View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by ePrints@TNMGRM (Tamil Nadu Dr. M.G.R. Medical University)

EFFECTIVENESS OF NEONATAL CARE PACKAGE ON KNOWLEDGE AND PRACTICE REGARDING NEWBORN CARE AMONG PRIMI GRAVID MOTHERS AT SELECTED SETTING, CHENNAI, 2015

DISSERTATION SUBMITTED TO

THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY

CHENNAI

IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE DEGREE OF

MASTER OF SCIENCE IN NURSING

OCTOBER 2015

Internal Examiner:

External Examiner:

EFFECTIVENESS OF NEONATAL CARE PACKAGE ON KNOWLEDGE AND PRACTICE REGARDING NEWBORN CARE AMONG PRIMI GRAVID MOTHERS AT SELECTED SETTING, CHENNAI, 2015

Certified that this is the bonafide work of

Mrs. K.J.PUNITHAVATHI

Omayal Achi College Of Nursing
No. 45, Ambattur Road,
Puzhal, Chennai – 600 066.

COLLEGE SEAL :

SIGNATURE :

Dr. (Mrs.) S.KANCHANA
R.N., R.M., M.Sc.(N)., Ph.D., Post . Doc(Res).,
Principal & Research Director, ICCR,
Omayal Achi College of Nursing,
Puzhal, Chennai – 600 066, Tamil Nadu.

DISSERTATION SUBMITTED TO

THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY

CHENNAI

IN PARTIAL FULFILLMENT OF REQUIREMENT FOR THE DEGREE OF

MASTER OF SCIENCE IN NURSING

OCTOBER 2015

EFFECTIVENESS OF NEONATAL CARE PACKAGE ON KNOWLEDGE AND PRACTICE REGARDING NEWBORN CARE AMONG PRIMI GRAVID MOTHERS AT SELECTED SETTING, CHENNAI, 2015

Approved by the Research Committee in April 2014.

PROFESSOR IN NURSING RESEARCH
Dr. (Mrs.) S.KANCHANA _____
R.N., R.M., M.Sc.(N)., Ph.D., Post. Doc (Res).,
Principal & Research Director,
Omayal Achi College of Nursing, ICCR,
Puzhal, Chennai -600 066, Tamil Nadu.

CLINICAL SPECIALITY - HOD & RESEARCH GUIDE
Mrs. RUTHRANI PRINCELY. J _____
R.N., R.M., M.Sc(N)., [Ph.D(N)]., Head of the Department,
Child Health Nursing,
Omayal Achi College of Nursing,
Puzhal, Chennai -600 066, Tamil Nadu.

MEDICAL EXPERT
Dr. K. SANTHOSHINI RAMESH _____
DCH, DNB(Peds)
Sir Ivan Stedeford Hospital,
Ambattur,
Chennai.

DISSERTATION SUBMITTED TO

THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY

CHENNAI

IN PARTIAL FULFILMENT OF REQUIREMENT OF THE DEGREE OF

MASTER OF SCIENCE IN NURSING

OCTOBER 2015

ACKNOWLEDGEMENT

I thank **God Almighty** for giving me the courage, strength and abundant blessings throughout my career and personal life.

Towards the commencement, I the investigator of this study would like to express my ardent thanks and fervent obligation to **The Tamil Nadu Dr. M.G.R. Medical University**, Chennai, for having given me this valued opportunity to undergo the post graduate programme in education in this esteemed university, for the foremost purpose of enriching my professional career.

I would like to express my heartfelt thanks and gratitude to the **Managing Trustee**, Omayal Achi College of Nursing for giving me an opportunity to pursue my post graduate education in this esteemed institution.

I accord my sedulous gratitude and immense thanks to **Dr. K. R. Rajanarayanan,** B.Sc., M.B.B.S., FRSH [London], Research Coordinator, ICCR and Honorary Professor in Community Medicine for the valuable suggestions and guidance throughout the study.

I express my deep sense of indebtedness to **Dr. (Mrs.) S. Kanchana**, Research Director ICCR and Principal, Omayal Achi College of Nursing for her constant source of inspiration and encouragement throughout the study.

I am extremely grateful to **Dr. (Mrs.) Celina.D,** Vice Principal, Omayal Achi College of Nursing for inculcating the knowledge of research to my level of understanding and thought provoking valuable advices throughout the study.

I am thankful to the **ICCR Executive Committee Members** for their suggestions during the Research proposal and mock viva presentations.

I owe my profound gratitude and thanks to my research guide **Mrs. Ruthrani Princely. J,** Head of the Department, Child Health Nursing for her timely corrections, support and motivation till the final fraction of the study.

I extend my grateful endless thanks to **Ms. Nandhini. P,** Assistant professor and **Mrs. Sangeethajanani. SA,** Assistant professor, faculty of Child Health Nursing department for their constructive criticisms, valuable guidance and encouragement, which was a key for the successful completion of the study.

I express my earnest gratitude to **Mrs. D. Sorna daya Rani,** Tutor, faculty of Child Health Nursing department for her constant encouragement, scholarly suggestions and guidance in every phase of the study.

A bouquet of thanks to our class coordinator **Mrs. Bhagavathy S,** Assistant professor who constantly supported, guided and motivated for completion of the study.

A memorable note of gratitude to the **Honorary Secretary, Managing Director, Chief Consultant Pediatrician** and **Sister Incharge,** all **maternity ward Staffs** of **Sir Ivan Stedeford Hospital**, Ambattur, and **Teja Hospital**, Ambattur, Chennai for their concern and co-operation during data collection period.

I specially thank all the **Primi gravid mothers** participated in the study without whom this piece of work would not have come true.

My genuine thanks to **Mr. Venkatesan**, Biostatistician for his resourceful aid in statistical analysis of this study.

A bouquet of thanks to **Mr.Yayathee Subbarayalu**, Research fellow (ICMR), ICCR, Omayal Achi College of Nursing and all **HODs and faculty** Omayal Achi College of Nursing for rendering their constant and encouragement throughout the study.

I am indeed thankful to the **Librarians** of Omayal Achi College of Nursing and The Tamil Nadu Dr. M. G. R. Medical University, for their co-operation and help in collecting the related literature for this study.

I dedicate my warm and heartfelt thanks to **Mr. Jayaraman, M.A., M.Ed., M.Phil.,** for editing the Tamil tool and **Mrs. A. Anuradha, M.A., B.Ed., M.Phil.,** for editing the manuscript in English

A special note of gratitude to **Mr. G. K. Venkataraman,** Elite Computers for his effort in shaping and aligning the manuscript.

I thank all my fellow classmates "**CARNITES", M.Sc(N) 2013-15 Batch** especially my department friends **Ms. Anitha.R , Ms. Soumya Baby , Ms. Nisha Rachel .C** and my peer evaluators **Sharon Grace Joseph and Sulu Susan Rajan** for their endless help and constructive ideas, which helped me to mould my study in a better way.

Words are beyond expression for the meticulous effort and laboured efforts of my beloved parents **Mr. K. Jayaraman** and **Mrs. J. Poongothai,** my ever loving brother **Dr.J. Thirunavukkarasu** and sister **Mrs. J. Thilagavathi** and all my **family members** for their care, support, unending love, special prayers, constant encouragement and strength which made my study a dream come true.

LIST OF ABBREVIATIONS

CNE	-	Continuing Nursing Education
ENMR	-	Early Neonatal Mortality Rate
IAP	-	Indian Academy of Paediatrics
ICCR	-	International Centre for Collaborative Research
IEC	-	Information Education Communication
IMR	-	Infant Mortality Rate
LNMR	-	Late Neonatal Mortality Rate
LSCS	-	Lower Segment Caesarian Section
NMR	-	Neonatal Mortality Rate
SD	-	Standard Deviation
SISH	-	Sir Ivan Stedeford Hospital
UNICEF	-	United Nations International children's Emergency fund
WHO	-	World Health Organization

LIST OF SYMBOLS

χ^2	-	Chisquare
=	-	Equals to
<	-	Less than
>	-	More than
%	-	Percentage
+/-	-	Plus or minus

TABLE OF CONTENTS

CHAPTER NO.	CONTENT	PAGE NO.
	ABSTRACT	
1	**INTRODUCTION**	
1.1	Background of the study	
1.2	Significance and need of the study	
1.3	Statement of the problem	
1.4	Objectives of the study	
1.5	Operational Definition	
1.6	Assumptions	
1.7	Null hypotheses	
1.8	Delimitation	
1.9	Conceptual framework	
1.10	Outline of the report	
2	**REVIEW OF LITERATURE**	
2.1 2.2	Scientific reviews related to knowledge and practice of neonatal care Scientific reviews related to effectiveness of Neonatal care package	
3	**RESEARCH METHODOLOGY**	
3.1	Research Approach	
3.2	Research Design	
3.3	Variables	
3.4	Setting of the study	
3.5	Population	
3.6	Sample	

