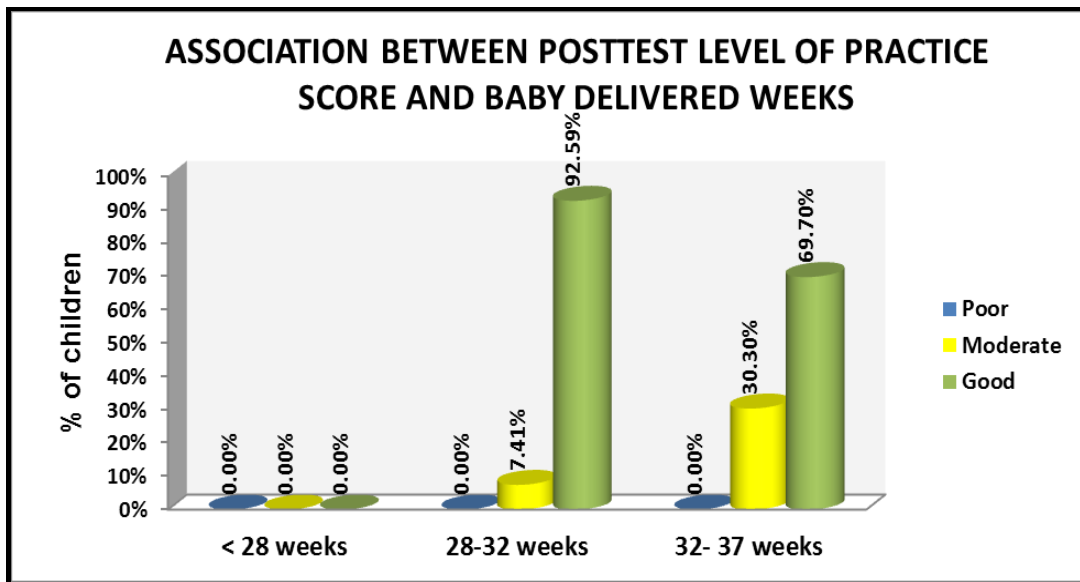


Fig4.24: Multiple bar diagram showing the percentage distribution of Association between posttest level of practice score and baby delivered weeks.

CHAPTER – V DISCUSSION

This chapter deals with the discussion of the results of the data analyzed based on the objectives of the study hypothesis and purpose of study was to assess the effectiveness of multimodal intervention program on comprehensive home care management of babies among mothers of preterm at Neonatology Intensive care Unit, Institute of child Health and Hospital for children. Egmore, Chennai-08.

THE RESULTS OF THE STUDY ARE DISCUSSED BELOW BASED ON OBJECTIVES.

Out of 60 mothers 21-21 years 60%, 26-30 years (31.67), more than 30 years of age group is (8.33). As regards educational status 6.67% of mothers had informal education, 45% had primary education, 40% of mothers had secondary education. 8.33% of mothers were graduate. Concerning occupational status 11.67% are employed. and 88.33% were unemployed. Out of 60 mothers, 83.33% mothers belongs to Hindu, 10% of mothers belongs to Christian and 6.67% of mothers belongs to Muslim. With regard monthly income 13.33% of mothers monthly income less than Rs.5000, 58.33% of mothers monthly income Rs.5001-10000, 18.34% family income Rs.10001-20000, and 10% of mother's family income more than 20,000 per month. concerning type of family 61.67% of mothers belongs to nuclear family. 33.33% are joint family, and 5% of mothers are from extended family.

In view place of residence 35% of mothers from rural area, 35% of mothers from urban area, 48.33% of mothers from suburban area. As regard health status of mothers 3.33% of mothers had diabetic mellitus, 5% of mothers had history of hypertension, 8.34% of mothers had anemia.

Demographic Variables Of Child

As regard age of the child 21.67% of babies were below 10 days, 26.66% of babies were 11-20 days, and 51.67% of babies belongs to 21-28 days of life. In this study 53.33% of babies Girl child, and 46.67% of them Boy child. Concerning birth weight of the babies are 1001-1500kgs, 10% of baby's weight is 1501-2000kgs, 5% of baby weight is more than 2000kgs. As regard birth order of the child 60% of babies were first child, 35% of babies were born second child, 5% of babies more than two child. Concerning family history of preterm 18.33% had a family history preterm.

In this studies on the knowledge and practice of the mothers and relatives should be undertaken to Eliminate certain Bad practices/Taboos and to find out useful guidance for the Nursing practitioners as well as Education.

Objective-1: To assess the pretest knowledge and practice regarding care of preterm babies among the mothers of preterm.

Each domain wise pretest percentage of knowledge on Home care management of preterm baby among mothers the result shows Regarding Preterm care 50.75%, Feeding of babies 47.60%, regarding Thermoregulation 27.00%, Skin care 53.00%, Umbilical cord care 35.50%, Eye care 62.67%, Elimination care 51.75%, Immunization 57.00% and Follow up care is 45.35%.

Pretest level of Knowledge

Over all 65.0% of mothers having inadequate knowledge, 35.0% of mothers had moderate knowledge.

In Pretest Practice Level

In this study 60.0% of mother had poor practice score and 40.0% of them had moderate practice score.

Nasrin Khalesi, et.al.,(2015) Evaluation of parents awareness and knowledge about problems and issues related to their infants in an Iranian Hospital. This was descriptive study. result shows the most awareness and knowledge of parents about problems of their premature infant were related to their age and being a mother or father. Parents had little knowledge about some NICU principles and premature needs and care. Similarly, **Antony(2018)** conducted the study Qualitative assessment of knowledge transfer regarding preterm birth. A single researcher recorded responses, and transcript notes were reviewed. The goal was to identify specific knowledge gap and to then develop tailored educational materials and healthcare messages. In order to educate the majority of mother improve and understanding of the definition of preterm birth, methods to prevent risk of preterm birth, and management options for preterm babies.

From the above, it is revealed that majority of mothers had poor knowledge and awareness on home care management of preterm baby among the mothers of preterm. Hence the researcher has an interest on providing nurse driven multimodal intervention program for mother.

Objective-2: To assess the posttest knowledge and practice regarding care of preterm babies among the mothers of preterm.

Each domain wise posttest percentage of knowledge on home care management of preterm baby among the mothers. preterm care 80.50%, feeding of babies 79.00%, pertaining to thermoregulation 74.50%, skin care 79.25%, umbilical cord care 78.75%, eye care 86.00%, regards elimination care 83.25%, immunization 84.50%, and follow up care 75.86%. over all posttest percentage of knowledge score is 79.86% among mothers.

Posttest level of Knowledge

Out of 60 mothers 78.33% of mothers had Adequate knowledge, 21.67% of mothers had moderate knowledge score.

Posttest level of Practice Checklist Core

In general 80.00% of mothers had Good practice in care of preterm, 20.00% of mothers had moderate level of practice score.

Julia petty et al., (2019) conducted the study to aim explore the existing knowledge base learning needs of community health professionals to further understand how they can adequately support parents in the community with premature babies. The results showed that tailored resources for community based health professionals on the specific needs of the premature baby would enhance provisions of optimal support for parents. Similarly, **Gabriet seidman et al., (2010)** the systematic sought to identify the most

From the above discussion, it was revealed that the mothers gained adequate knowledge and practice by administration various teaching modules on multimodal intervention program.

Objective- 3: to evaluate the effectiveness of multimodal intervention on management of preterm baby.

Preterm Care

Considering knowledge of preterm care in pretest mothers had 2.03 score whereas in posttest they had 3.22 score. Difference is 1.19. which significantly is larger and it is statistically significant evidence. **It is supported by priyanka bansal, merlin james (2016)**

Thermoregulation

The investigator discussed to the mothers about the hypothermia, about kangaroo mother care it can given by all family members without having any infection, and the cover the baby with wollen cloths to prevent heat loss. Considering in pretest mothers had 1.08 score whereas in posttest they had 2.98 score. Difference is 1.90. This difference is

large and it is statistically significant difference. **It is supported by Marilyn Aita et al., (2015)**

Feeding of Babies

The investigator explained the important of breastfeeding and the methods of feed the expressed breast milk, exclusive breast feeding, paladai feeding technique and handwashing and how to keep feeding utensils. Considering feeding of babies in pretest, mothers had 2.38 score whereas in posttest they had 3.95 score. Difference is 1.57. This difference is large and it is statistically significant difference. **It is supported by Nega Degefa et al., (2019)**

Skin care

The mothers are taught about the skin care, body massage, danger sign of skin colour changes, regarding sponge bath with luke warm water. *In pretest mothers had 2.12 score whereas in posttest they had 3.17 score. Difference is 1.03. This difference is large and it is statistically significant difference. It is supported by Gabriet seidman et al., (2010)*

Umbilical Cord Care

The care of umbilical cord was thought to mothers through demonstration and instruction was given not apply anything over the cord and the diaper should place under the umbilical cord. Considering umbilical cord care in pretest mothers are having 1.42 score whereas in posttest they are having 3.15 score. Difference is 1.73 . This difference is large and it is statistically significant difference. **It is supported by Marilyn Aita et al., (2015)**

Eye Care

Through the demonstration and explanation given to the mothers regarding eye care, how to protect the eye, avoidance of kajal and self medication, and demonstration given to mothers about how to clean the

eyes. Considering eye care in pretest mothers are having 1.88 score whereas in posttest they are having 2.58 score. Difference is 1.01. This difference is large and it is statistically significant difference. **It is supported by Marilyn Aita et al., (2015)**

Elimination Care

Educate the mothers regarding how to clean the baby after urination and defecation, how often change the diaper, if not what will be the result, demonstration shown to the mothers to clean by clean wet cloth from upper direction to lower direction. Considering elimination care in pretest mothers had 2.07 score whereas in posttest they had 3.33 score. Difference is 1.05. This difference is large and it is statistically significant difference. **It is supported by Julia petty et al., (2019)**

Immunization

Mothers are instructed by the investigator how the vaccines are protect the baby from major killer diseases and the important of the immunization. Considering immunization in pretest mothers had 2.28 score whereas in posttest they had 3.38 score. Difference is 1.32. This difference is large and it is statistically significant difference. **It is supported by Heliyon (2019)**

Follow-up care

The investigator advice the mothers to attend the follow up without fail and ask to clear their doubt regarding baby care after discharge. Considering follow-up care in pretest mothers had 2.25 score whereas in posttest they had 3.78 score. Difference is 1.04. This difference is large and it is statistically significant difference. **It is supported by Alber yemosoo lomotey et al., (2019)**

The above discussion shows that there is significant difference between pretest and posttest score calculated using student paired 't'-test. On an average, mothers are improved their knowledge score from 17.52 to 29.55 after the administration of multimodal intervention. In which as an average, mothers had improved their practice score from 7.09 to 12.15 after administration of multimodal intervention signifies the importance of study done by the investigator proved by using student's paired 't' test.

Knowledge: $t=24.88$ $P=0.001$ $DF=59$, significant

Practice : $x^2=53.87$ $P=0.001$ $DF= 2$, significant

The difference observed in the mean score value of pre and posttest were true differences and not by chance. Hence stated null hypothesis is rejected $p<0.001$ and H_1 - is accepted, which shows that multimodal intervention program was effective for all the areas.

The finding of the present study was supported by **Ali alderaei et.al., (2019)** carried out a study to evaluate mothers knowledge of caring for premature infants post discharge from NICU it is quantitative based cross sectional design study was used to survey 120 mothers of preterm neonate at the time of discharge by face to face interview.the result showed there was no statistical significance difference between the level of knowledge and mothers socio demographic characterists the study emphasis the necessity of thoughtful exchange of health information between team members and mother and establishing healthy transistion of preterm neonatal to home to ameliorate family concerns. Simiarly, **Sinmayee kumara devi, kalpana Badhei (2015)** conducted a quasi experimental study with pre and posttest without control group design and samples were secelected by purposive sampling technique findings revealed that overall statistical analysis of

data revealed that STP was effective in improving knowledge of the mother care of newborn.

The above discussion indicated that multimodal intervention program promoted by nurses was effective in accelerating to the mother's knowledge and practice regarding home care management of preterm baby.

Objective-4: To find out the association between the posttest knowledge and practice scores of mothers with socio-demographic variables.

In order to find out the association between the post-test and the selected demographic variables of the subjects, chi square test was computed and found that there were significant association between the posttest knowledge and practice of mothers regarding home care management of preterm baby with their selected demographic variables.