CHAPTER NO.	CONTENT	PAGE NO.
3.7	Sampling size	
3.8	Sampling technique	
3.9	Criteria for sample selection	
3.10	Development and description of the tool	
3.11	Content validity	
3.12	Ethical considerations	
3.13	Reliability of the tool	
3.14	Pilot study	
3.15	Procedure for data collection	
3.16	Procedure for data analysis	
4	**DATA ANALYSIS AND INTERPRETATION**	
5	**DISCUSSION**	
6	**SUMMARY, CONCLUSION, IMPLICATIOS, RECOMMENDATION AND LIMITATIONS**	
	REFERENCES	
	APPENDICES	

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
4.1.1	Frequency and percentage distribution of demographic variables of primi gravid mothers with respect to age in years, religion and type of family .	
4.1.2	Frequency and percentage distribution of demographic variables of primi gravid mothers with respect to occupation of the mother, gestational week and type of delivery.	
4.2.2	Comparison of pretest and post test level of practice score regarding neonatal care among primi gravid mothers	
4.3.1	Frequency and percentage distribution of post test level of practice regarding neonatal care among primi gravid mothers.	
4.4.1	Correlation between post test knowledge and practice score regarding neonatal care among primi gravid mother	
4.5.1	Association of selected demographic variables with mean differed post test level of practice regarding neonatal care among primi gravid mothers	

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1.9.1	Conceptual framework.	
3.1	Schematic representation on research methodology	
4.2.1	Frequency and percentage distribution of pretest and post test level of knowledge regarding neonatal care among primi gravid mothers.	

LIST OF APPENDICES

APPENDIX	TITLE	PAGE NO.
A	Ethical clearance certificate	
B	Letter seeking and granting permission for conducting the main study	
C	Content validity (i) Letter seeking experts' opinion for content validity (ii) List of experts for content validity (iii) Certificate of content validity	
D	Certificate of English and Tamil editing	
E	IEC certificate for intervention tool from ICCR	
F	Informed consent (i) Informed consent request form (ii) Informed written consent form	
G	Copy of the tool for data collection with scoring key	
H	Coding for the demographic variables	
I	Blue print of data collection tool	
J	Intervention tool	
K	Plagiarism report	
L	Dissertation Execution plan-Gantt chart	
M	Photographs, CD and Booklet	

Effectiveness of Neonatal care package on knowledge and practice regarding newborn care among primi gravid mothers at selected setting, Chennai.

Abstract:

Aim and objective: To assess the effectiveness of Neonatal care package on knowledge and practice among primi gravid mothers. **Methodology**: Quantitative approach. Pre experimental design was adopted to assess the effectiveness of Neonatal care package on knowledge and practice among 60 primi gravid mothers who satisfied the inclusion and exclusion criteria at Sir Ivan Stedeford Hospital and Teja Hospital. Non-probability purposive sampling technique was used to select the samples. The level of knowledge and practice was assessed by using structured knowledge questionnaire and observation checklist based on modified IAP guidelines. The pre test knowledge and intervention was administered during the admission in antenatal ward and post test level of knowledge was assessed on the second postnatal day. Post test level of practice was assessed on the first and second day for normal delivery mothers and second and third day for L.S.C.S mothers. **Results:** The study findings revealed that the pretest mean score of knowledge was 7.68 with standard deviation of 2.27 and the post test mean score was 10.21 with standard deviation of 1.88. The calculated paired 't' value 7.826 was found to be statistically highly significant at $p<0.001$ level and the correlation revealed that the mean post test level of knowledge score was 10.21 with mean post test level of standard deviation of 1.88 and the post test practice score was 33.83 with post test level of standard deviation of 3.82. The calculated 'r' value 0.4 which indicated that there was statistically significant at $p<0.01$ level which showed that the Neonatal care package had a effectiveness on improving knowledge and practice among primi gravid mothers. **Conclusion**: The results depicted that there was a significant improvement of knowledge and practice among primi gravid mothers after administration of Neonatal care package.

Key words*: Neonatal care package, Primi gravid mothers .*

INTRODUCTION

Newborns are considered to be tiny and powerless, completely dependent on others for life. Neonates are "at risk" for various health problems, even though they are born with average birth weights. The morbidity and mortality rates in newborn infant are high. They need optimal care for improved survival.

Neonatal mortality or death is one of the major causes of concern with newborn all over the world, especially developing countries Globally an average of 3,53,000 babies are born each day around the world. The crude birth rate is 18.9 births per 1,000 population or 255 births globally per minute or 4.3 births every second (as of Dec. 2013 estimate) and 19.89 births/1,000 population .**(UNICEF, 2014)**

Neonatal deaths occurs due to various causes such as complications during pregnancy, poor health condition of the mother, filthy conditions during delivery, critical conditions after birth and improper newborn care . It is essential that neonatal care to be taught to the primi gravid mothers to gain their confidence and improving the neonatal care.

Primi gravida is a medical term used to refer to a woman who is pregnant for the first time. Primi gravid mothers should be aware of all the components to reduce the mortality rates and improve the health of the newborn. There are number of interventions in the essential newborn care module which can be practiced by the mother such as prevention of infection by proper hand washing, thermal protection by keeping the neonate warmth, early and exclusive breast feeding**.**

During clinical posting the investigator observed that primi gravid mothers lack knowledge and practice to handle the neonates and primi gravid mothers can be motivated and encouraged to focus on newborn care through education and practicing on specific vital aspects of newborn care such as mummification, breastfeeding and hand washing which can have impact on neonatal mortality and morbidity rate. Hence the investigator devised Neonatal care package focusing on the knowledge and practice of specific components such as thermoregulation, breast feeding and prevention of infection.

Objectives

- To assess the effectiveness of Neonatal care package on knowledge and practice regarding neonatal care among primi gravid mothers.

Null hypothesis

NH_1- There is no significant difference in the pre and post test level of knowledge and practice on Neonatal care among primi gravid mothers at $p<0.05$ level.

METHODOLOGY

A pre experimental research design was adopted to assess the effectiveness of Neonatal care package on knowledge and practice among primi gravid mothers. The independent variable of this study was primi gravid mothers and the dependent variable

was neonatal care package. The study was conducted in Sir Ivan Stedeford Hospital (SISH), Chennai and Teja Hospital, Chennai. The study population includes primi gravid mothers within 37-40 weeks of gestation admitted in SISH and Teja Hospital, Chennai. The sample size consisted of 60 primi gravid mothers (who fulfils the inclusion and exclusion criteria) selected by Non probability purposive sampling technique. The study included the primi gravid mothers with 37-40 weeks of gestation, and primi gravid mothers who can deliver either by normal vaginal delivery or by L.S.C.S. The study excluded primi gravid mothers who are not willing to participate in this study, primigravid mothers with any other comorbid illness, neonate with APGAR of less than 7 .

The instrument used in this study was knowledge questionnaire to assess the knowledge and observational checklist based on IAP guidelines to assess the practice of mothers on selected components of Neonatal care package. The investigator done this study through lecture cum video method on thermoregulation, breastfeeding, prevention of infection followed by lecture cum demonstration on mummification, breastfeeding techniques, hand washing was performed to each mother. Demonstration was done for 20 minutes and reinforcement given through leaflet. The investigator performed pretest and intervention during the admission of the primi gravid mothers in the antenatal ward and post test was assessed on the second postnatal day. Post test level of practice was assessed for normal delivery mothers on the first and second postnatal day and for L.S.C.S mothers on the second and third post natal day.

RESULT AND DISCUSSION

The findings of the study revealed that the pretest mean score of knowledge was 7.68 with standard deviation of 2.27 and the post test mean score was 10.21 with standard deviation of 1.88. The calculated paired ‘t’ value (7.826) was higher than the table value which indicated , that there was a high statistical significant difference in the post test level of knowledge among prim gravid mothers at $p<0.001$ level

The correlation revealed that the mean differed knowledge score was 10.21 with mean differed standard deviation of 1.88 and the mean differed practice score was 33.83 with mean differed standard deviation of 3.82. The calculated ‘r’ value (0.4) was statistically significant at $p<0.01$ level.

The study findings were analyzed by calculated paired 't' test. The calculated 'r' value indicated that there was significant improvement of knowledge with the post test score level of practice. Thus Neonatal care package was proved to be an effective method for improving the knowledge and practice of primi gravid mothers on their newborn.

CONCLUSION

The findings revealed that the post test mean score knowledge was 10.21 with standard deviation of 1.88. The calculated paired 't' value is 7.826, which indicated there is significant difference in the post test level of knowledge. The post test practice score was 33.83 and calculated 'r' value is 0.4 which is statistically significant. Thus the study findings showed that there was significant improvement in knowledge and practice among primi gravid mothers after administration of Neonatal care package. Therefore the intervention tool can be utilized by the pediatric health care providers to impart knowledge and practice of selected components of neonatal care .

IMPLICATIONS

The pediatric nurse can utilize this tool for all primi gravid mothers during post natal period and leaflet can be given to the mother during discharge. The nurse educator can enable the student nurses to gain practice required to educate the neonatal care package. The educational institution can provide opportunities for nursing students to get exposed to taking care of the neonate. The findings of the study can be disseminated to the nurses working in various hospitals and for student nurses through various media. Nurse administrators should take initiation in organizing CNE, conferences and workshop on Neonatal care among primi gravid mothers.

CHAPTER 1

INTRODUCTION

INTRODUCTION

Neonatal period is a very crucial period and to a large extent determines the overall health status of the child and in turn adult life. The period of neonate is 0 to 28 days. Birth is a major challenge to the newborn to negotiate successfully from intrauterine to extra uterine life. The neonates are considered to be tiny and powerless, completely dependent on others for life. Neonates are "at risk" for various health problems, even though they are born with average birth weights. The morbidity and mortality rates in newborn infant are high. They need optimal care for improved survival.

Neonatal mortality or death is one of the major causes of concern with newborn all over the world , especially developing countries .Globally an average of 353,000 babies are born each day around the world. The crude birth rate is 18.9 births per 1,000 population or 255 births globally per minute or 4.3 births every second (as of Dec. 2013 estimate) and 19.89 births/1,000 population (2014). the incidence of newborn mortality in India is roughly 26 million children born in India each year, 1.2 million die during the first four weeks. That's 30% of the 3.9 million global neonatal deaths**.(UNICEF 2014)**

Primi gravida is a medical term used to refer to a woman who is pregnant for the first time. Primi gravid mothers should be aware of all the components to reduce the mortality rates and improve the health of the newborn. There are number of interventions in the essential newborn care module which can be practiced by the mother such as prevention of infection by proper hand washing, thermal protection by keeping the neonate warmth, early and exclusive breast feeding.

Proper parenting especially by a primi gravid mothers for an newborn is very important as neonates needs special care. Care given by a mother to the neonate is not just important for their physical health but also promotes psychological and social well being. It is the responsibility of the primi mothers to attain this knowledge and they must gain it before the delivery of the neonate as the newborn care practices depends on the knowledge of the mother on newborn care.

Primi gravid mothers should be aware of all the components to reduce the mortality rates and improve the health of the newborn. There are number of interventions in the essential newborn care module which can be practiced by the mother such as prevention of infection by proper hand washing, thermal protection by keeping the neonate warmth, early and exclusive breast feeding**.**

Thermoregulation is important for both term and preterm neonates because they have to adopt from intrauterine life to extra uterine life during transition. Heat loss in neonates occur by evaporation, conduction, convection and radiation. Warmth to be provided by keeping the baby dry and wrapping the baby otherwise hypothermia will occur. Breastfeeding is the optimal source of nutrition. It provides immune factors, hormones and other bioactive components that can act as biological signals; and can decrease the incidence and severity of infectious disease, enhance neuro development, decrease the incidence of childhood obesity and some chronic illnesses. Newborn babies are more susceptible to infections because their immune system is immature. Proper hand hygiene may eliminate the risk of occurrence of infection **.**

1.1 BACKGROUND OF THE STUDY

Newborn care is an effective way to meet the neonatal needs like warmth, breast feeding, protection from infection, stimulation, safety and love. The first 28 days of the neonatal period is the most vulnerable time for a child's survival.

Globally, an average of 353,000 babies are born each day around the world. The crude birth rate is 18.9 births per 1,000 population or 255 births globally per minute or 4.3 births every second (as of Dec. 2013 estimate) and 19.89 births/1,000 population **(United Nations International Children's Emergency Fund, 2014).**

According to **United Nation inter-agency Group for child mortality Estimation (2013**) for South East Asia the neonatal mortality as per 1000 live birth in Northern Africa is 53, Caucasus and Central Asia is 26, Eastern Asia is 150, South Eastern is 160 and Western Asia is 67

Rama R, Gopalakrishnan S and Udayshankar PM (2014) conducted a cross sectional study to assess the knowledge regarding newborn care among 100 mothers in Kancheepuram district by using structured interview schedule. Results revealed that the level of knowledge regarding new born care was adequate for the mothers with 15% in feeding practices, 39% in immunization, 8% in growth and development and 42% in newborn illness in 33% of the mothers. The knowledge regarding new born care was found to have a significant association with the educational status of the mother. This study outcome explained that the need for better awareness and education program coupled to improve the level of knowledge regarding newborn care among mothers.

In India the infant mortality rate is 42, Neonatal mortality rate is 29, Early neonatal mortality rate is 23 and Late neonatal mortality rate is 6**.(2012, Statistical Reporting Service Report)**

In Delhi, 64 per cent newborns die within the first 28 days, the Infant Mortality Rate (IMR) in Tamil Nadu is 22 deaths per 1000 live births. The neonatal period is vulnerable, the first day of life (24 hours) is even more critical. Of the 2.8 million neonates dying across the world during the first 27 days, death during the first day of birth alone accounts for one million. 300,000 newborn deaths in India are on the very first day of birth. Thus, India accounts for about one-third of all neonates dying globally on the first day of birth**.(The Hindu News papaer-2014).**

The majority of all neonatal deaths (73%) occur during the first week of life, around 36% occur within the first 24 hours. Up to two thirds of newborn deaths could be prevented if skilled health workers perform effective health measures at birth **(UNICEF 2014)**

Proper parenting especially by a primi gravid mothers for an newborn is very important as neonates needs special care. Care given by a mother to the neonate is not just important for their physical health but also promotes psychological and social well being. It is the responsibility of the primi gravid mothers to attain this knowledge and they must gain it before the delivery of the neonate as the newborn care practices depends on the knowledge of the mother on newborn care.

Good newborn knowledge will lead to positive attitude towards newborn and it reflects in their practices. Inadequate knowledge may be due to illiteracy, early marriage, lack of experience as in case of primi gravid also become reasons for mortality in developing countries.

Mala L.C., (2010) conducted a quasi experimental study among 60 mothers in Manipur to assess the effectiveness of educational programme on knowledge regarding breast feeding practices .Their knowledge were assessed by questionnaire and practice by observation. Result showed that 93.3% of the mothers had adequate knowledge, 40% of mothers breast fed their infants for 6 months, 91.3% of mothers breast fed their infant more than 2 years. The study concluded that majority of mothers had adequate knowledge regarding breast feeding.

Thus the investigator adopted the Neonatal care package as the intervention tool for the present study as it is easy and can be administered by the staff nurses to the primi gravid mothers as it improves the knowledge and practice of selected aspects of neonatal care.

1.2 SIGNIFICANCE AND NEED FOR THE STUDY

The healthy newborn infant born at term, between 38 to 42 weeks, cries immediately after birth, establishes independent rhythmic respiration, quickly adapts with the extra-uterine environment, has an average birth weight and no congenital anomalies. Primigravid mothers plays an active role in caring the newborn , hence knowledge about neonatal care and practice can enhance the mother to gain confidence and improves neonatal care.

Mohite R.V, Mohite V.R and Kakada S.V., (2012) conducted a cross sectional study from 590 married primi gravid mothers to assess the knowledge of breast feeding attending antenatal clinic of Krishna hospital and medical research centre, Karad district Satara .Pre tested structured proforma used to collect information attending ante-natal clinic during study period by utilizing personal interview method. The result revealed that 59.66% showed fair quality of knowledge about breast feeding and association was found between socio-demographic variables with their knowledge.

Neelima Thakur and Arun Kumar., (2012) conducted a cross sectional survey among 6 Urban slum in Ganda community of Raipur city with 160 mothers of newborns on knowledge and practices related to delivery and newborn care practices, immediate care after birth, breastfeeding practices Community. Semi-structured, pre-tested schedule was used to interview and the results revealed that majority (80.62%) of home deliveries,73.75% of the mothers were applied paste of mustered oil and turmeric powder on stump. Bathing the baby immediately after birth was practiced in (67.5%) of home deliveries. 61.87% of mothers initiated the breastfeed within 2 hrs after birth.