The study indicated that, regarding family age more than 30 years had gained more knowledge and practice score. **It is statistically significant with $\chi^2=6.33$ at $p=0.02^{**}$ level.**

Regarding educational status mothers who had secondary level of education had gained more knowledge and practice score. **It is statistically significant $\chi^2=8.44$, $p=0.04^*$ level.**

Regarding type of family mothers who belongs to joint family had gained more knowledge and practice score. **It is statistically significant with $\chi^2=7.52$ $p=0.02^*$.**

Recording to age of the child mothers who had 21-28 days mother had gained more knowledge and practice score. **It is statistically significant with $\chi^2=7.64$ $p=0.02^*$ level.**

The findings revealed that there is significant association between posttest knowledge and practice of mothers regarding comprehensive home care management of preterm baby.

Hence, it is proved that the mothers gained knowledge through the multimodal intervention programme, has improved knowledge and practice gain score was calculated by using Pearson's chi-square test, thus H2: also is proved it of the mother regarding care of newborn.

So, the hypothesis II was accepted.

This findings was consistent wi the following similar studies.

The result of present study was supported by **Priyanka ontita et, al.,(2016)** studied to assess the knowledge of postnatal regarding essential care to develop to disseminate an information guidelines on the same.the study findings revealed that essential newborn care was disseminated to postnatal mothers. Similarly, **Julia petty et al., (2019)** conducted the study to aim explore the existing knowledge base learning needs of community health professionals to further understand how they can adequately support parents in the community with prematurebabies. The result showed that tailored resources for community based health professionals on the specific needs of the premature baby would enhances provisions of optimal support for parents

CHAPTER-VI

SUMMARY, NURSING IMPLICATIONS, RECOMMENDATIONS AND CONCLUSION

Preterm is indisputably a very important cause of death in neonates the world over. According to WHO New global estimates show that in 2014, approximately 10.6% of all live births globally were preterm. Published in the journal the study underlines the crucial need to safeguard the health and well-being of all women and girls, and their babies, throughout life including through ensuring access to High quality and respectful Healthcare services.

So the important of the knowledge to be given to the parents especially to the mothers to prevent and minimize preterm birth, and maintain healthy society.

SUMMARY OF THE STUDY

Investigator undertook the study to assess the effectiveness of multimodal intervention program on knowledge and practice regarding care of preterm babies among the mothers of preterm at Neonatal intensive care Unit, Institute of Child Health and hospital for Children at Egmore, Chennai-08.

The conceptual frame work of the study was based on the Ludwig Von Bertalanffy's General System Theory (1968) a quasi experimental one group pretest and posttest design was used. The independent variables was multimodal intervention program, dependent variables was knowledge and practice of mothers of preterm babies.

The study period was 4 weeks. Totally 60 mothers were selected as samples using purposive sampling technique. The data was collected using semi structured questionnaire. Multimodal intervention program given with using various health teaching modules like demonstration,

flash cards and Booklet. The reliability of tool was test retest method, the data analysis and interpretation were done by using descriptive and inferential statistics.

BASED ON DEMOGRAPHIC DATA FINDINGS

According to age of the mother 26-30 years mothers had adequate knowledge. In pursuant to educational status graduate mothers had 80.00% of adequate knowledge. In accordance to occupational status. Employed mothers had 85.71% adequate knowledge. As mentioned religion, mothers belongs to Hindu had 80.00% score. As per family Income 87.50% of mothers had adequate knowledge. As seen in type of family joint family mothers had 98.00% of knowledge. Based on residence urban and rural family mothers had adequate knowledge score 80.95 %.

The hypothesis formulated were, that there is a significant relationship of mothers age, education, occupational status, joint family, place of residence with level of knowledge. Thus the health care personnel will be able to identify those who requires special attention while imparting health education.

MAJOR FINDING OF THE STUDY.

BASED ON PRETEST AND POSTTEST LEVEL OF KNOWLEDGE AND PRACTICE SCORE

In pretest 35.0% of mothers had moderate knowledge score. Practice Overall pretest percentage of practice score is 52.67%.

In posttest the knowledge and practice has improved due to the impact of multimodal intervention program. The overall posttest percentage of knowledge score is 79.86% among mothers. And overall posttest percentage of practice score is 81.00% .

BASED ON COMPARISON OF PRETEST AND POSTTEST LEVEL OF KNOWLEDGE AND PRACTICE SCORE

Before intervention 65.0% of the mother had inadequate level of knowledge score, 35.0% of them had moderate level of knowledge. After intervention, 21.67% of the mother had gained moderate knowledge and 78.33% of mothers gained adequate level of knowledge.

FINDINGS BASED ON THEEFFECTIVENESS OF MULTIMODAL INTERVENTION PROGRAM

The effectiveness of multimodal intervention on comprehensive home care management of preterm baby. On an average, in posttest after multimodal intervention program, mother gained 32.51% more knowledge score than pretest score.

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

ASSOCIATION BETWEEN POSTTEST LEVEL OF KNOWLEDGE SCORE AND DEMOGRAPHIC VARIABLES OF MOTHERS OF PRETERM BABIES

Association between posttest level of knowledge score and demographic variables of age group mother 26-30 years ,parents from joint family, regarding age of child between 21-28 days baby mothers have gained more knowledge than others after multimodal intervention program. It was confirmed using Chi square test.

The result obtained by the investigator from the study reveals that there is a significant need for continuous educational process using various educational modals represented by the result as in posttest there is significant improvement in the areas of

NURSING IMPLICATIONS

This study has its implication in Nursing Education, Nursing Practice, Nursing Administration and Nursing Research.

NURSING EDUCATION

- ❖ Student nurses should be motivated in participating and organizing teaching programme on the various aspects whenever posted in neonatology ward.
- ❖ Nursing educator should motivate the mothers to participate in an any teaching programme regarding preterm care in hospital and any health organizations.
- ❖ Nurse educator should take initiative to publish books and articles in journals regarding care of preterm babies.
- ❖ Students should be encouraged to do many projects on care of preterm babies.

NURSING PRACTICE

Health education is the vital role of the nurse, the parents need information regarding comprehensive home care management after discharge. It is mandatory that nurses supply the needed information to the mothers before she is discharged from the hospital.

The finding of the study supports the importance of teaching to mothers in various aspects. The personals should conduct various programs for mothers which help in reduction of neonatal mortality and morbidity. Nurse to develop the profession in an independent and extended aspect in prevention of complications like hypothermia and hypoglycemia promotion of health of preterm babies. A.V aids Pamphlets, Hand books, posters and other A.V aids can be displayed in neonatology ward and outpatient department.

NURSING ADMINISTRATION

- ❖ An effective role is found in every nursing administrator in organizing these programs.
- ❖ Neonatology nurse can be encouraged to organize educational programs on preterm baby care regularly in the ward and outpatient department.
- ❖ Plan for staff development programme for nurses on care of preterm babies to update their knowledge periodically.
- ❖ Nurse administrator should expand their role in involving themselves in policy making.

NURSING RESEARCH

This study provides the scope for further research related to other aspects on preterm care.

Nurses will have to apply new techniques in their role in the respective department where they are posted and such care should also be expected from the mothers or caregivers to carry out. The research studies on the knowledge and practice of the mothers and relatives should be undertaken to eliminate certain bad practices/taboo and to find out useful guidance for the nursing practitioners as well as educators.

This study provides the scope for further research related to other aspects on preterm care.

- 1) The study findings bring an understanding that there is a serious lack in the awareness on preterm care among mothers.
- 2) Utilization of finding and dissemination of knowledge in nursing practice.

RECOMMENDATIONS

During the course of the study the investigator felt that the following recommendations are required to be mentioned.

- ❖ Education programme on prevention of infection and kangaroo mother care, immunization, care of umbilical cord and skin care to be conducted for family members.
- ❖ A similar study can be done to follow up the babies in home.
- ❖ A similar study may be conducted with experimental approach having a control group with larger samples.
- ❖ A comparative study can be done in rural and urban areas.
- ❖ A follow up study could be done to identify the complications in the preterm babies.
- ❖ Coping skill of the parents with preterm babies could be studied.
- ❖ Cohort of preterm babies should be studied to find out the duration taken to become a normal baby.
- ❖ Interstate difference in knowledge and practice of preterm care could be compared
- ❖ The in laws and the caregiver should be involved in such classes.

CONCLUSION

The following conclusion were drawn from the study.

- ❖ The knowledge of the parents regarding care of preterm babies improved significantly after they had undergone the multimodal intervention program.

- ❖ The multimodal intervention program found to be effective in improving the knowledge on care of preterm among the mothers of preterm babies.
- ❖ The study proved that there was an association between posttest level of knowledge score and demographic variables of is age group mother 26-30 years ,parents from joint family, regarding age of child between 21-28 days baby mothers have gained more knowledge than others after multimodal intervention program.

BIBLIOGRAPHY

BOOKS

1. Abraham, A Text Book of Pediatrics, ed. Mosby, Singapore: (2001).
2. Achars, Text Book of Pediatrics, (3rd edition). Orient Longman, India. ,(2001).
3. Adele Pillitery, Child Health Nursing, 2nd ed. CBS, Philadelphia. (2005).
4. Andrews, K.M. Text Book of Pediatrics, 6th ed. Orient Longman, Chennai. . (2009).
5. Alligard, M.R. Nursing Theorists and their work, 5th ed. Mosby company. New Delhi. .(2008).
6. Behrman, E.R.et al., Text book of pediatrics, 15th ed. Prism books. Banglore. (2010).
7. Bowden,M.Children and Their Families, 1st ed., W.B. sounders, Philadelphia. .(2010).
8. Basavanthappa, B.T. Pediatrics/Child Health Nursing, ed.,Jaypee. New Delhi. (2006).
9. Catherine,E.AText Book of Pediatrics, (1st edition). W.B.Saunders. Philadelphia. (1990).
10. Carole Kenner and Judy Wright Lott, Comprehensive Neonatal Care, An Interdisciplinary Approach, 4th ed., B. Saunders. New Delhi. (2007).

11. Gupta, S.P. Statistical Methods, 18th ed. Sultan Chands & Sons. New Delhi. (2000).
12. Ghai, O.P Essential Pediatrics, 6th ed. Elsevier publications. New Delhi. (2007) p Page No. 800-815.
13. Hungler, B.P. and Polit, D.F. Essentials of Nursing Research. 4th ed., USA: Library of Congress Cataloging including Publications. USA. (1985).
14. HarjitSingh, Text Book of pediatric Nursing, 18th ed.,New Delhi: Mehtha. New Delhi. (1996).
15. Marlow, Barbara. A Text Book of Pediatric Nursing, 6th ed. Elsevier publication. New Delhi. (2003).
16. Marlow D.R, Text Book of Pediatrics Nursing, 2nd ed., Lippincott Williams and Wilkins. Philadelphia(2005).
17. Meharban Singh, Care of the Newborns, 5th ed., Sagar publications. Philadelphia.(1999).
18. Mhairi, G., Martha, D. Mullet., Mary, M.K, Avery's Neonatology pathophysiology & Management of the Newborn 6th ed., Lippincott Williams and Wilkins. (2005).
19. Nelson, A Essential of Pediatrics, 20th Ed., volume-1 W.B.saundars, Philadelphia. . (2009)
20. Parul Gupta, Essential Pediatrics Nursing. 2nd ed. CBS publishers. New Delhi: (2004).
21. Piyush Gupta,. Essential pediatrics Nursing. 2nd ed., Jaypee. New Delhi. (2004).

22. Pillitteri, J. Child Health Nursing, 7th ed., Lippincott, Philadelphia. (2011)
23. Parthasarathy A., IAP textbook of Pediatrics, 3rd ed., Jaypee. New Delhi. (2006).
24. Sunder, R. An Introduction to Biostatistics. ed. New Delhi: Prentice Hall of India. (1996).
25. Suraj Gupta, The Short Text Book of Pediatrics', 8th ed. Jaypee. New Delhi. (1998).
26. Suresh k. Sharma, A Text book of Nursing Research and Statistics, 3rd ed. Elsevier. New Delhi. (2010).
27. Tambulwalkar, A Text Book of Pediatrics Nursing. vora medical. Bombay. (1993).
28. Wongs Whaley, L.D. and Wongs, Essentials of Pediatrics Nursing, (4th edition) Philadelphia, Mosby. (1997).
29. William, M. Nursing care of Infant and Children, 10th ed. Jaypee. Missouri. (2012).
30. Wacheter, H.E Nursing Care of Children, 15th ed., Lippincott, Philadelphia. (2005),
31. WHO A practical guide Kangaroo mother care, Geneva.(2003).