Santhi M D and Kokilavani ., (2013) conducted a quasi experimental study to assess the effectiveness of video teaching programme on breast feeding among primigravid mothers in 6 main urban health maternity centers in Coimbatore. The data was collected from 30 primigravida mothers through interview schedule and observation check list. Result showed that 30 mothers in experimental group show excellent knowledge and practice and control group mother had very poor knowledge and practice.

Though newborn care is practiced by all mothers either from previous knowledge or from the information obtained from the hospital, primi gravid mothers has lack of experience to handle the neonates. The investigator during the clinical experience found that the primi gravid mothers can be motivated and encouraged to focus on newborn care through education and practicing on specific aspects of newborn care such as mummification, breastfeeding and hand washing which can have an impact on neonatal mortality and morbidity rate.

1.3 STATEMENT OF THE PROBLEM

A pre experimental study to assess the effectiveness of Neonatal care package on knowledge and practice regarding newborn care among primi gravid mothers at selected setting, Chennai.

1.4 OBJECTIVE

1. To assess and compare the pre and post test level of knowledge regarding neonatal care among primi gravid mothers.
2. To assess the post test level of practice regarding neonatal care among primi gravid mothers
3. To correlate the post test level of knowledge score with post test level of practice score on neonatal care among primi gravid mothers.
4. To associate the selected demographic variables with the mean differed score of knowledge and post test level of practice regarding neonatal care among Primi gravid mothers

1.5 OPERATIONAL DEFINITION

1.5.1 Effectiveness

Refers to the outcome of Neonatal Care Package on knowledge and practice on neonatal care among primi gravid mothers by using structured questionnaire devised by the investigator and observation checklist based on modified IAP guidelines which was assessed on the third day for knowledge and first and second postnatal day for normal delivery mothers and second and third day for the L.S.C.S mothers for the practice.

1.5.2 Neonatal care package

It refers to a set of information prepared by the investigator for the primi gravid mothers regarding neonatal care and it has the following components

- Lecture cum discussion with the aid of PowerPoint presentation for maintenance of thermoregulation, breastfeeding and prevention of infection
- Lecture cum demonstration on mummification, breastfeeding techniques and hand washing.
- Leaflet was given to reinforce.

1.5.3 Knowledge

Refers to the awareness and ability of primi gravid mothers to respond to questions regarding selected components of Neonatal care package, the pre test was assessed after admission and post test was assessed on the second day of post natal period after intervention by using structured knowledge questionnaire prepared by the investigator**.**

1.5.4 Practice

Refers to the actions performed by the primi gravid mothers to practice selected components of neonatal care on their newborns such as mummification procedure, steps of breastfeeding technique and hand washing procedure which was assessed by using observation checklist based on modified IAP guidelines during first and second day for normal delivery mothers and second and third post natal days for LSCS mothers.

1.5.5 Neonatal care

Refers to the information and practice gained by the mother in regard to care their newborn , which is focused on thermal regulation, breastfeeding and prevention of infection

1.5.6 Primi gravid mothers

Refers to the women who is pregnant for the first time and between the age group of 18-30 admitted in the hospital for delivery.

1.6 ASSUMPTIONS

1. Primi gravid mothers may have some knowledge and practice regarding newborn care
2. Enhanced knowledge increase good practice on newborn care among primi gravid mothers

1.7. NULL HYPOTHESES

NH_1: There is no significant difference in the pre and post test level of knowledge on neonatal care package among primi gravid mothers.

NH_2: There is no significant correlation between the post test knowledge score with practice score on neonatal care among primi gravid mothers.

NH_3: There is no significant association of selected demographic variables with the mean differed level of knowledge and practice among primi gravid mothers.

1.8 DELIMITATION

The study was delimited to a period of 4 weeks

1.9 CONCEPTUAL FRAMEWORK

The study was based on modified **Von Bertalanefy Open System Model (1968).**

The researcher adopted Von Bertalanefy open system model for conceptual framework. He was born in the year 1901 at Austria. The open system model was formulated in the year 1968.The open system enumerates various aspects of system and interaction. He formulated various theories based on management. The researcher applied Von Bertalanefy open system model in order to assess the effectiveness of neonatal care package regarding newborn care among Primi gravid mothers. This involves interaction between the researcher and the Primi gravid mothers.

An open system was a system which continuously interacts with its environment. The interaction can take the form of information, energy or material transfers into or out of the system boundary, depending on the discipline which defines the concept. An open system should be contrasted with the concept of an isolated system which exchanges neither energy and matter nor information with its environment. Open system theory was useful in breaking the whole process into sequential tasks to ensure goal realization. The three major aspects of the systems are:

a) Input
b) Throughput
c) Output

Input refers to any type of information, energy or material that enters the system from environment through its boundaries. In this study it refers to the pre test level of knowledge regarding newborn care among primi gravid mothers which was assessed using a structured knowledge questionnaire.

Throughput refers to the process used by the system to convert energy from the environment in to products. In this study it refers to the administration of Neonatal care package by the investigator in the antenatal ward through lecture cum discussion on selected components such as thermoregulation, breast feeding and prevention of infection followed by lecture cum demonstration on mummification, breast feeding techniques and hand washing techniques to the primi gravid mothers in the postnatal period.

Output is the information that leaves the system, enters the environment through the system. In this study it refers to the assessment of pretest level of knowledge during antenatal period and post test level of knowledge was assessed on the second postnatal day by structured questionnaire and practice was assessed on first and second postnatal days in normal delivery mothers and for L.S.C.S mothers on the second and third postnatal days by using observational checklist based on IAP guide lines.

The feedback for the system depends on the output which may be reinforced or enhanced. The achievement of goal or need was indicated by positive outcome that is attainment of adequate knowledge and practice regarding newborn care which may be reinforced and negative outcome is indicated by the inadequate knowledge and practice regarding newborn care which may be reassessed by further assessing the demographic variables.

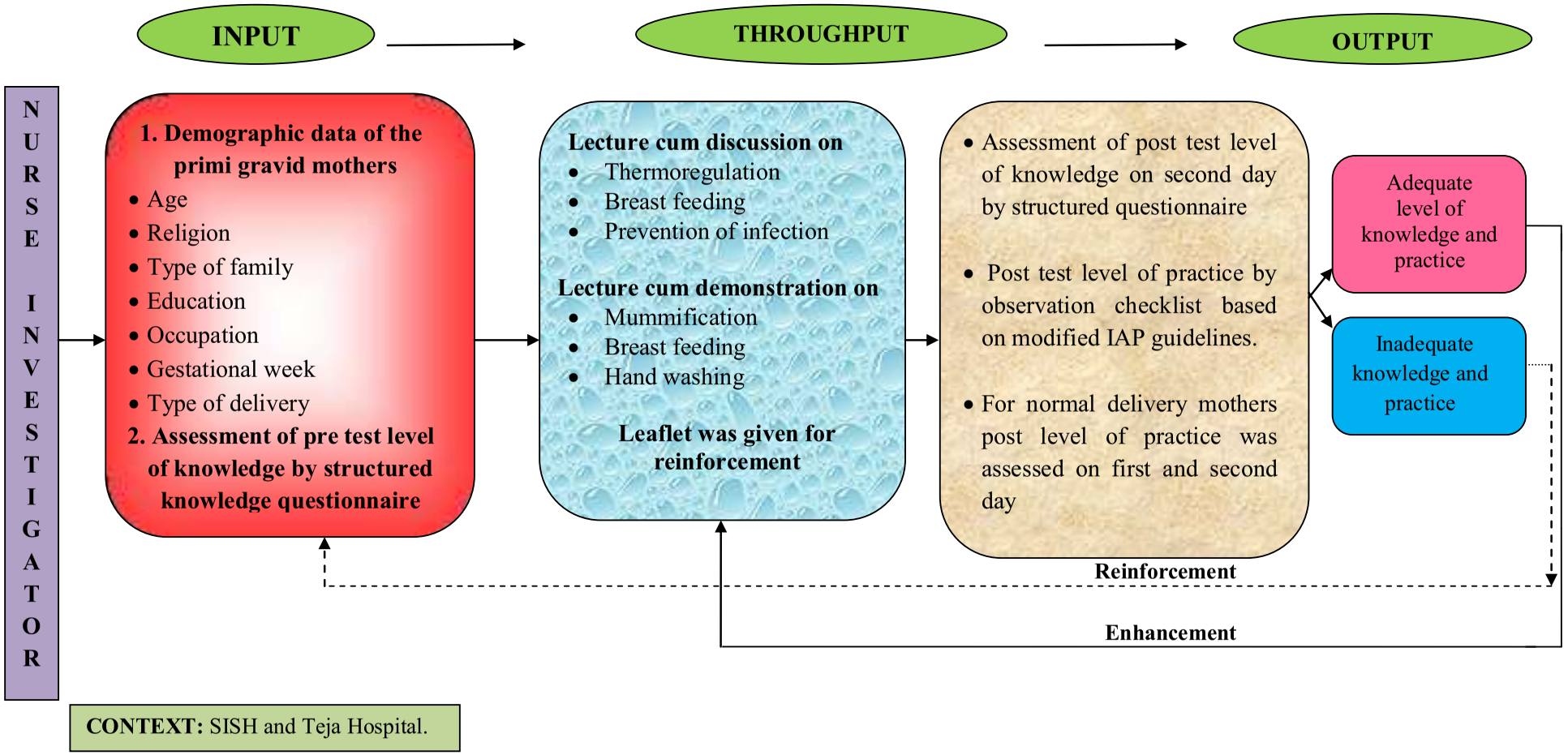


FIG.1.9.1: CONCEPTUAL FRAMEWORK BASED ON VON BERTALANEFY OPEN SYSTEM MODEL

OUTLINE OF THE REPORT

CHAPTER 1 : Dealt with the back ground of the study, need for the study, statement of the problem, objectives, operational definitions, null hypotheses, assumptions, delimitations and conceptual frame work.

CHAPTER 2 : Focuses with review of literature

CHAPTER 3 : Enumerates the methodology of the study and plan for data analysis

CHAPTER 4 : Presents the data analysis and data interpretation.

CHAPTER 5 : Deals with the discussion of the study

CHAPTER 6 : Contains the summary, conclusion, implications, recommendations and limitations of the study.

The study report ends with selected References and Appendices.

CHAPTER 2

REVIEW OF LITERATURE

REVIEW OF LITERATURE

Review of literature entails systematic identification, selection and critical analysis of scholarly publications, unpublished scholarly print materials, audiovisual materials and personal communications to the problem of interest.

Hence the investigator had done a thorough exploration of books, journals, internet sources and had obtained clinical exerts opinion to lay a broad scientific foundation of the present study. The researcher had done the related review of literature to gain in-depth knowledge of various works, methods and overall effect of the intervention used for the present study.

This chapter is presented under 2 sections as follows

SECTION 2.1: Scientific reviews related to knowledge and practice of primi gravid mothers on neonatal care package

SECTION 2.2: Scientific reviews related to effectiveness of neonatal care package among primi gravid mothers

SECTION 2.1: SCIENTIFIC REVIEWS RELATED TO KNOWLEDGE AND PRACTICE OF PRIMI GRAVID MOTHERS ON NEONATAL CARE PACKAGE

Sujatha P and Prasad KV (2015) conducted a cross sectional study among 600 mothers in Government General Hospital Kakinada to assess the knowledge of infant feeding practices . Semi structured questionnaire was to collect the data. Result showed that 81% of mother are belong to Hindu religion , 64% from nuclear family , 50% of mothers are working and 49% mothers are belong to low socio economic status and 42.7% mother do not know about exclusive breast feeding and 20.6% of mothers had awareness regarding introdutcion of complementary feeds

Dr. Deepanjan Ray, Dr.MD Abdur Rahaman and Dr Aparajita Dasgupta., (2015) conducted a Cross Sectional Study among 83 antenatal mothers attending OPD in two union Health Centers of Singur block of West Bengal to assess awareness and knowledge of mothers about breast feeding. Structured knowledge questionnaire was used

Result showed that knowledge and awareness of breast feeding the majority 96.4% mother believed breastfeeding was beneficial, 57.8%(48) mothers had knowledge about offering breast milk as first food and 63.9% had knowledge that only breast milk should be provided for the baby. Mothers about 71.1% had knowledge about correct age for starting supplementary foods and 71.1% of mother had knowledge that the breast feeding should be continued till two year with additional foods.

Saadia Gul, Rehana Khalil, M. Tahir Yousafzai and Faiza Shoukat (2014) conducted a cross- sectional study to assess newborn care knowledge and practices among 170 mothers at a tertiary care hospital in Karachi, Pakistan. Mothers were interviewed through structured questionnaire. Results showed 92% mothers had one antenatal visit, tetanus toxoid coverage was 88%, home deliveries were 18%, 74% mothers had applied substances like coconut oil, mustard oil, purified butter and turmeric to the cord stump. Kohl application to the newborn's eyes were 68% and 86% of the mothers gave bath to newborn within 24hous of birth. 48% mothers initiated breast feed after 2 hours of delivery. 43% of mothers discard the colostrums and exclusive breast feeding rate was 26%. Through this study antenatal care coverage was good, but knowledge regarding newborn care was poor.

Darling .B. Jiji, Ranjita.S Wankhede and Bazil Alfred Benjamin., (2014) conducted a descriptive study among 100 post natal mothers to assess the knowledge, attitude and practice regarding newborn care in selected maternity centers in Madurai. Data was collected using structured interview schedule. Result showed that 65% of post natal mothers had moderate knowledge; 61% had favorable attitude and 57% of them had high practice of newborn care. There was a significant association between knowledge and attitude (r=+0.567), knowledge and practice (r=+0.388), attitude and practice (r=+0.321).There was a significant association between knowledge and education, monthly family income and obstetrical score at $p<0.05$.

Castalino F, Nayak B.S, and D' Souza A., (2014) conducted a descriptive study among 30 post natal mothers in Kasturba Hospital in Manipal to assess the knowledge and practice on newborn care. Data was collected using structured knowledge and practice questionnaire. Result showed that 24(80%) were in the age group of 21-30yrs, 16(53.3%) were primipara, 15(50%) undergone normal vaginal delivery and 15(50%) were

undergone L.S.C.S. In this 25(83.3%) belongs to Hindu religion, 19(63.3%) were joint family, 17(56.7%) were in rural area and 17(56.7%) were housewives. 24(80%) newborns are in 37 weeks of gestation, 21(70%) are below 6 days of age, 24(80%) were male and 16(53.35%) newborn weight were 3000 grams. Through this 23(76.7%) of mothers had good knowledge and 16(53.33%) of mother had excellent practice on newborn. Relationship between knowledge and practice was not statistically significant at 0.05.

Navjot Brar, et. al., (2013) conducted a descriptive study in post natal wards of Shri Guru Tegh Bahadur Hospital Amritsar through questionnaire to assess the knowledge regarding newborn care among primigravid postnatal mothers. The samples used was convenient sampling method. Result showed that out of total mothers 77.14% had inadequate knowledge, 17.14% had moderate and 5.71% had adequate knowledge regarding newborn care. Through this majority of mother had inadequate knowledge regarding newborn care.

Fransica Monebenimp et. al., (2013) conducted a Cross sectional study in Garoua city, Northen Cameroon among three hundred and forty seven mothers were interviewed using a standard questionnaire. Demographic data were collected and information gathered regarding cord care, thermal care, breast feeding and vaccines. Result showed that 211 (60.8%) had undergone four antenatal health checkup. For cutting umbilical cord the sterile material used was reported by 307(88.5%) mothers and 5(1.4%) mother had received information about danger sign. Traditional substance was applied on the cord by 188 (54.2 %) mothers and eye care was given 2 to 7 days by 194 (85.4%) mothers. First bath was delayed after six hours by 244 (70.3%) mothers and breastfeeding within one hour by 154 (44.3%). BCG and oral Polio vaccine was received by 315 (90.8%) and bed nets were used by 226 (65.1%) mothers

Tumla Shrestha, Saraswoti Gautam Bhattarai and Kalpana Silwal (2013) conducted a descriptive study among 100 purposively selected post natal mothers admitted in Teaching Hospital, Nepal. Semi-structured interview questionnaire and observation checklist was used to collect the data. All (100%) respodents had knowledge and practice to feed colostrums and exclusive breast feeding, 70% knew about early initiation of breastfeeding. Mean knowledge and practice of respondents was on measures to keep warm 8.5 and 17. Although 60 (60%) had knowledge to wash hands before breastfeeding,

and after diaper care, only 10 (10%) followed it in practice. Mean practice of successful breast feeding was 37.5, 12 (60%) applied nothing kept cord dry. The study concluded that postnatal mothers have adequate knowledge regarding newborn care.