JOURNALS

- 1) Urmila K.V. Ravikumar, Usha Karunakaran, (2018), to assess the knowledge, attitude and practice of kangaroo mother care among post-natal mothers. Journal of contemporary pediatrics.(2018) May;5(3);992-996.
- 2) Akilu Abrham Roba, et. al., knowledge, attitude and practice of Kangaroo Mother care by postnatal Mothers who gave birth to preterm and Lowbirth weight babies. Journal of Neonatal Biology. . (2017), Nov 27.
- 3) Ali Aldirawi mothers knowledge of health caring premature infants after discharge from NICU. Journal of pediatrics. Jan 2019.
- 4) AyanKusari et. al., Evidence based skin care in preterm infants. Journal of pediatric dermatology . (2018)Dec 12,
- 5) Alberta, YemotsooLomotey et. al., Experience of mothers with preterm babies at a mother and baby unit. A descriptive phenomenological study. (2019) Journal nursing August 22.
- 6) Anup Mohta A dangerous cosmetic Oman Journal of Ophthalmology(2010) may-Aug 3(2):100-101.
- 7) Anthony Mawson et al., Preterm birth, vaccination and neurodevelopmental disorders: a cross sectional study. Apr 24, 2017. Journal of Translational science.
- 8) Akilu Abrham Roba, Susan Binoy and Mahantesh A Naganuri, Knowledge, attitude and Practice of Kangaroo Mother Care by postnatal mothers who gave birth to preterm and lowbirth weight babies. Journal of Neonatal Biology. (2017)

- 9) Bariah Mohd-Ali and Ahmad Asmah Visual function of preterm children: a review from a primary eye care. Ju;4 (3) 2011. Journal of optometry
- 10) Chythra R.Rao et al., A case-control study on risk factors for preterm deliveries. 13 Mar, 2014 Journal International scholarly Research notices. 2014. 13 Mar.
- 11) Denise, Donnellan et al., effect of thermoregulation quality improvement initiative on admission temperature of premature/very low birth-weight infants. Journal of Specialties in Pediatric Nursing. (2020) Jan 07.
- 12) Felix Omenaca et al., Immunization of preterm infants with GSK's hexavalent combined diphtheria-tetanus-a cellular pertussis-hepatitis B-inactivated poliovirus-Homophiles influenza type b conjugate vaccine: A review of safety and Immunogenicity. Jan 2018.
- 13) HelaJamal, RuchiSrivastava, A retrospective study of the epidemiology and causes of preterm birth. International Journal of Reproduction, Obstetrics and Gynecology2017) Dec 6(12)
- 14) Helen Sison et al., vaccination timeliness in preterm infants: An integrative review of the literature. Jun2017 Journal of Clinical Nursing.
- 15) Jennifer Challen yet al., A Review of the literature examining the benefits and challenges, incidence and duration, and barriers to breastfeeding in preterm infants. (2005)
- 16) Julia Petty, Janet Green knowledge and learning needs of health professionals in providing support for parents of premature babies at home. Journal of Neonatal Nursing. Dec (2019) PP277.

- 17) Knobel-Dail RB Role of effective thermoregulation in premature neonates. Journal of Research and Reports in Neonatology.2014 Jun 14.
- 18) Layla M, Ali et al., Nurse's skills regarding care of preterm infants in Neonatal Intensive care unit. Journal of Neonatal and Pediatric Medicine. 2019
- 19) MarcoPezzati et. al., Umbilical cord care in premature infants: the effects of two different cord-care regimens (Salicylic Sugar powder vs Chlorexidine) on cord separation time and other outcomes. Journal of pediatrics2020. May16, 2020.
- 20) Margaret Ontita knowledge and practice of essential care among preterm and low birth weight infants. Journal of Pediatrics Oct 2016.
- 21) NasrinKhalesi et al.,Evaluation of parents awareness and knowledge about problems and issues related to their premature infants. Journal of Nursing May2015
- 22) Nasrin Khalesi et al., Evaluation of parents' Awareness and knowledge about problems and issues Related to their premature infants. May 2015. Journal of Nursing.
- 23) Naeem Taleghani et al., Investigating common post-discharge problems of premature neonates. Journal of comprehensive pediatrics .,(2019)
- 24) Prachi Shailesh Gandhi, Vaidehi Dande, to assess the knowledge and practice of initiation of immunization in mothers of low birth weight Neonatal Intensive care unit. International journal of contemporary pediatrics.(2018)Mar:5(2).

- 25) Patricia S. Coffey and Siobhan C, Brown, Umbilical cord-care practices in low-and middle-income countries: systematic review. Feb-8, 2017.
- 26) Ragnhild, Maastrup et al., Factors associated with exclusive breastfeeding of preterm infant. Journal of pediatrics. (2013)
- 27) Sinmayee kumara devi et al., Impact of structured teaching programme on knowledge among mothers of newborn in prevention of neonatal hypothermia. IORS journal of nursing and Health science. 2015. Mar-April
- 28) Sharma. S et al Effect of kajal application and fuel used in kitchen on ocular health. 2014 the Internet Journal of preventive medicine.
- 29) Tinu M. Samuel et al., preterm birth: A Narrative review of the current evidence on Nutritional and Bioactive solutions for risk reduction.2019 Aug 6.
- 30) Tanushree Sahoo et al., Vaccination in preterm infants: An Indian Prospective Jan-Feb 2020 Journal of child health.

NET REFERENCES

1. [www. dx.doi.org](http://www.dx.doi.org)
2. [www. ijpediatrics. Com.](http://www.ijpediatrics.Com)
3. [www. science direct .com](http://www.science direct .com)
4. www.researchgate. Net
5. [www. dx.doi.org.](http://www. dx.doi.org)
6. www. webmd.com
7. www.Medscape.com
8. www.dovepress.com
9. Onlinelibrary.wiley.com
10. [www.research gate.com.](http://www.research gate.com)
11. [www.semanticscholar.com.](http://www.semanticscholar.com)
12. [www.ncbi.nlm gov.](http://www.ncbi.nlm gov)
13. www. mdpi.com
14. www. internationalbreastfeedingjournal.biomedcentral.com
15. www.who.int
16. www.redalyc.org
17. www.cambridge.org
18. www.journals.plog.org
19. www. scholar.google.com
20. www.hindawi.com
21. www ispub.com
22. [Journal.biomedcentral.com.](http://Journal.biomedcentral.com)

**COLLEGE OF NURSING,
MADRAS MEDICAL COLLEGE, CHENNAI- 600 003.**

DEMOGRAPHIC DATA REGARDING

Instructions:

1. Investigator introduces herself to respondent and request to answer the questions ()

2. All information collected will be kept confidential and will be used only for the research study.

1. Age of the Mother

- a) 20 years and less []
- b) 21 – 25 years []
- c) 26 – 30 years []
- d) 31 years and above []

2. Educational qualification of the mother

- a) Informal education []
- b) Primary education []
- c) Secondary education []
- d) Graduate []

3. Occupational status of the mother

- a) Employed []
- b) Unemployed []
- c) If employed specifying the job []

4. Religion

- a) Hindu []
- b) Christian []
- c) Muslim []
- d) Others []

5. Monthly income

- a) Rs.5000 or below []
- b) Rs.5001-25000 []
- c) Rs.25001-50000 []
- d) Rs.Above 50000 []

6. Type of family

- a) Nuclear family []
- b) Joint family []
- c) others (Extended,single parent) []

7. Area of residence

- a) Rural []
- b) Suburban []
- c) Urban []

8. Health Issues

- a) Diabetes mellitus []
- b) Hypertension []
- c) Anemia []
- d) Nil specific []

DEMOGRAPHIC DATA OF THE CHILD

1. Age of the child

- a) < 10 days []
- b) 11-20 days []
- c) 21-28 days []

2. Sex of the baby

- a) Girl []
- b) Boy []
- c) Ambiguous []

3. Birth weight of the baby

- a) 501-1000gms []
- b) 1001-1500gms []
- c) 1501-2000gms []
- d) > 2000gms []

4. Baby delivered at

- a) < 28 weeks []
- b) 28-32 weeks []
- c) 32- 37 weeks []

5. Birth order of the child

- a) First child []
- b) Second child []
- c) More than 2 children []

6. Any associated problem during birth?

- a) Yes (If yes specify) []
- b) No []

7. Mode of delivery

- a) Normal []
- b) Caesarian sectioning []
- c) Forceps []
- d) Vacuum []

8. Mother's Source of support

- a) Family members []
- b) Friends []
- c) Neighbors []

9. Do you have any habits?

- a) Yes (If yes specify) []
- b) No []

10. Source of Health care related Information

- a) Doctor []
- b) Nurses []
- c) Relatives/ multimedia []
- d) All the above []

11. Is there any family history of preterm?

- a) Yes []
- b) No []

KNOWLEDGE REGARDING PRETERM CARE

1. The average birth weight of the baby

- a) 1500-2000gms []
- b) 2000-2500gms []
- c) 2500-3000gms []
- d) >3000gms []

2. Preterm baby means

- a) Born at 40 weeks of gestation []
- b) Born < 37 weeks []
- c) Born after 42 weeks []

3. The common complication which occur in preterm baby

- a) Hypothermia []
- b) Diarrhea []
- c) Increased weight []

4. The best way to prevent preterm birth is

- a) Proper Immunization []
- b) Adequate Antenatal management []
- c) Using contraceptive devices []

KNOWLEDGE REGARDING FEEDING OF BABY

5. Exclusive breast feeding should be given

- a) Upto 6 months []
- b) Upto 5 months []
- c) Upto 3 months []

6. The frequency of breast feeding for the baby
- a) Hourly []
 - b) When baby cries []
 - c) Once in 5 hours []
7. The duration of breast feeding
- a) Till baby sucks []
 - b) Each breast for 20 minutes []
 - c) Each breast for 10 minutes []
8. The best way to prevent regurgitation
- a) Burping []
 - b) Giving more feeds []
 - c) Place the baby in prone position []
9. The correct method of feeding expressed breast milk
- a) Paladai feeds []
 - b) Bottle feeding []
 - c) Through syringe []

KNOWLEDGE REGARDING THERMOGULATION (KMC)

10. In premature, babies more amount of heat loss occurs from
- a) Head []
 - b) Feet []
 - c) Abdomen []
11. Kangaroo Mother Care is a method which prevents
- a) Infection []
 - b) Hypoglycemia []
 - c) Hypothermia []

12. Kangaroo Mother Care can be done by

- a) All family members []
- b) Mother []
- c) Father []

13. Kangaroo Mother Care can be given for

- a) one hour []
- b) Two hours []
- c) As long as possible []

KNOWLEDGE REGARDING SKIN CARE

14. Nature of the preterm baby's skin

- a) Dry and fragile []
- b) Silky skin []
- c) Normal skin texture []

15. Suitable cloth for preterm babies

- a) Soft cotton cloth []
- b) Silky cloths []
- c) Nylon cloth []

16. The wet Napkin should be changed

- a) Immediately after every toileting []
- b) After one to two hours of wetting []
- c) Only at Night []

17. Baby's clothes should be washed using

- a) Detergent []
- b) Plain water []
- c) Detergent wash with antiseptic lotion []

KNOWLEDGE REGARDING UMBILICAL CORD CARE

18. The cord stump dries and falls off between
- a) 3-5 days []
 - b) After 1 months []
 - c) Soon after birth []
19. Signs and symptoms of umbilical cord infection
- a) Delayed umbilical cord fall []
 - b) Blood or Pus discharge []
 - c) Dryness of the site []
20. The umbilical cord should be kept clean by
- a) Applying talcum powder []
 - b) Applying oil []
 - c) Cleaning with sterile water []
21. Diapers should be placed
- a) Above the umbilical cord []
 - b) Below the umbilical cord []
 - c) Over the cord []

KNOWLEDGE REGARDING EYE CARE

22. The eyes should be cleaned with
- a) Sterile wet cloth []
 - b) Bare hands []
 - c) Dry cloth []

23. The practice of applying kajal leads to
- a) Lead poisoning []
 - b) Beautification []
 - c) Protection from evil eye []
24. If any discharge from the eye
- a) Immediately seek medical intervention []
 - b) Apply self-medication []
 - c) Get medicine from pharmacy []

KNOWLEDGE REGARDING ELIMINATION CARE

25. Adequate of urine output can be assessed by
- a) Number wet of diapers / day []
 - b) Duration of baby's sleeping time []
 - c) Color of urine []
26. The best kind of napkins is
- a) Cotton []
 - b) Nylon []
 - c) Adhesive type []
27. If diaper not changed for long time, babies will get
- a) Diaper rashes []
 - b) Hyperthermia []
 - c) Infection []
28. The method of cleaning the baby's after elimination
- a) Wipe with papers []
 - b) Luke warm water with soft cloth (upper to lower direction) []
 - c) Dry cloth []

KNOWLEDGE REGARDING IMMUNIZATIONS

29. The importance of Immunization is to

- a) Prevent diseases []
- b) Treat diseases []
- c) Care of infections []

30. Immunization should be started

- a) At birth []
- b) Completion of 10 months []
- c) While follow-up []

31. The B.C.G vaccine is given to prevent

- a) Tuberculosis []
- b) Jaundice []
- c) Chickenpox []

32. Poliomyelitis can be prevent by following vaccine

- a) BCG []
- b) Polio vaccine []
- c) Hepatitis B []

KNOWLEDGE REGARDING FOLLOW UP CARE

33. The first month follow-up for preterm baby
- a) Once in 7 days []
 - b) Every 1 year []
 - c) Every 1 month []
34. Danger signs of preterm baby
- a) Respiratory distress []
 - b) Having hiccups []
 - c) Passing yellowish stool []
35. The Breastfeeding to be continued even if the baby is
- a) Passing stools every feed []
 - b) Vomiting []
 - c) Seizures []
36. If the baby is refusing to take breast milk
- a) Cow milk can be given []
 - b) Seeking medical advice []
 - c) Giving natural medicines []
37. Weaning food should start at
- a) After 6 months []
 - b) 4 months []
 - c) 10 months []

THANK YOU

செவிலியர் கல்லூரி

சென்னை மருத்துவ கல்லூரி, சென்னை- 600 003.

நேர்காணல் படிவம் சுய முககுறிப்பு

குறிப்பு:

1. தாய்மார்கள் அனைத்து கேள்விகளுக்கும் விடையளிக்க கேட்டுக்கொள்கிறேன் ().
2. தங்களுடைய தகவல்கள் இந்த ஆராய்ச்சியின் பயன்பாட்டிற்கு மட்டுமே உபயோகப்படுத்துவேன்.

1. தாயின் வயது

- அ. 20 வயது (அ) 20 வயதிற்குள் []
- ஆ. 21-25 வயது []
- இ. 26-30 வயது []
- ஈ. 31 வயதிற்கு மேல் []

2. தாயின் கல்வி தகுதி

- அ. முறை சாரா கல்வி []
- ஆ. முதல் நிலை கல்வி []
- இ. இடை நிலை கல்வி []
- ஈ. பட்டதாரி []

3. தாயின் தொழில் விபரம்

- அ. இல்லத்தரசி []
- ஆ. அரசு / தனியார் வேலை []
- இ. சுய தொழில் []
- ஈ. வேலையில் இருபவரயின்யின் விபரம் []

4. மதம்

- அ. இந்து []
- ஆ. கிருத்துவர் []
- இ. முஸ்லிம் []
- ஈ. மற்றவை []

5. மாத வருமானம்

- அ. ரூ.5000 க்கு கீழ் []
- ஆ. ரூ. 5001- 25000 []
- இ. ரூ. 25001 - 50000 []
- ஈ. ரூ. 50000 மேல் []

6. குடும்ப வகை

- அ. கூட்டுகுடும்பம் []
- ஆ. தனிக்குடும்பம் []
- இ. பிறவகை குடும்பம் (தொடர்குடும்பம்,தனியான பெற்றோர் []

7. வாழ்விடம் / இருப்பிடம்

- அ. கிராமப்புறம் []
- ஆ. புறநகர் []
- இ. நகரம் []

8. உடல்நலனில் பிரச்சன்னை

- அ. சர்க்கரை நோய் []
- ஆ. இரத்தஅழுத்த நோய் []
- இ . இரத்த சோகை []
- ஈ. ஏதுமில்லை []

குழந்தையின் சுயமுக குறிப்பு

1. குழந்தையின் வயது

அ. <10 நாள் []

ஆ. 11 – 20 நாள் []

இ. 21 – 28 நாள் []

2. குழந்தையின் பாலினம்

அ. ஆண் []

ஆ. பெண் []

இ. தெளிவின்மை []

3. பிறந்த எடை

அ. 501 – 1000 கிராம்கள் []

ஆ. 1001 – 1500 கிராம்கள் []

இ. 1500 – 2000 கிராம்கள் []

ஈ. >2000 கிராம்கள் []

4. குழந்தை பிரசவிக்கப்பட்ட வாரம்

அ. <28 வாரங்கள் []

ஆ. 28- 32 வாரங்கள் []

இ. 32 -37 வாரங்கள் []

5. குழந்தையின் வரிசை

அ. முதல் []

ஆ. இரண்டாம் []

இ. இரண்டுக்கு மேல் []

6. பிரசவத்தின் போது சிக்கல் இருந்ததா?

அ. ஆம் (எனில் விவரம்) []

ஆ. இல்லை []

7. குழந்தை பிரசவித்த முறை

அ. சாதாரண பிரசவம் []

ஆ. அறுவை சிகிச்சைமுலமாக பிரசவம் []

இ. ஆயுதபிரசவம் []

ஈ. வக்யும் (vacuum) டெலிவரி பிரசவம் []

8. தாயின் குடும்ப ஆதாரம்

அ. குடும்ப உறுப்பினர்கள் []

ஆ. நண்பர்கள் []

இ. அக்கம்பக்கத்தினர்/உறவினர்கள் []

9. உங்களுக்கு ஏதேனும் தீய பழக்கம் உள்ளவரா ?

அ. ஆம் எனில் விவரம் []

ஆ. இல்லை []

10. குறைமாத குழந்தை பராமரிப்பு பற்றிய விபரம் பெறப்பட்டது

அ. மருத்துவர் []

ஆ. செவிலியர் []

இ. உறவினர்கள் /ஊடகங்கள் []

ஈ. மேற்கூறிய அனைத்தும் []

1 1. குடும்பத்தில் குறைமாத குழந்தை பிறந்திருக்கிறதா?

அ. ஆம் []

ஆ. இல்லை []

குறைமாத குழந்தை பற்றிய தகவல்கள்

1. நிறைமாத குழந்தையின் சராசரி எடை

அ. 15000-2000 கிராம்கள் []

ஆ. 2001 – 2500 கிராம் கள் []

இ. 2501 – 3000 கிராம்கள் []

ஈ. 3000 கிராமிற்கு மேல் []

2. குறைமாத குழந்தை என்றால்

அ.40 வாரத்திற்குள் பிறப்பது []

ஆ. 37 வாரத்திற்கு முன் பிறப்பது []

இ.42 வாரத்திற்குப் பிறகு பிறக்கும் குழந்தை []

3. குறைமாத குழந்தைக்கு இருக்கும் சிக்கல்கலளில் ஒன்று

அ. உடல் வெப்ப நிலை குறைவு []

ஆ. வயிற்று போக்கு []

இ. எடை குறைவு []

4. குறைமாத பிரசவத்தை தடுக்கும் முறை

அ. தடுப்பூசிகள் []

ஆ. போதிய பேறுகால பராமரிப்பு []

இ. கருத்தடை சாதனங்கள் []

தாய்ப்பால் குறித்துக் தகவல்கள்

5. குழந்தைக்கு தாய்ப்பால் மட்டுமே கொடுக்கப்படவேண்டிய காலஅளவு
- அ. 6 மாதங்கள் வரை []
- ஆ. 5 மாதங்கள் வரை []
- இ. 3 மாதங்கள் வரை []
6. குழந்தைக்கு எப்போதெல்லாம் தாய்ப்பால் கொடுப்பீர்கள்
- அ. 1 மணி நேரத்திற்கு ஒருமுறை []
- ஆ. குழந்தை அழும்போது []
- இ. 5 மணி நேரத்திற்கு ஒருமுறை []
7. தாய்ப்பால் கொடுக்கும் நேரம்
- அ. குழந்தை அருந்தும் வரை []
- ஆ. 20 நிமிடங்கள் []
- ஈ. 10 நிமிடங்கள் []
8. பால் புரைஏறுவதை தடுக்க சிறந்த வழி
- அ. முதுகில் தட்டி ஏப்பம் விடசெய்தல் []
- ஆ. மேலும் பால் புகட்டுதல் []
- இ. குப்புற படுக்கவைப்பது []
9. தாய்ப்பால் கொடுக்க பயன்படும் மாற்றுமுறை
- அ. பாலாடை []
- ஆ. பாட்டில் []
- இ. ஊசி குழல் []

உடல் வெப்பநிலை குறித்த தகவல்கள்

10. குழந்தையின் உடல் வெப்பம் அதிகமாக வெளியேறும் உடல் பாகம்

- அ. தலை []
ஆ. கால்கள் []
இ. வயிறு []

11. கங்காரு தாய்ப் பராமரிப்பு என்பது

- அ. தொற்று நோய் வராமல் தடுப்பது []
ஆ. சர்க்கரை அளவைக் குறைப்பது []
இ. தாழ் வெப்பநிலையை தடுக்கிறது []

12. கங்காரு தாய் பராமரிப்பு யாரெல்லாம் கொடுக்காலம்

- அ. குடும்ப உறுப்பினர்கள் []
ஆ. தாய் []
இ. தந்தை []

13. கங்காரு தாய் பராமரிக்கும் நேரம்

- அ. 1 மணி நேரம் []
ஆ. 2 மணி நேரம் []
இ. இயன்ற அளவு []

தோல் பராமரிப்பு குறித்த தகவல்கள்

14. குறைமாத குழந்தையின் தோலின் தன்மை

- அ. வறண்டு சுருக்கத்துடன் இருக்கும் []
ஆ. பளபளப்பாக இருக்கும் []
இ. ஈரப்பதத்துடன் இருக்கும் []

1 5. குறைமாத குழந்தைக்கு ஏற்ற உடை

- அ. பருத்தி உடை []
ஆ. பட்டு உடை []
இ. நைலான் உடை []

1 6. ஈரமான நேப்கின்கள் எப்பதெல்லாம் மற்றும்வீர்கள்.

- அ. ஈரமானஉடன் []
ஆ. 1 மணி நேரம் []
இ. இரவில் மட்டும் []

1 7. குழந்தையின் உடைகளை சுத்தம் செய்யும் முறை

- அ. சோப்பு சலவை []
ஆ. தண்ணீர் சலவை []
இ. சோப்பு & கிருமிநாசினி சலவை []

தொப்புள் கொடி பராமரிப்பு குறித்த தகவல்கள்

1 8. தொப்புள்கொடி எப்போது காய்ந்து விழும்

- அ. 3-1 5 நாட்கள் []
ஆ. 1 மாதத்தில் []
இ. பிறந்த உடன் []

19. தொப்புள்கொடி நோய் தொற்றின் அறிகுறிகள்

- அ. விழாமல் இருப்பது []
ஆ. இரத்தம் / சீழ் வடிதல் []
இ. வரண்டு இருப்பது []

20. தொப்புள்கொடியில் நோய்த் தொற்று ஏற்படாமல் தடுக்கும் முறை

அ. பவுடர் போடுதல் []

ஆ. எண்ணெய் போடுதல் []

இ. தூய்மையாக வைத்திருத்தல் []

21. நாப்கின் எங்கு பொருத்துவீர்கள்

அ. தொப்புள்கொடிக்கு மேலே []

ஆ. தொப்புள்கொடிக்கு கீழ் []

இ. தொப்புள்கொடியின் மேல் []

கண் பாதுகாப்பு குறித்து தகவல்கள்

22. குழந்தையின் கண்களை சுத்தம் செய்யும் முறை

அ. தொற்றுநீக்க பட்ட ஈரத்துணியை கொண்டு உட்புறத்தில் இருந்து வெளிப்புறமாக []

ஆ. வெற்று கைகளால் []

இ. காய்ந்த துணிகளால் []

23. கண் மை வைக்கும் பழக்கம்

அ. கண்களுக்கு கெடுதல் []

ஆ. அழகு கொடுக்கும் []

இ. திருஷ்டி போகும் []

24. குழந்தையின் கண்களில் நோய்த்தொற்று அறிகுறி இருந்தால்

அ. மருத்துவ உதவியை அணுகவேண்டும் []

ஆ. சுய வைத்தியம் []

இ. மருந்தாளுனரிடமிருந்து மருந்து வாங்கிகொடுப்பது []

உடல் கழிவு பற்றிய தகவல்கள்

25. குழந்தை போதிய தாய்ப்பால் அருந்தியதற்கான அறிகுறி

அ. எத்தனைமுறை சிறுநீர் கழிகிறது []

ஆ. எவ்வளவு நேரம் தூங்குகிறது []

இ. தாய்ப்பாலின் அளவு []

26. ஈரத்தை நன்றாக உறிஞ்சக் கூடிய நாப்கின்கள்

அ. பருத்தி []

ஆ. நையலன் []

இ. ஒட்டும் வகை []

27. ஈரமான நாப்கின்களை மாற்றாவிட்டால்

அ. தோல் அழற்சி (Diaper rash) []

ஆ. காய்ச்சல் []

இ. நோய்த்தொற்று []

28. குழந்தை மலம் கழித்தபின் சுத்தம் செய்யும் முறை

அ. பேப்பரால் துடைத்தல் []

ஆ. வெந்நீரில் நனைத்த துணிகொண்டு (மேலிருந்து கீழ் நோக்கி) []

இ. காய்ந்த துணி கொண்டு துடைத்தல் []