Francisca Monebenimp, et. al., (2013) conducted a cross sectional study among three hundred and forty seven mothers in Garoua city, Northen Cameroon to determine the knowledge and practice on essential newborn care. Data was collected using standard questionnaire. Information was gathered regarding cord care, thermal care, breast feeding and vaccine. Result showed that mean age of mother was 25.14 ± *5.70 years*. 211 (60.8%) mothers had undergone four antenatal health check up. The mean age of the newborns was 14.71 ± 6.40 days. Material used for cutting the umbilical cord was reported by 307 (88.5%) mothers and 5 (1.4%) had received information on newborn's danger signs. substances was applied on the cord by 188 (54.2) mothers while eye care was continued without any eye disease for 2 to 7 days by 194 (85.4%) mothers. First bath was delayed after 6 hours by 244 (70.3%) mothers and breastfeeding within one hour by 154 (44.3%). Baby received BCG and oral Polio vaccine by 315 (90.8%) and 316 (91%) newborns respectively. Be nets was used for treating insecticide by 226 (65.1%) mothers. Through this mother had poor knowledge regarding danger signs and they had poor practice regarding breastfeeding, eye care and cord care

Mbada CE., (2013) was conducted a Cross sectional study among three hundred and eighty three lactating mothers who have breast feed for 6month two year from a Semi-Urban community in Nigeria to assess the knowledge, attitude and technique of breast feeding. Data was collected through the structured knowledge questionnaire. Result showed that 71.3% had good knowledge and 54% had positive attitude. Sitting on chair to breast feed the baby was followed 62.4% and comfort of the baby and mother 60.8%. Position like Cross-cradle hold 80.4%, football hold technique 13.3%, breast-to-baby 18% and baby-to-breast latch-on 41.3%. Nigerian mothers had good knowledge and positive attitude towards breastfeeding

Jennifer A Callaghan-Koru et, al., (2013) conducted a cluster sampling method among women in the period of 1 to 7 month in Ethiopia to assess new born care practices. Result showed that majority of mother made one antenatal check up and half made four or

more visit and mother were most likely to deliver their babies at home. Newborn care practices include exclusive breast feeding 87.6%, wrapping the baby before delivery of the placenta 82.3% and dry cord care 65.2%. Bathing the baby within first 24 hours of life 74.7%, application of butter and other substance to the cord 19.9% and discharge of colostrum milk 44.5%. Through this there is no difference between facility and home deliveries.

Reza Sharafi and Hassan Esmaeeli., (2013) conducted a cross sectional study among post natal mothers in Ravar/Kerman medical health center to assess the knowledge regarding neonatal care. Data was collected using questionnaire. Result showed that 316 mothers with mean age of 25.87 were studied. In this 8.2% mother had poor knowledge, 78.5% had moderate and 13.3% had good knowledge. Urban mothers less than 24 years of age with 2or 3 children and with higher education had higher knowledge score.

Amolol L, Irmu G, Njai D and Easunna A ., (2013) conducted a Cross sectional study among 380 post natal mothers in Kenyatta national Hospital in Nairobi to assess essential new born care practices. Consecutive sampling technique was used. Data was collected using structured knowledge questionnaire. Result showed that exclusive breast feeding up to 6 month 93.7%, knowledge of colostrum 98.6%, vaccine prevent the disease 56.8% and about cord care 26.1%.

Vidhya K., (2012) conducted a pre-experimental study among 30 antenatal mothers Raja muthiah medical college and hospital, Chidambaram. Mother were selected based on convenient sampling technique. Result showed in pretest 97% of the antenatal mothers had inadequate knowledge on newborn care and in the post test 70% of the antenatal mothers had adequate knowledge on newborn care and 30% of antenatal mothers gained moderately adequate knowledge on newborn care.

Mohamed Asif Padiyath, Vishnu Bhat B and Maheswari Ekambaram., (2012) conducted a descriptive study among post natal mothers of tertiary hospital in South India among 100 post natal mothers to assess the knowledge , attitude and practice regarding neonatal care. The data was collected by structured interview. Scoring was done and the data was analyzed .Knowledge of mothers was inadequate in areas of umbilical cord care (35%), thermal care (76%) and vaccine preventable diseases. Nineteen percentages of

them still practice oil instillation into nostrils of newborns and 61% of them administer gripe water to their babies. This study indicates that awareness and attitude of postnatal mothers towards neonatal care has lots of lacunae especially in those who belong to the lower socio-economic status. There is scope for improvement by providing better care and health education for antenatal mothers.

Klejewshi A, Urhaniah, Baczyk G and Cichocha (2012) was conducted a Cross sectional study among 101 pregnant women in Gynecology hospital in Poznan and Leszno to examine the level of knowledge about breast feeding. Data was collected through structured knowledge questionnaire. Result showed that majority of the mothers are willing to breast feed the baby. In this 98% mothers had knowledge about what are all the ingredients in breast milk and it is helpful for the development of the baby.

Agarwal PK, et. al., (2012) conducted a community based intervention on clean cord care practices in two districts of Uttar Pradesh, India. Findings showed that 30% of the mothers practiced clean cord care. Clean cord care was associated with 37% lower neonatal mortality after adjusting the mother's age, education, caste, religion, household wealth, newborn thermal care practice and care-seeking during the first week after birth. Thus the study concluded that promoting clean cord care practice among neonates in community-based maternal and newborn care programs has the potential to improve neonatal survival in rural India and similar other settings.

Nigam Richa and Sinha Umesh., (2012) conducted a Cross Sectional Study among 200 antenatal mothers attending OPD both public and private setting of Indore city to assess the knowledge regarding breast feeding practices. Data was collected using structured Knowledge questionnaire. Result showed that out of 200 antenatal mothers 81.5% had adequate knowledge about importance of breast feeding and 37 (18.5%) of mother don't know the importance of breast feeding.

Shilpa G.S and Asha P Shetty., (2011) conducted a descriptive study among 75 normal delivered primi mother in Government Lady Goschen maternity hospital at Mangalore. Non probability purposive sampling technique was used and tool based on structured knowledge questionnaire. Result shows 47% mother had good knowledge and

53% had excellent knowledge regarding newborn care. 13% mother had average practice and 87% of mother had good practice score regarding newborn care.

Bhatt Shwetall, et. al., (2010) has conducted a cross sectional study among 175 post natal mothers in tertiary care hospital, Vadodara city to assess the knowledge, attitude and practice of postnatal mothers for early initiation of breast feeding. The research revealed that, delay in initiation of breast feeding were caesarian section and fatigue (29.7% and 21.1% respectively) and 32.6% mothers initiated breast feeding within one hour of delivery. The study concluded that lack of adequate information, maternal education level, socioeconomic factors, etc influences the early breast feeding practices which can be overcome by proper support, care and counseling provided by health care staff.

SECTION 2.2: SCIENTIFIC REVIEWS RELATED TO EFFECTIVENESS OF NEONATAL CARE PACKAGE AMONG PRIMI GRAVID MOTHERS

Sujatha V et, al., (2014) conducted a pre experimental study to assess the effectiveness of structured teaching programme on knowledge regarding antenatal care among 60 antenatal primi gravid mothers in Sree Balaji Medical College and Hospital, Chennai. Convenient sampling technique was used and data collected by using structured knowledge questionnaire. Results showed that in pretest 96.7% of mother had inadequate knowledge and in the post test 60% of mothers had adequate knowledge. The study concluded that educating the antenatal mothers help to prevent maternal and infant mortality and morbidity.

Kanchan Bala, Rajkumari sylvia Devi and Gomathi B., (2013) conducted a quasi experimental study among 62 post natal mothers in multi-specality teaching hospital in Uttarakhand to assess the effectiveness of an instructional teaching programme on the knowledge of post natal mothers regarding newborn care. Consecutive sampling technique was used. Pre test was done by using structured knowledge questionnaire devised by the researcher and after 7 days the post test was done .The overall mean pre test knowledge score was 30+-4.3 and mean post test knowledge score was 42+- 1.1 and the 't' value is 22.22. Result revealed that there was statistical significant association was found between pre test knowledge score with their demographic variables except age of the mother.

Tahani Al otaiby, Hoda jradi and Amen Bawazit., (2013) conducted a Cross-Sectional study among 100 antenatal mothers at multiple primary health centers in Riyadh city, Saudi Arabia to assess the antenatal knowledge and describe the learning needs. Questionnaire was used to collect the data. Result showed that antenatal mean knowledge score was 34.8%, followed by preference for one to one education 18.8%. Preferred education strategies were motivation and support, guidance, problem solving.

Sheetal Kadam1 and Sunita Tata., (2012) conducted a Pre experimental study among antenatal mothers selected by Purposive sampling technique**.** Majority antenatal mothers were (68%) belongs to the age group 21 - 25 years and 91(91%) were Hindu, 41 (41%) were having primary education while 72 (72%) of belongs to rural area, 88 (88%) belongs to joint family while 92(92%) and 38 (38%) belongs to income Rs.2000-4000. The mean score was increased from 3.8 to 23.6 after structured education and p value is less than .0001 which revealed that there were significant gains in knowledge score of antenatal mothers after administering structured education

CHAPTER 3

RESEARCH METHODOLOGY

RESEARCH METHODOLOGY

This chapter describes the methodology adopted in this study to assess the effectiveness of neonatal care package among primi gravid mothers at selected setting, Chennai.