தடுப்புசி போடுதல் குறித்த தகவல்கள்

29. தடுப்புசி போடுவதன் அவசியம்

அ. நோய் தடுப்பு []

ஆ. நோய்க்கான சிகிச்சை []

இ. நோய் தொற்றுக்கான சிகிச்சை []

30. தடுபுசியை ஆரம்பிக்கும் வயது

- அ. பிறந்துடன் []
ஆ. 10 மாதங்கள் முடிந்தபின் []
இ. தொடர் பராமரிப்புக்கு வரும்போது []

31. பி. சி. ஜி மருந்து தடுக்கும் நோய்

- அ. காசநோய் []
ஆ. மஞ்சள்காமாலை []
இ. அம்மை நோய் []

32. இளம்பிள்ளை வாதம் தடுக்க போடப்படும் மருந்து

- அ. பி. சி. ஜி []
ஆ. போலியோ சொட்டு மருந்து []
இ. ஹேபடிடிஸ்- பி (Hepatitis b) []

தொடர் பராமரிப்பு குறித்த தகவல்கள்

33. தொடர் பராமரிப்பு என்பது +-

- அ. 7 நாட்கள் ஒருமுறை []
ஆ. 1 வருடம் ஒருமுறை []
இ. ஒவ்வொரு மாதமும் []

34. குறைமாத குழந்தையின் அபாய அறிகுறிகளில் ஒன்று

- அ. முச்சுத்திணறல் []
ஆ. விக்கல் []
இ. மஞ்சள் நிறத்தில் மலம்கழித்தல் []

35. தொடர்ந்து தாய்ப்பால் கொடுக்கவேண்டிய நிலை

அ. தாய்ப்பால் அருந்திய உடன் மலம் கழிக்கும் போதும் []

ஆ. வாந்தி எடுக்கும் போதும் []

இ. வலிப்பு நோய் ஏற்படும்போதும் []

36. தாய்ப்பால் அருந்த மறுத்தால் செய்யவேண்டியது

அ. பசும்பால் கொடுத்தல் []

ஆ. உடனடியாக மருத்துவ ஆலோசனை பெறல் []

இ. சுய வைத்தியம் []

37. திட உணவு தொடங்கும் மாதம்

அ. 6 மாததிற்கு பின் []

ஆ. 4 மாதம் []

இ. 1½ மாதங்கள் []

நன்றி

S.No	TIME PLAN	CONTRIBUTORY OBJECTIVES	CONTENT	STUDENT TEACHER	LEARNERS ACTIVITY	AV AIDS	METHODS OF EVALUATION
1.	5mts	Define the term preterm baby	<p>Definition of preterm baby, A baby born with a gestational age of less than 37 completed weeks is termed as preterm baby. These are also termed as immature born early or premature.</p>	Explaining	Listening	Book let	What is mean by preterm?
2.	5mts	Enlist the categories of preterm infants	<p>Sub categories of preterm infants,</p> <ol style="list-style-type: none"> a) Extremely preterm (less than 28 weeks of gestation) b) Very preterm (28 to 32 weeks of gestation) c) Moderate to late preterm (32 to less than 37 weeks). 	Explaining	Listening		Specify any two subcatoggries?
3.	8mts	Explain the causes of preterm	<p>Casus of preterm baby</p> <ol style="list-style-type: none"> 1. Spontaneous causes 2. Induced casus. <p>Spontaneous causes</p> <p>There may be spontaneous onset of preterm birth. The cause may be.</p> <ul style="list-style-type: none"> • Antepartum hemorrhage • Cervical incompetence • Bi- cartunate uterus Chronic and systemic maternal disease. • Threatened abortion. • Low maternal weight gain. • Poor socio economic condition. • Maternal malnutrition • Cigrate smoking. • Drug addiction during pregnancy. • Multiple pregnancy and congenital malnutrition. 	Explaining	Listening		List out any 2 causes of preterm baby?

		Contd.,	<ul style="list-style-type: none"> • Very young and unmarried mother. • Frequent child birth and previous history of preterm delivery. <p style="text-align: center;">INDUCED CAUSES</p> <p>The preterm labor may be induced to safeguard the interest of the mother or fetus, when there is impending danger for them. The condition are,</p> <ul style="list-style-type: none"> • Maternal diabetes • Severe heart diseases. • Eclampsia, severe pre Eclampsia and hypertension. • Fetal hypoxia and fetal distress. • Severe RH iso- immunization. • Iatrogenic improper diagnosis of maturity in elective deliveries. <p style="text-align: center;">CHARACTERISTICS OF PRETERM INFANTS</p> <p>A preterm baby is small in size with large head. Crown heal length is less than 47 cm and head circumference is less than 33 cm but exceeds the chest circumference by more than 3 cm.</p> <ul style="list-style-type: none"> • Poor and sluggish neonatal reflexes such as Moro, sucking and swallowing reflex. <p>Limbs are extended due to hypertonia with poor recoil of flexed forearm when it is extended.</p> <ul style="list-style-type: none"> • Head larger than body. • Skull bones re soft. • Sutures are widely separates. • Large fontanel's'. <p>Face is small with small chin</p> <ul style="list-style-type: none"> • Less or absent of buckle fat. • Scalp hair are scanty, wooly and fuzzy with separate individual hair fiber. • Eyes remain closed and protruding due to shallow orbit. • Ears are soft and flat and cartilage not fully developed. • Skin is shiny, delicate and pink with little vernix caseosa. Plenty of lanugo. • Breast nodules are absent or less than 5 mm. 	Explaining	Listening		
4.	8mts	Elaborate the characteristics of preterm baby	<p>The condition are,</p> <ul style="list-style-type: none"> • Maternal diabetes • Severe heart diseases. • Eclampsia, severe pre Eclampsia and hypertension. • Fetal hypoxia and fetal distress. • Severe RH iso- immunization. • Iatrogenic improper diagnosis of maturity in elective deliveries. <p style="text-align: center;">CHARACTERISTICS OF PRETERM INFANTS</p> <p>A preterm baby is small in size with large head. Crown heal length is less than 47 cm and head circumference is less than 33 cm but exceeds the chest circumference by more than 3 cm.</p> <ul style="list-style-type: none"> • Poor and sluggish neonatal reflexes such as Moro, sucking and swallowing reflex. <p>Limbs are extended due to hypertonia with poor recoil of flexed forearm when it is extended.</p> <ul style="list-style-type: none"> • Head larger than body. • Skull bones re soft. • Sutures are widely separates. • Large fontanel's'. <p>Face is small with small chin</p> <ul style="list-style-type: none"> • Less or absent of buckle fat. • Scalp hair are scanty, wooly and fuzzy with separate individual hair fiber. • Eyes remain closed and protruding due to shallow orbit. • Ears are soft and flat and cartilage not fully developed. • Skin is shiny, delicate and pink with little vernix caseosa. Plenty of lanugo. • Breast nodules are absent or less than 5 mm. 	Explaining	Listening		

5.	25mts	<p>Contd.,</p> <p>Enumerate the management of preterm baby at home care setting?</p>	<ul style="list-style-type: none"> • Nipples areola are present and flat. • Abdomen is full, soft and round with prominent veins. • Nails are short and not grown. • In female child- labia minors is exposed due to poorly developed widely separated labia majors. <p>MANAGEMENT OF PRETERM BABIES IN HOME CARE SETTING</p> <ol style="list-style-type: none"> 1. Maintenance of stable body temperature. 2. Breast feeding, maintenance of nutrition. 3. Eye care and cord care. 4. Immunization. 5. Follow up care. <p>THERMOREGULATION</p> <p>Baby `s skin temperature should be maintained 36.5-37.5c</p> <ul style="list-style-type: none"> ➤ Baby should be clothed and frock, cap, socks and gloves. ➤ Constant monitoring of temperature is essential. ➤ Bathing should be delayed. ➤ External heat sources be used for thermal protection of these neonates. ➤ Kangaroo mother care. <p>BENIFTS OF KANGAROO MOTHER CARE</p> <ul style="list-style-type: none"> ➤ KMC helps in thermal control and metabolism. ➤ Reduce the risk of hypothermia. ➤ Increased duration and rate of breast feeding. ➤ KMC satisfies all five sense. <ul style="list-style-type: none"> -listen the breast to feed (hearing sense). -skin to skin contact (touch). -sucks the breast feed(taste sense) -makes eye contact with mother (vision) -KMC promotes mother infant bondage. ➤ Mother feels more relaxed comfortable and better bond. ➤ KMC not require additional staff. 	Explaining	Listening		
----	-------	--	---	------------	-----------	--	--

			<p>BREAST FEEDING</p> <ul style="list-style-type: none"> ✓ Breast feeding should be initiated early as possible. ✓ It can given with spoon or paladi. ✓ Encourage for demand feeds. ✓ Breast milk contain all nutrients. <ul style="list-style-type: none"> -protein, sodium, chloride and immunoglobulin A (IgA), growth factor, hormones, prolactin, calcitonin, Thyroxine T4, steroids, Taurine are present in human milk. -IgA is important in control of bacteria in the intestinal track additional protection from infection is provided by leukocyocytes, lectoferin and lysozyme all present in breast milk. ✓ Breast milk easily digestible. ✓ It contain amino acids for growth and development. ✓ It protect the infant from viral, bacterial infection. ✓ Protects the infants from allergy and bronchial asthma, hypoglycemia, Tetany, convulsions etc., ✓ Promote bonding and psychological benefit to mother. <p>INDICATORS OF ADEQUACY OF BREAST FEEDING</p> <ul style="list-style-type: none"> ✚ Audible swallowing sound during the feed. ✚ Letdown sensation in mother breast. ✚ Wet nappies 6 or more in 24 hours. ✚ Average weight gain of 18 gm to 30gm/day. ✚ Baby sleeps well and does not cry frequently. ✚ Baby has good muscle tone and healthy skin. <p>EYE CARE</p> <ul style="list-style-type: none"> ❖ Wash hands before you begin eye care. ❖ Soak a cotton ball in warm water squeeze gently. ❖ Clean the eye by gently wiping the eye from inner canthus to outside canthus. ❖ Use different cotton ball for each eye to avoid potential cross infection. 	Explaining	Listening		
--	--	--	---	------------	-----------	--	--

			<p>CORD CARE</p> <ul style="list-style-type: none"> ✓ Wash hands before and after care. ✓ Do apply nothing on the stump. ✓ Fold nappy below the level of the stump. ✓ Keep cord stump loosely covered with clean clothes. ✓ If stump is soiled, wash it with clean cloth. ✓ Look for signs of infection like pus drainage, redness around the cord, swelling. <p>IMMUNIZATION Immunization is process of protecting an individual from disease. Through introduction of live, or killed or attenuated organisms in the individual system.</p> <ul style="list-style-type: none"> ▪ Immunization is one of the cost effective health interventions. ▪ Immunizations against vaccine preventable diseases is essential to reduce the child mortality, morbidity and handicapped children. ▪ Some infectious diseases can be prevented by vaccines. <ul style="list-style-type: none"> - Six killer diseases - Vaccine preventable diseases like primary tuberculosis, polio, diphtheria, pertussis, tetanus, hepatitis, meningitis, Rota virus, measles and rubella. - <p>FOLLOW-UP CARE FOR PRETERM</p> <ul style="list-style-type: none"> ✚ Baby should have steadily weight gain. ✚ Able to suck and maintain warmth. ✚ Complications Should be watched like <ul style="list-style-type: none"> - Minor neurological disabilities. - Seizures. - Hypoglycemia, lethargy. - Blindness due to ROP -Language ADHD disorders. <p>THANK YOU</p>	Explaining	Listening		
--	--	--	--	------------	-----------	--	--

வ.எண்	நேரம்	சிறப்பு நோக்கங்கள்	பொருளடக்கம்	மாணவ ஆசிரியர்	பார்வையாளர்	கருவி	மதிப்பீடு
1.	5mts	குறைமாத குழந்தை என்றால் என்ன	<p>குறைமாத குழந்தை என்றால் ,</p> <p>குறைமாத குழந்தை என்றால் 37 வாரங்களுக்கு குறைவாக பிறக்கும் குழந்தை குறைமாத குழந்தை ஆகும் .</p>	விரிவாக்கம்	கவனித்தல்	கையேடு	குறைமாத குழந்தை என்றால் என்ன?
2.	5mts	குறைமாதகுழந்தையின் வகைகள்	<p>குறைமாத குழந்தையின் வகைகள் ,</p> <p>அ. குழந்தை 28 வாரங்களுக்குள் பிறப்பது ஆ. குழந்தை 28 to 32 வாரங்களுக்குள் பிறப்பது. இ. குழந்தை 32 to less than 37 weeks பிறப்பது .</p>	விரிவாக்கம்	கவனித்தல்	கையேடு	குறைமாத குழந்தையின் வகைகள் ?
3.	8mts	குறைமாத குழந்தை பிறப்பதற்கான காரணங்கள்	<p>குறைமாத காரணங்கள்</p> <p>❖ துண்டப்பட்ட காரணங்கள் ❖ தனிச்சையான காரணங்கள்</p> <p>❖ தனிச்சையான காரணங்கள்</p> <ul style="list-style-type: none"> • கர்ப்பத்தின் பொது இரத்தக்கசிவு • கர்ப்பை வாய் இயலாமை • கருகலைப்பு • நாள்பட்ட தாய்வழி நோய்கள் • குறைந்த சமூக பொருளாதார நிலை • உட்டசத்து குறைபாடு • புகை பிடித்தல் . • மது மட்டும் போதை பழக்கம் . • குழந்தை குறை பாடுகளுடன் பிறப்பது • சிறுவயது திருமணம் • உடனுக்குடன் கர்ப்பம் தரிப்பது 	விரிவாக்கம்	கவனித்தல்		குறைமாத குழந்தை பிறப்பதற்கான காரணங்கள்?