This phase of the study deals with the research design, variables, setting of the study, population, sample, criteria for sample selection, sample size, sampling technique, development and description of the tool, content validity, reliability of the tool, pilot study, procedure for data collection an plan for data analysis.

3.1 RESEARCH APPROACH

Quantitative Research Approach

3.2 RESEARCH DESIGN

The research design undertaken for this study was a pre-experimental, one group pretest and posttest design. According to **Polit and Beck (2012)**

The schematic representation of pre-experimental study as follows

GROUP	PRE-TEST (O_1) Antenatal mothers	INTERVENTION (×) Antenatal mothers	POST – TEST (O_2) Post natal mothers
Primi gravid mothers	Assessment of pretest level of knowledge regarding neonatal care package among primi gravid mothers using structured knowledge questionnaire	Neonatal care Package: Lecture cum discussion on ➢ Thermoregulation ➢ Breast feeding ➢ Prevention of infection Lecture cum demonstration on ➢ Mummification ➢ Breast feeding technique ➢ Hand washing	Assessment of post test level of knowledge on second postnatal day by using structured knowledge questionnaire and post test level of practice on first and second day for normal delivery mothers and second and third day for L.S.C.S mothers by observation checklist based on modified IAP guidelines

3.3 VARIABLES

3.3.1 Independent Variable

The independent variable of the present study was Neonatal care package.

3.3.2 Dependent Variable

The dependent variables of the present study were knowledge and practice on neonatal care among primi gravid mothers

3.3.3 Extraneous Variable

It consisted of demographic variable which includes age, religion, type of family, educational qualification, occupation, gestational week and type of delivery.

3.4 SETTING OF THE STUDY

The study was conducted in two settings

1. Sir Ivan Stedeford Hospital, Ambattur, Chennai. It was a 220 bedded hospital with 36 beds in maternity ward and approximately 300 deliveries are conducted per month.
2. Teja Hospital , Ambattur, Chennai . It is a multispecialty hospital with 25 beds for maternity ward and around 60 deliveries are conducted per month.

3.5 POPULATION

3.5.1 Target population

All Primi gravid mothers

3.5.2 Accessible population

All primi gravid mothers who are admitted in Sir Ivan Stedeford hospital and Teja Hospital during the study period.

3.6 SAMPLE

The study sample comprises of 60 Primi gravid mothers .

3.7 SAMPLE SIZE

The sample size consisted of 60 primi gravid mothers who fulfilled the inclusion criteria.

3.8 SAMPLING TECHNIQUE

Non-probability purposive sampling technique was used to select the samples for the study.

3.9 CRITERIA FOR SAMPLE SELECTION

3.9.1 Inclusion Criterias

1. Primi gravid mothers in the age group of 18-30years who are admitted for safe delivery
2. Primi gravid mothers who are willing to participate
3. Primi gravid mothers between 37-40 weeks of gestation
4. Neonate with APGAR score of more than seven and accompanies with the mother after delivery.

3.9.2 Exclusion Criterias

1. Mother who cannot understand English or Tamil
2. Mother with comorbid illness

3.10 DEVELOPMENT AND DESCRIPTION OF THE TOOL

After an extensive review of literature and consultation with experts in the field of pediatrics the tool was constructed to generate the data for the study.

The tool constructed in the study has two parts:

3.10.1 Data collection tool: This consisted of three sections

Section A: Assessment of demographic variables

Section B: Knowledge questionnaire

Section C: Observational checklist based on IAP guidelines

3.10.2 Intervention Tool (Neonatal care package)

3.10.1 DATA COLLECTION TOOL

Section A: Assessment of Demographic variables

Structured interview with the mother using schedule and medical record review to assess the demographic data. It consisted of demographic variables are age, religion, type of family, educational qualification, occupation, gestational weeks and type of delivery.

Section B: **Structured knowledge questionnaire:**

A structured knowledge questionnaire was developed to assess the level of knowledge of primi gravid mothers on Neonatal care package with the following components:

I. Thermoregulation

II. Breast feeding

III.Prevention of infection

Each item is a closed ended multiple choice questions with single correct answer. Each correct answer awarded with a score of'1' mark and the wrong answer awarded with a score of '0' mark. Total score is 15. Maximum score is 15 and minimum score is '0'.

Scoring Key

>75 – Adequate Knowledge

51-75 – Moderately Adequate Knowledge

≤ 50 – Inadequate Knowledge

Section-C: Skill assessment using observational check list based on modified IAP guidelines

S.NO.	COMPONENTS	PRACTICE
1	Thermoregulation	Mummification
2	Breast feeding	Breast feeding technique
3	Prevention of infection	Hand washing

Each correct answer was awarded with a score of '1' mark and the wrong answer awarded with a score of ' 0' mark. The maximum score was 40.

Scoring Key

>75 – Adequate practice

51-75 – Moderately Adequate practice

≤50 – Inadequate practice

3.10.2: INTERVENTION TOOL (Neonatal care package)

Neonatal care package comprises of two components focusing on knowledge and practice. Knowledge was imparted through lecture cum discussion on thermoregulation, Breast feeding and prevention of infection. Practice was given through lecture cum demonstration focusing on mummification, Breast feeding techniques and hand washing. Mothers were reinforced with leaflets. Individual teaching was given for each mothers. Regarding intervention the lecture was given for 10 minutes and demonstration was done for 20 minutes. Totally the investigator used approximately 30 minutes with each mother to administer the intervention.

3.11 CONTENT VALIDITY

The content validity of the tool was ascertained from the following field of expertise

Pediatrician - 2

Pediatric Nursing Experts - 2

3.12 ETHICAL CONSIDERATION

The study was approved by the Ethical committee of International Center for Collaborative Research (ICCR), Omayal Achi College of Nursing and the ethical principles were followed in the study.

A. BENIFICIENCE

- **Freedom from harm and discomfort**

Participants were prevented from unnecessary risk of harm and discomfort during the study period. The primi gravid mothers were given full freedom to disclose their view in case of discomfort they feel during the course of study.

- **Protection from exploitation**

The investigator completely explained the procedure , nature of the study, an ensured that the participants in the study would not be exploited in any cost or denied from fair treatment.

B. RESPECT FOR HUMAN DIGNITY

The investigator followed the second ethical principle with respect for human dignity. It includes the right to self determination and the right to self disclosure.

- **The Right to Self-determination.**

The investigator had provided full freedom to the participants to decide voluntarily whether to participate in the study, to withdraw from the study and the right to ask questions at any time during the course of the study .

- **The right to full disclosure**

The researcher has fully described the nature of the study, the person's right to refuse participation and the researcher's responsibilities based on which the informed consent both oral and written consent was obtained from the participants.

C. JUSTICE

The researcher adhered to the third ethical principle of justice, it includes participant's right to fair treatment and right to privacy.

- **Right to Fair Treatment**

The researcher had selected the study participants based on the inclusion and exclusion criteria , no vulnerable or compromised candidates were selected as study participants.

- **Right to Privacy**

The researcher maintained the participant's privacy through confidentiality pledge obtained through informed consent.

D. CONFIDENTIALITY

The researcher maintained confidentiality of the data provided by the study participants through individual coding for each participant.

3.13 RELIABILITY

The reliability of the tool was established for knowledge questionnaire by test-retest method and the score was 0.81and observational check list was done through Inter rater method and the reliability was r= 0.89 . The 'r' value indicated the good positive correlation, which showed that the tool was reliable for conducting the main study.

3.14 PILOT STUDY

Pilot study is a trial run for the main study. The refined tool was used for pilot study to test the feasibility and practicability.

Formal administrative approval obtained from the International Center for Collaborative Research(ICCR) and Principal, Omayal Achi College of Nursing. The study was conducted in Sir. ivan Stedeford Hospital, Ambattur, and Teja Hospital, Ambattur, Chennai. A brief introduction about self and purpose of the study was explained to primi gravid mothers and informed written consent was obtained. Confidentiality regarding the data was assured so as to get cooperation throughout the procedure of data collection period.

Self introduction about the investigator and information regarding the nature of the study was explained to the Nursing Superintendent of Sir Ivan Stedeford Hospital to gain co-operation in the procedure of data collection. The investigator selected 10 primi gravid mothers who fulfilled the sample selection criteria using Non probability purposive sampling technique.