4.	8mts	குறைமாதகுழந்தையின் குணங்கள் நலன்கள் பற்றிய விளக்கங்கள்?	<p>❖ துண்டப்பட்ட காரணங்கள்</p> <ul style="list-style-type: none"> • கற்பகால சர்கைவியாதி • இருதய பிரச்சனைகள் • வலிப்பு மற்றும் உயர் இரத்த அழுத்தம் • கற்பகால குழந்தைக்கு மூச்சுதிணறல் <p>குறை மாத குழந்தையின் குணநலன்கள்.</p> <p>குறைமாத குழந்தை எடை குறைவாக இருக்கும். உடலைவிட தலை பெரியதாக இருக்கும். தலையின் சுற்றளவு 33செ. மீ மார்பு சுற்றளவு 31 செ.மீ ஆகும்.தாளின் சுட்டரளவு விட 2 செ.மீ குறைவாக இருக்கும்.</p> <ul style="list-style-type: none"> ➤ குழந்தையின் அன்னிச்சை செயல்கள் ➤ குறைவவாக காணப்படும். ➤ உடலைவிட தலை பெரியதாக காணப்படும். ➤ கபால ஐம்புகள் மென்மையாக இருக்கும். ➤ மண்டையோட்டு பிளவுகள் பெரியதாக காணப்படும். ➤ large fontanelles ➤ தலை முடி மிகவும் மென்மையாக இருக்கும். ➤ கண்கள் சிறிது மூடி இருக்கும் .காது எலும்புகள் மென்மையாக இருக்கும் . ➤ தோள் பளபளப்பாக இருக்கும் vernix caseosaகுறைத்து காணப்படும் ➤ மார்பக வளர்ச்சி குறைந்து இருக்கும் ➤ கை, கால் நகங்கள் வளைச்சி குறைவாக இருக்கும் 	விரிவாக்கம்	கவனித்தல்	
----	------	---	--	-------------	-----------	--

5.	20 mts	குறைமாத குழந்தை பராமரிப்பு பற்றிய விளக்கவுரை	<p>➤ பெண் குழந்தையின் பிரப்புருபுகள் வளர்ச்சி குன்றி இருக்கும்.</p> <p>குறைமாத குழந்தை வீட்டில் பராமரிக்கும் முறைகள் பற்றிய விளக்கம்</p> <ul style="list-style-type: none"> ❖ வெப்பநிலை பராமரிப்பு ❖ தாய்ப்பால் மற்றும் உட்டசத்துணவு ❖ கண்கள் மற்றும் தொப்புள் கோடி பராமரிப்பு ❖ நோய்தடுப்பு ❖ தொடர் பராமரிப்பு. <p><u>உடல் வெப்பநிலை பராமரிப்பு</u></p> <ul style="list-style-type: none"> ✚ உடல் வெப்பநிலை 36.5-37.5c பரமரிக்கவண்டும். ✚ தலை, கை, கால்கலை நன்றாக போத்தி, சுற்றி விடவேண்டும் ✚ தினமும் கலை வெயிலில் சிறிது நேரம் காண்பிக்கவேண்டும். ✚ கங்காரு தை பராமரிப்பு ✚ கதகதப்பாக வைத்திருக்கவேண்டும் ✚ குழந்தை பிறந்தவுடன் குளிப்பட்டுவதை தவிர்க்கவும். 	விரிவாக்கம்	கவனித்தல்		
----	--------	--	--	-------------	-----------	--	--

			<p>கங்காரு தாய் பராமரிப்பு</p> <ul style="list-style-type: none"> ▪ உடல் வெப்பநிலை பரமரிகிறது . ▪ வேபநிலை குறைந்து போவதை தடுகிறது ▪ தாய்ப்பால் உண்ணும் நேரம் அதிகரிக்கிறது ▪ குழந்தை மற்றும் தாய் பாதுகாப்பு அதிகரிக்கிறது ▪ குழந்தை வளர்சியை சமநிலை படுத்துகிறது. ▪ கங்காரு தை பராமரிப்பு குழந்தையின் புலன்களையும் செயல்படுகிறது. <p>தாய்ப்பால் மற்றும் உட்ட சத்துணவு</p> <ul style="list-style-type: none"> ✓ குழந்தை பிறந்தவுடன் தாய்ப்பால் கொடுக்கவேண்டும் ✓ தைபலை பாலாடை மற்றும் சிறிய கரண்டி மூலம் புகட்டலாம் ✓ குழந்தை அழும் போதெல்லாம் தாய்ப்பால் கொடுக்கலாம் ✓ தாய்பாலில் குழந்தைக்கு தேவையான அண்ணிது உட்டசதும் இருக்கிறது <ul style="list-style-type: none"> -புரத சத்து, நோய்எதிர்ப்பு, வைட்டமின், கால்சியம், வளர்ச்சி ஹோர்மோன்கள், குலோரைட், ப்ரோலச்டின், லக்டோபிரின்மற்றும் தரைத் ஹோர்மோன்கள் உள்ளன. ✓ தாய்ப்பால் எளிதில் ஜிரனமடையகூடியது ✓ தாய்ப்பால் எல்லா வகையான நோயெதிர்ப்புகளையும் கொடுகிறது ✓ அலர்ஜி மற்றும் சுவாச பிரட்சனைகளிருந்து குழந்தையை காக்கிறது. தாய் மற்றும் குழந்தை உறவு மேம்படுத்துகிறது. 	<p>விரிவாக் கம்</p>	<p>கவனித்த ல்</p>		
--	--	--	---	---------------------	-------------------	--	--

		<p>தாய்பால் நன்றாக அருந்தியதற்கான அறிகுறி</p> <ul style="list-style-type: none"> ✚ குழந்தைன் எடை நாளுக்கு 18 கிராம் 30 கிராம் அதிகரித்தல். ✚ குழந்தை ஒரு நாளைக்கு ஆறு இருந்து ஏழுமுறை சிறுநீர் கழிதல். ✚ நன்றாக உறக்கம். ✚ தாய் letdown reflex எனப்படும் செயல்பாட்டை உணர்வது. ✚ குழந்தையின் தசை செயல் நன்றாக செயல்படுவதுஆகியன குழந்தை நன்றாக தாய்பால் நன்றாக அருந்தியதற்கான அறிகுறிகள் . <p>கண் பராமரிப்பு</p> <ul style="list-style-type: none"> ➤ கண்களை சுத்தம் செய்வதற்கு முன் கைகளை நன்றாக சோப்பு போட்டு சுத்தம் செய்யவேண்டும். ➤ சுத்தமான பஞ்சு மிதமான சுடுநீரில் நனைதுபிழிந்துகொள்ள வேண்டும். ➤ உட்புறமாக இருந்து வெளிப்புறமாக சுத்தம் செய்யவேண்டும். ➤ தனி தனி பஞ்சுகளை உபயோகிக்கவேண்டும் இதனால் நோய்த்தொற்று ஏற்படுவதை தடுக்கலாம். <p>தொப்புள் கோடி பராமரிப்பு</p> <ul style="list-style-type: none"> ➤ கைகளை நன்றாக சொப்புபோட்டு சுத்தம் செய்யவேண்டும். ➤ தொப்புள்கொடி மேல் எவ்விதமன பவுடர் போடகூடாது . ➤ குழந்தைக்கு அணிவிக்கும் நாப்கின்கள் தொப்புள் கோடிக்கு கிழ் கட்டவேண்டும். ➤ தொப்புள்கொடி மேல் அசுத்தம் 	<p>விரிவாக்கம்</p>	<p>கவனித்தல்</p>		
--	--	---	--------------------	------------------	--	--

			<p>இருந்தால் சுத்தமான சுடுநீர் கொண்டு சுத்தம் செய்ய வேண்டும்.</p> <p>➤ தொப்புள் கொடியை சுற்றி சிவந்து காண்படுதல், வீக்கம், சீழ்வடிந்தல் ஆகிய அறிகுறிகள் தென்பட்டால் உடனடியாக மருத்துவரை அணுக வேண்டும்.</p> <p>நோய் தடுப்பு முறை</p> <ul style="list-style-type: none"> ✚ நோய்தடுப்பு என்பது குழந்தைகளை நோயடமிருந்து காப்பது . ✚ நோய்தடுப்பு முறைகள் மூலம் தட்டுபூசி போட்டு ல்குழந்தைகளை கொடிய நோய்களிடமிருந்து காக்க முடியும் . ✚ நோய்தடுப்பு குறைந்த செலவில் அரசு அளிக்கும் திட்டம் ஆகும். ✚ நோய்தடுப்பு ஊசிகள் கொடிய நோய்களை தடுக்கும் சிறந்த வழி. ✚ தடுபூசி குழந்தைன் இறப்பு மற்றும் நோய் தொற்று ஏற்படாமல் தடுகிறது <p>பின்வரும் நோய்கள் தடுக்கலாம் ,</p> <ul style="list-style-type: none"> - காசநோய் - போலியோ - தொண்டை அடைப்பான் - கக்குவான் இருமல் - முளை காய்ச்சல் - மஞ்சள் காமாலை - Mumps, rubella - இரனஜன்னி - வயிற்றுப்போக்கு - வைட்டமின் எ குறைபட்டு நோய்கள் 	விரிவாக்கம்	கவனித்தல்		
--	--	--	---	-------------	-----------	--	--

			<p>தொடர் பரமரிப்பு</p> <ul style="list-style-type: none"> ➤ தினமும் குழந்தையை குளிபட்டவேண்டும். ➤ இரண்டு மணி நேரத்திற்கு ஒருமுறை தாய்ப்பால் கொடுக்கவேண்டும். ➤ குழந்தையின் அடிகளை நன்றாக துவைத்து சூரிய ஒளியில் காயவைத்து உபயோகிக்க வேண்டும். ➤ சளி, இருமல், காய்ச்சல் இருப்பின் மருத்துவரை அணுகி வைத்தியம் செய்யவேண்டும். ➤ தடுப்பூசிகள் தவறாமல் உரிய நேரத்தில் போடவேண்டும். ➤ ஆறுமாதங்கள் வரை தாய்ப்பால் மட்டும் கொடுக்க வேண்டும் . ➤ ஆறுமாதகளுக்கு பிறகு திட உணவு ஆரம்பிக்கவேண்டும். <p>ஆரோகியமான குழந்தையை பேணிகாத்து நல்ல சமுதாயத்தை உருவாக்குவோம்.</p> <p style="text-align: center;">நன்றி</p>	விரிவாக்கம்	கவனித்தல்		
--	--	--	--	-------------	-----------	--	--

CHECKLIST

TOPIC: A study to assess the multimodal intervention on comprehensive home care management of preterm babies among the mothers of preterm at Institute of Child Health and Hospital for children., Egmore, chennai -8.

S.NO	ITEMS	YES	NO	REMARKS
1.	Do you wash your hands before and after touching the baby?			
2.	Do practicing the methods kangaroo Mother Care at home?			
3.	Do you cover the child with proper clothing?			
4.	Do your family members involved in KMC?			
5.	Do you clean up and freshen baby daily?			
6.	Do you hold the baby properly?			
7.	Do you continue exclusive breast feeding?			
8.	Do you burp baby after every feeding?			
9.	Do you change the bab's diaper every 4 hourly?			
10.	Do you clean up baby's eyes twice a day?			
11.	Do you place diapers below the umbilical cord?			
12.	Do you clean nappy area after defecation?			
13.	Do you take care of your baby's sensitive skin?			
14.	Do you immunize your child with BCG, OPV and hep- B vaccine?			
15.	Do you follow medical advice?			

COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE, CHENNAI-03
LESSON PLAN ON MANAGEMENT OF PRETERM BABY

Introduction

A newborn is a god's divine precious gift given to a mother. Preterm is the single biggest cause of Neonatal mortality and morbidity. Babies who survive have increased rates of disability compared with babies who are not born preterm. Preterm babies had significantly higher incidence of hypothermia, infection and many other complications. Multimodal intervention strategy in imparting on prevention of hypothermia, promotion of breast feeding, care of eye, care of umbilical cord, elimination care, immunization and follow up care.

Central objectives

Help the mothers to gain knowledge and understanding the importance of home care management of preterm baby and to develop skills and attitude to provide comprehensive nursing care to the baby at home care settings.

Contributive objectives,

At the end of this session, mothers will be able to know the,

- meaning of preterm baby
- enlist the categories of preterm baby
- explain the causes of preterm baby
- elaborate the characteristics of preterm baby
- enumerate the management of preterm baby at home care setting regarding following aspects.

1. Thermoregulation,
2. Feeding of baby
3. Eye care
4. Umbilical cord care
5. Skin care
6. Elimination care
7. Immunization and
8. Follow up and its important.

TEACHING MODULE

TOPIC	:	multimodal intervention program on comprehensive home care management of preterm baby.
GROUP	:	Mothers of preterm babies.
VENUE	:	Neonatal Intensive care unit, Institute of child health and hospital for children, Egmore, Chennai 08.
INSTITUTION	:	College of Nursing, Madras Medical College, Chennai -03.
PROGRAMME	:	M.Sc(N) II student,
SUBJECT	:	Child Health Nursing
PLACE	:	NICU (Mother and baby room) Institute of child health and hospital for children.Egmore, Chennai-08.
DURATION	:	45 minutes
METHOD OF TEACHING	:	Lecture cum Demonstration
AUDIO VISUAL AIDS	:	Booklet, Flash cards. Demonstration.
RESEARCH GUIDE	:	Mrs. Seetharaman Vijayalakshmi, MSc (N)., MBA., Reader, Department of child Health Nursing.
NAME OF THE INVESTIGATOR	;	Rajeswari G. MSc (N) II year student, college of nursing, Madras Medical College, Chennai-03.

SUMMARY

So far we discussed about the topic care of preterm baby preterm neonate means the baby born before the 37 completed weeks of gestational age. The causes of preterm baby is antepartum hemorrhage, pregnancy induced hypertension, bi-cartunate uterus, teenage pregnancy, maternal infections etc., the sub categories of preterm babies are late preterm early preterm, very preterm. When come to the characteristics feature of the preterm babies like large head, shiny hair, low birth weight, less subcutaneous tissue, poor feeding, poor sucking reflex, poor maintenance of thermoregulation so the baby is prone for infection care of preterm neonate is very essential to prevent morbidity and mortality. We discussed important care regarding thermoregulation (Kangaroo Mother Care) it provide skin to skin contact, bonding, and weight gain of neonate. Eye care regarding cleaning of eyes twice a day, avoid kajal application, regarding umbilical cord care cleaning of umbilical twice a day. regarding Elimination care, bottom care and hygienic practices. immunization and follow-up care and its importance.

செவிலியர் கல்லூரி
சென்னை மருத்துவ கல்லூரி, சென்னை- 600003.

குழந்தைகள் நல செவிலிய துறை
பாடத்திட்டம்

குறைமாத குழந்தை பராமரிப்பு முறை பற்றிய விவரங்கள்

- தலைப்பு : குறைமாத குழந்தைகளின் தாய்மார்களுக்கு குழந்தை நலம் பேணல் பற்றிய வரையறுக்கப்பட்ட நிகழ்ச்சி
- பங்கேற்பவர்கள் : குறைமாத குழந்தையின் தாய்மார்கள்
- இடம் : பச்சிளம் குழந்தை பிரிவு, அரசு குழந்தைகள் நல மருத்துவமனை , எழும்பூர் , சென்னை.
- நேரம் : 45 நிமிடங்கள்
- கற்பிக்கும் முறை : விரிவுரையாடல்
- கற்பிக்க உதவும் சாதனங்கள் : விளக்ககாட்சி, விரிவுரை , துண்டு பிரசுரம்.
- ஆராய்ச்சி வழிகாட்டி : திருமதி. சீதாராமன் விஜயலட்சுமி , M. Sc (N)., MBA., துறைத்தலைவர், குழந்தை நல ஆராய்ச்சியாளர் பெயர் : திருமதி க .ராஜேஸ்வரி , முதுநிலை இரண்டாம் மாணவி

சுயமுகவுரை

காலை வணக்கம் , நான் சென்னை மருத்துவக் கல்லூரி, செவிலியர் கல்லூரி, முதுநிலை பட்டமேற்படிப்பு இரண்டாம் ஆண்டு பயில்கிறேன். நான் குறைமாத குழந்தையை பற்றியும் மற்றும் வீட்டில் குறைமாத குழந்தையை பராமரிப்பது பற்றியும் கலந்துரையாட வந்துள்ளேன். தயவு கூர்ந்து இந்த விளக்க உரையில் பங்கேற்று, உரையின் இறுதியில் ஏதேனும் சந்தேகங்கள் இருப்பின் கேட்டு தெளிவு பெறவும் .

மைய நோக்கம்

இந்த நலகல்வியின் முடிவில் பங்கேற்பாளர்கள் தங்கல் குறைமாத குழந்தையை பராமரிக்கும் முறை மற்றும் நடைமுறை படுத்துதல் பற்றிய முழுவிவரங்கங்களையும் தெரிந்துகொள்வார்கள்.

பங்களிப்பு நோக்கம் :

குறைமாத குழந்தை பராமரிப்பு குறித்த நலகல்வியின் முடிவில் தாய்மார்கள்,

- குறைமாதகுழந்தை என்றால் என்ன
- குறைமாத குழந்தையின் வகைகள் ,
- குறைமாதகுழந்தை பிறப்பதற்கான கரணங்கள்
- குறைமாதகுழந்தையின் குணங்கள் பற்றிய விளக்கங்கள்
- குறைமாத குழந்தை பராமரிக்கும் முறைகள் பற்றிய விளக்கம்
 - ✓ உடல் வெப்பநிலை பராமரிப்பு (காங்காறு தாய் பராமரிப்பு).
 - ✓ தாய்பால் மட்டுமே கொடுத்து உடல் எடையை மேம்படுத்துதல்.
 - ✓ கண் பராமரிப்பு.
 - ✓ தொப்புள் கொடி பராமரிப்பு.
 - ✓ தோள் பராமரிப்பு.
 - ✓ உலகளாவிய நோய்தடுப்புத்திட்டத்தை பின்பற்றுதல்.
 - ✓ தொடர் பராமரிப்பு.

முடிவுரை:

குறைமாத குழந்தை என்றால் 37 வாரங்களுக்கு முன்னதாக பிறக்கும் குழந்தையே குறைமாத குழந்தை ஆகும். அதன் வகைகள். குறைமாத மற்றும் குழந்தை பிறப்பதற்காண காரணங்கள் கர்ப்பத்தின் போது ஏற்படும் ரத்த அழித்தம், ரத்த கசிவு, புகை பிடித்தல், சிறுவயது திருமணம், ஊட்டச்சத்து குறைபாடு, சர்க்கரை வியாதி, குறைந்த பொருளாதார நிலை, மற்றும் கற்பகால நோய்தொற்று, போன்ற காரணங்களால் குறைமாத குழந்தை பிறக்கின்றன. குறைமாத குழந்தைன் குணநலன்கள் உடல் எடை குறைவு, தோலின் வளர்ச்சி குன்றி காணபடுதல். மேலும் குறைமாத குழந்தையை வீட்டில் பரமரிக்கும்முறைகள் பற்றிய விளக்கங்கள் வெப்பநிலை பராமரிப்பு, தாய்ப்பால் ஊட்டும் முறைகள், நன்மைகள், கண்கள் பராமரிப்பு, தொப்புள் கோடி பராமரிப்பு, தோள் பராமரிப்பு, ஊலகளாவிய நோய்த்தடுப்புத்திட்டம் மற்றும் தொடர் பராமரிப்பு விளக்கங்கள். போன்றவற்றை இந்நலக்கல்வி வயலாக தெரிந்துகொண்டோம். இந்நிகழ்ச்சி தங்களின் திறனை மேம்படுத்தி தங்கள் குழந்தைகளை பேணி பாதுகாக்கவும்,பயன்னுளதகவும் இறுக்கும் என நம்புகிறேன்.

ஆரோக்கியமான குழந்தையை பேணிகாத்து வளமான சமுதாயத்தை உருவாக்குவோம்.

INFORMED CONSENT

Investigator :Mrs. Rajeswari. G

Name of Participant:

Age/sex :

Date :

Name of the Institution: College of Nursing, Chennai.

Title: “A study to assess the effectiveness of multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm babies at Institute of child health and hospital for Children, Egmore, Chennai 08.”

Documentation of the informed consent: (legal representative can sign if the participant is minor or competent).

- I _____ have read/it has been read for me, the information in this form. I was free to ask any questions and they have been answered. I am mother of preterm and exercising my free power of choice, hereby give my consent to be included as a participant in the study.
- I have read and understood this consent form and the information provided to me.
- I have had the consent document explained in detail to me.
- I have been explained about the nature of my study.
- My rights and responsibilities have been explained to me by the investigator.
- I agree to cooperate with the investigator.
- I have not participated in any research study at any time.
- I am aware of the fact that I can opt out of the study at any time without having to give any reason.
- I hereby give permission to the investigators to release the information obtained from me as a result of participation in this study to the regulatory authorities, government agencies and Institutional Ethics Committee. I understand that they are publicly presented.
- My identity will be kept confidential if my data are publicly presented.
- I am aware that I have any question during this study; I should contact the concerned investigator.

Signature of Investigator

Signature of Participants

Date

INFORMATION TO PARTICIPANTS

Title : “A study to assess the effectiveness of multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm babies at Institute of child health and hospital for Children, Egmore, Chennai 08.”

Name of the Participant :

Date :

Age/sex :

Investigator : **Rajeswari. G**

Name of the institution : **College of Nursing, MMC, Chennai.**

Enrolment No :

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 co-operate in this study being conducted at Institute of Child Health and Hospital for Children, Egmore, Chennai 08.

What is the Purpose of the Research (explain briefly)

This research is conducted to assess the effectiveness of multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm, 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 College of Nursing, Madras Medical College, Chennai-3 to conduct study.
- The purpose of study will be explained to the participants.
- The investigator will obtain informed consent.
- The investigator will assess the effectiveness of multimodal intervention on comprehensive home care management of preterm baby among the mothers of preterm using structured questionnaire.
- It will be explained by the investigator.

Possible benefits to other people

The result of the research may provide benefits to the mothers of preterm by home care management of preterm baby.

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, 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 the 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

சுய ஒப்புதல் படிவம்

ஆராய்ச்சி தலைப்பு : குறைமாத குழந்தையை பராமரிப்பு பற்றிய முழுவிழிப்புணர்வு மற்றும் நடைமுறை படுத்துதல் பற்றிய ஆராய்ச்சி.

ஆய்வாளர் பெயர் ; திருமதி. க. ராஜேஸ்வரி.

பங்கேற்பாளர் பெயர் :

தேதி :

வயது/பாலினம் :

- ஆய்வாளர்கள் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழு மனதுடனும் சுயநினைவுடன் சம்மதிக்கிறேன்.
- ஆய்வாளர் மேற்கொள்ளப்போகும் பரிசோதனைகளை மிக தெளிவாக விளக்கிக்கூறினார்.
- எனக்கு விருப்பம்மில்லாத பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகலாம் என்பதையும் ஆய்வாளர் மூலம் அறிந்து கொண்டேன்.
- இந்த ஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நன்கு புரிந்து கொண்டேன். எனது உரிமைகள் மற்றும் கடமைகள் ஆராய்ச்சியாளர் மூலம் விளக்கப்பட்டது.
- நான் ஆராய்ச்சியாளருடன் ஒத்துழைக்க சம்மதிக்கிறேன் எனக்கு ஏதேனும் உடல்நலகுறைவு ஏற்பட்டால் ஆராய்ச்சியாளரிடம் தெரிவிப்பேன்.
- நான் வேறு எந்த ஆராய்ச்சியிலும் தற்சமயம் இடம்பெறவில்லை என்பதை தெரிவித்துக் கொள்கிறேன்.
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன். அப்படி வெளியிடும் போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.
- எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது.

ஆய்வாளர் கையொப்பம்

பங்கேற்பாளர் கையொப்பம்

தேதி :

தேதி :

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சி தலைப்பு: குறைமாத குழந்தையை பராமரிப்பு பற்றிய முழுவிழிப்புணர்வு மற்றும் நடைமுறை படுத்துதல் பற்றிய ஆராய்ச்சி.

ஆய்வாளர் பெயர் : திருமதி. க. ராஜேஸ்வரி **தேதி :**

பங்கேற்பாளர் பெயர் :

வயது/பாலினம் :

- ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடன் சம்மதிக்கலாம்.
- இதில் பங்கேற்பதன் நோக்கம்: இந்த ஆராய்ச்சியில் தகவல்களை தெரிந்து கொள்வதற்காகவும், அதனை பயன்படுத்துவதற்காக மட்டும்தான்.
- இந்த ஆராய்ச்சியின் நோக்கம்: குறைமாத குழந்தையை பராமரிப்பு பற்றிய முழுவிழிப்புணர்வு மற்றும் நடைமுறை படுத்துதல் பற்றிய ஆராய்ச்சி.
- ஆராய்ச்சி மேற்கொள்ளும் முறை: இந்த ஆராய்ச்சியில் குறைமாத குழந்தையை பராமரிக்கும் முறை மற்றும் நடைமுறை படுத்துதல் பற்றிய முழுவிவரங்களையும் செவிலியரின் விளக்கவுரை மூலம் அறிந்து கொள்ளலாம்.
- இதனால் ஆய்வாளருக்கான பயன்: இந்த ஆராய்ச்சி குறைமாத குழந்தையை பராமரிக்கும் முறை மற்றும் நடைமுறை படுத்துதல் பற்றி முழுவிவரங்களையும் அறிந்துகொள்வதுடன் குறைமாத குழந்தையின் நலனை பேணிக்காக்க இந்த ஆராய்ச்சி குறித்த விவரங்கள் பயன்படுகின்றன.
- இதனால் பங்கேற்பாளருக்கான பயன்: இந்த ஆராய்ச்சியின் மூலம் குறைமாத குழந்தையை பராமரிக்கும் முறை மற்றும் நடைமுறை படுத்துதல் பற்றி முழுவிவரங்களையும் அறிந்துகொள்வதுடன் குறைமாத குழந்தையின் நலனை பேணிக்காக்கவும், மருத்துவமனையில் குறைமாத குழந்தையை பராமரிக்கவும் இந்த ஆராய்ச்சி பயன்படுகின்றன.
- ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும் உங்களின் சராசரி வாழ்க்கை முறையில் எந்தவித மாற்றமும் ஏற்படாது என்பதை தெரிவிக்கின்றேன்.
- இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழு மனதுடன் நீங்கள் இந்த ஆராய்ச்சியில் இருந்து விலகிக் கொள்ளலாம் என்பதை தெரிவிக்கின்றேன்.
- இந்த ஆராய்ச்சியில் உங்களின் தகவல்களை பாதுகாப்பாக வைத்து கொள்கிறேன் என்பதை தெரிவிக்கின்றேன். இந்த ஆராய்ச்சியின் தகவல்களை வெளியிடும் போது உங்களை பற்றி அடையாளங்கள் வெளிவராது என்று உறுதி கூறுகிறேன்.

ஆய்வாளர் கையெப்பம்

பங்கேற்பாளர் கையொப்பம்

தேதி :

தேதி :

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool submitted by Rajeswari. G, M.Sc. Nursing II year student, College of Nursing, Madras Medical College which is to be used in her study titled, **“A Study to assess the effectiveness of multimodal intervention on comprehensive Home care management of preterm baby among the mothers of preterm at Tertiary Care Hospital, Chennai-03”** 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

Prof. Dr. (Mrs). R.SUDHA, M.Sc (N), Ph.D.,

PRINCIPAL

VHS-M.A.Chidambaram College of Nursing
VHS Campus, Chennai-600 113

Name: Dr. R. SUDHA

Designation: Professor cum Principal

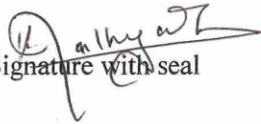
College: VHS - M.A. Chidambaram College of Nursing

Place: Chennai

Date: 08.01.2020

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool submitted by Rajeswari. G, M.Sc. Nursing II year student, College of Nursing, Madras Medical College which is to be used in her study titled, "A Study to assess the effectiveness of multimodal intervention on comprehensive Home care management of preterm baby among the mothers of preterm at Tertiary Care Hospital, Chennai-03" 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: NESHA SATHYA SATISH

Designation: Professor

College: Apollo CON



Place: Chennai

Date: 20/12/19

REQUISITION LETTER

From

Rajeswari.G,
M.Sc Nursing I Year student,
College of Nursing,
Madras Medical College,
Chennai-03.

To

The Professor and Head of the department
Department of Neonatology Intensive Care Unit,
Institute of Child Health & Hospital for Children
Egmore ,
Chennai -08

Through,

The Principal, College of Nursing, Madras Medical College, Chennai – 03

Respected madam/Sir

Sub : College of Nursing, Madras Medical College, M.Sc(N) first year student-
Dissertation -permission to conduct study -requested-reg

I request you to kindly permit meto conduct Dissertation on **“A Study to assess the effectiveness of multimodal intervention on comprehensive home care management of preterm babyamong mothers of preterm at Pediatric Tertiary Care Hospital ,Egmore , Chennai-08.**

Thanking you

Yours faithfully

G. Rajeswari
(G.Rajeswari)

Date:

Place :Chennai-03

Forwarded
Adelina Reg
PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003.

20/11/19
To permit Sr. Rajeswari
M.Sc Nsg Student of MSc
to carry out her study
at. ICH & HIC, ICH & HIC
Egmore
ICU & HIC Intensive
Care Unit

Dr. C.N. Kamalarathnam
MD (Paed.), DCH, DM (N)
Registration No. 4271
Prof. & Head, Dept. of Neonatology
& H & H.C. Egmore, Chennai

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

EC Reg.No.ECR/270/Inst./TN/2013/RR-16
Telephone No.044 25305301
Fax: 011 25363970

CERTIFICATE OF APPROVAL

To

Mrs.RAJESWARI G,
M.Sc (N) I Year
College of Nursing
Madras Medical College
Chennai-600003.

Dear Mrs.RAJESWARI G,

The Institutional Ethics Committee has considered your request and approved your study titled **"A STUDY TO ASSESS THE EFFECTIVENESS OF MULTIMODAL INTERVENTION ON COMPREHENSIVE HOME CARE MANAGEMENT OF PRETERM BABY AMONG THE MOTHERS OF PRETERM AT PEDIATRIC TERTIARY CARE HOSPITAL, CHENNAI"-NO.11112019.** The following members of Ethics Committee were present in the meeting held on **12.11.2019** conducted at Madras Medical College, Chennai 3.

- | | |
|--|--------------------|
| 1. Prof.P.V.Jayashankar | :Chairperson |
| 2. Prof.R.Jayanthi,MD.,FRCP(Glasg)., Dean,MMC,Ch-3 | :DeputyChairperson |
| 3. Prof.N.Gopalakrishnan,MD.,DM.,FRCP, Vice Principal Director,Inst.of Nephrology,MMC,Ch | : Member Secretary |
| 4.Prof.Bharathi Vidya Jayanthi,Vice Principal Director,Inst. of Pathology,MMC,Ch- | : Member |
| 5. Prof.R.Muthuselvan,MD,Prof. Inst. of Int.Med,MMC, Ch-3 | : Member |
| 6. Prof.Alli, Prof. Inst. of Gen.Surgery,MMC | : Member |
| 7. Prof.Shobha, Prof, Inst.of O&G, Chennai | : Member |
| 8. Prof.Rema Chandramohan,Prof.of Paediatrics,ICH,Chennai | : Member |
| 9. Prof. Sudha, Prof. Inst. of Pharmacology,MMC,Ch-3 | : Member |
| 10.Prof.K.Ramadevi,MD., Director, Inst. of Bio-Chemistry,MMC,Ch-3 | : Member |
| 11.Prof. S.Lakshmi, Prof. of Paediatrics ICH Chennai | : 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

CERTIFICATE OF ENGLISH EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the dissertation work topic titled “**A STUDY TO ASSESS THE EFFECTIVENESS OF MULTIMODAL INTERVENTION ON COMPREHENSIVE HOME CARE MANAGEMENT OF PRETERM BABY AMONG THE MOTHERS OF PRETERM AT PEDIATRIC TERTIARY CARE HOSPITAL, CHENNAI-08**” done by G. Rajeswari, M. Sc Nursing II year student, College of Nursing, Madras Medical College, Chennai – 03 has been edited and validated for English language appropriateness.

Signature : *A Saravanan*

Name :

Designation:


Place :

**A.SARAVANAN M.A., B.Ed.,
P.G.Assistant in English
Bharathi Hr.Sec. School,
Reddipatti, Namakkal.
Pin : 637 001.**

CERTIFICATE OF TAMIL EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the dissertation work topic titled “**A STUDY TO ASSESS THE EFFECTIVENESS OF MULTIMODAL INTERVENTION ON COMPREHENSIVE HOME CARE MANAGEMENT OF PRETERM BABY AMONG THE MOTHERS OF PRETERM AT PEDIATRIC TERTIARY CARE HOSPITAL, CHENNAI-08**” done by G. Rajeswari, M. Sc Nursing II year student, College of Nursing, Madras Medical College, Chennai – 03 has been edited and validated for Tamil language appropriateness.

Signature : 
Name : **சி. இராஜகுமாரி**
Designation: **M.A., M.F.N.**
Place : **முதகலை ஆசிரியர் (தமிழ்) அக பெண்கள் மேலிணைப்பு, காமராஜ் நகர், ஆவடி - 600 011**





CERTIFICATE OF PLAGIARISM

This is to certify that dissertation titled “**A STUDY TO ASSESS THE EFFECTIVENESS OF MULTIMODAL INTERVENTION ON COMPREHENSIVE HOME CARE MANAGEMENT OF PRETERM BABY AMONG THE MOTHERS OF PRETERM AT PEDIATRIC TERTIARY CARE HOSPITAL, CHENNAI-08**” of the candidate **Mrs.RAJESWARI.G** for the partial fulfillment of M.Sc. Nursing Programme in the branch of CHILD HEALTH NURSING has been verified for plagiarism through relevant plagiarism checker. We found that the uploaded thesis file from introduction to conclusion pages and rewrite shows _____% of Plagiarism (_____% uniqueness) in this dissertation.

CLINICAL SPECIALTY GUIDE

Mrs.Seetharaman Vijayalakshmi, M.Sc(N), MBA,
Reader in Nursing,
Dept. of Child Health Nursing,
College of Nursing,
Madras Medical College,
Chennai -03.

PRINCIPAL

Mrs.A.Thahira Begum, M.Sc.(N), MBA, M.Phil.,
Principal,
College of Nursing,
Madras Medical College,
Chennai - 03.

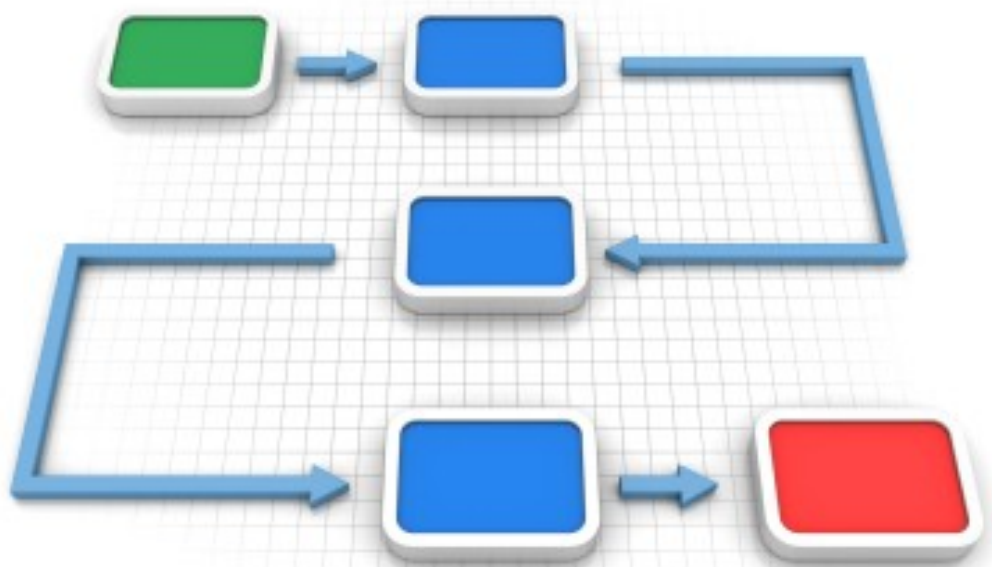
Introduction



Review Of Literature



Methodology



Analysis and Interpretation



Discussion



*Summary, Implications,
Limitations, Recommendation
& Conclusion.*



References



Anneasure