At first the investigator collected data from the primi gravid mother one at a time as they are getting admitted in the antenatal period during admission . After obtaining written consent, the demographic variables were collected and the pretest knowledge questionnaire was administered after that formal lecture was given on Neonatal care package followed by demonstration was done on a manikin for mummification, breast feeding techniques and hand washing procedures on the same day. Post test on knowledge

was assessed on second post natal day and post test practice was assessed on first and second postnatal days for normal delivery mother and second and third post natal days for the L.S.C.S mothers

3.15 PROCEDURE FOR DATA COLLECTION

Data collection procedure was done at Sir Ivan Stedeford hospital and Teja Hospital Chennai. Formal administrative approval was obtained from the International Center for Collaborative Research(ICCR) and Principal, Omayal Achi College of Nursing. The main study was conducted at Sir Ivan Stedeford Hospital in Ambattur and Teja Hospital in Ambattur. A formal permission was obtained from the medical director of the institution. The investigator had introduced herself and briefed on the purpose of the study to the participants. Cooperation was gained by pledging confidentiality at the period of data collection.

The data was collected within the period of 4 weeks. The investigator had given prior information regarding pretest, intervention and post test during admission of the primi gravid mothers in the antenatal ward . The written consent was obtained and demographic variables were collected . Pretest level of knowledge was assessed by using structured knowledge questionnaire. During the admission by means of one to one method each mother is given a comfortable place to listen the lecture cum discussion on selected components such as thermoregulation, breastfeeding and prevention of infection followed by demonstration of mummification by using manikin and a towel, breast feeding techniques and hand washing.

Post test on knowledge was done on the second postnatal day by using structured questionnaire prepared by the investigator, post test level of practice was assessed during first and second post natal days for normal delivery mothers and second and third day for the L.S.C.S mothers by using observational checklist ,which was based on modified IAP guidelines

3.16 PROCEDURE FOR DATA ANALYSIS

The data collected were analyzed using both descriptive and inferential statistics

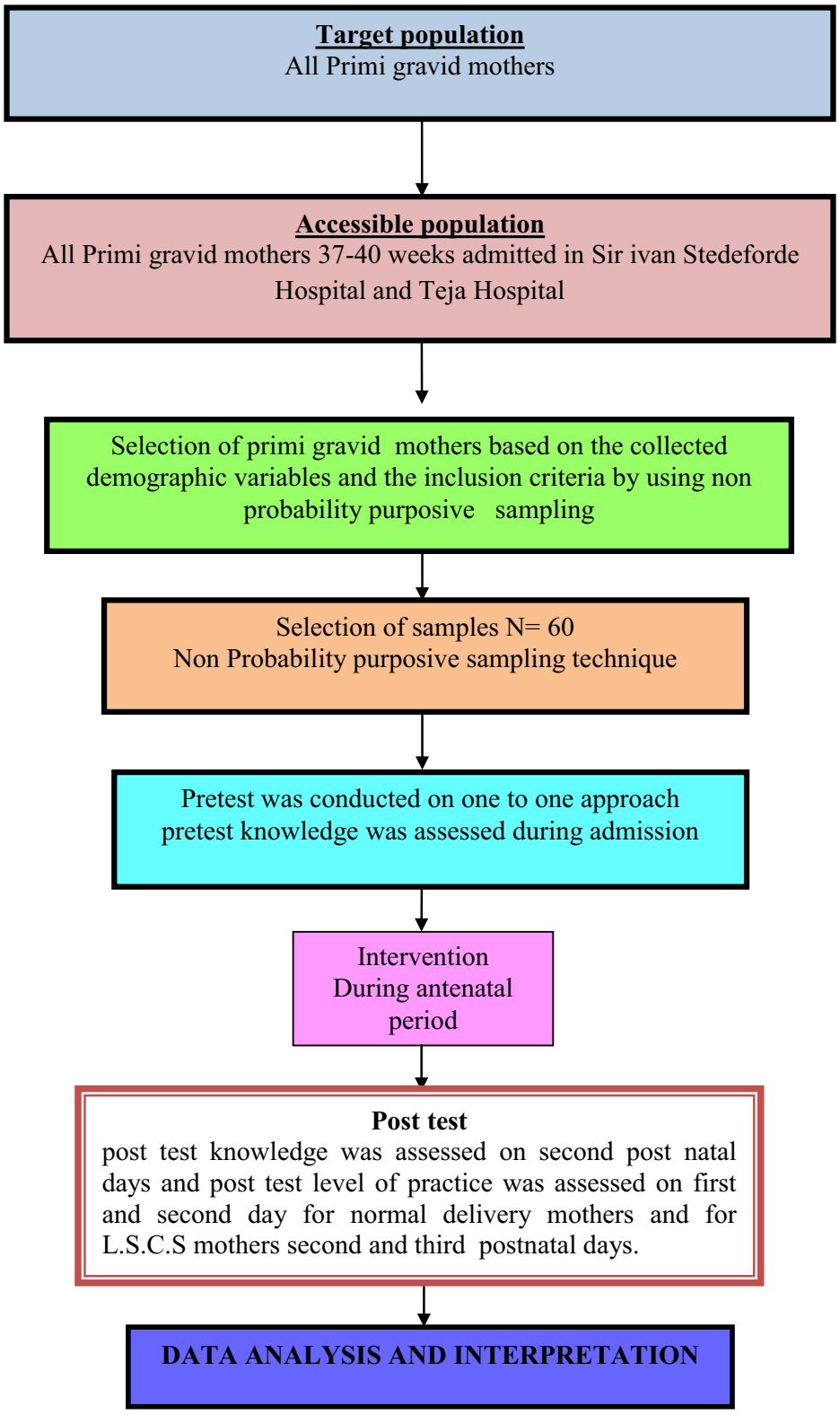
Descriptive Statistics

1. Frequency and percentage distribution to analyze the demographic variables.
2. Frequency and percentage distribution of level of knowledge and practice among primi gravid mothers.
3. Mean and standard deviation to assess the post test level of knowledge and practice .

Inferential Statistics

1. Paired 't' test to compare Pre and Post test level of knowledge on neonatal care package in primi gravid mothers
2. Correlation Co-efficient to find out the relationship of knowledge with practice among Primi gravid mothers
3. Chi-square to find out the association selected demo graphic variables with the post test mean knowledge and practice score

Fig. 3.1 SCHEMATIC REPRESENTATION ON RESEARCH METHODOLOGY



CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data collected from 60 primigravid mothers at selected settings, Chennai. The data collected was organized, tabulated, and analyzed according to the objectives. The findings based on the descriptive and inferential statistical analysis are present under the following sections.

ORGANIZATION OF THE DATA

Section 4.1: Description of the demographic variables among Primi gravid mothers

Section 4.2: Assessment and comparison of the pretest and post test level of knowledge regarding neonatal care among Primi gravid mothers

Section 4.3: Assessment of post test level of practice regarding neonatal care among primi gravid mothers

Section 4.4: Correlation between post test knowledge and practice scores regarding neonatal care among Primi gravid mothers

Section 4.5: Association of selected demographic variables with the mean differed score of knowledge and post test level of practice regarding neonatal care among Primi gravid mothers

SECTION 4.1: DESCRIPTION OF THE DEMOGRAPHIC VARIABLES OF PRIMI GRAVID MOTHERS

Table 4.1.1: Frequency and percentage distribution of demographic variables of primi gravid mothers with respect to age in years, religion and type of family.

N = 60

S.No.	Demographic Variables	No.	%
1.	**Age in years**		
	18 – 22	16	26.67
	22 – 26	27	45.00
	26 – 30	17	28.33
2.	**Religion**		
	Hindu	51	85.00
	Christian	8	13.33
	Muslim	1	1.67
	Others	0	0.00
3	**Type of family**		
	Nuclear family	21	35.00
	Joint family	39	65.00
	Separated	0	0.00
	Others	0	0.00
4	**Education of the mother**		
	Non Illiterate	2	3.33
	Primary education	3	5.00
	Secondary education	7	11.67
	High school	6	10.00
	Higher secondary	24	40.00
	Degree and above	18	30.00

The above table 4.1.1 shows frequency and percentage distribution of demographic variables of primi gravid mothers with respect to age in years, religion and type of family and education of the mother

With regard to the demographic variables to the age in years 27(45%) were in the age group of 22-26, 51(85%) were Hindu, 39(65%) belong to joint family and 24(40%) were studied up to higher secondary.

Table 4.1.2: Frequency and percentage distribution of demographic variables of primi gravid mothers with respect to occupation of the mother, gestational week and type of delivery

N=60

S.No.	Demographic variables	No	%
5.	**Occupation of the mother**		
	Homemaker	50	83.33
	Coolie	0	0.00
	Private sector	8	13.33
	Government sector	0	0.00
	Business	0	0.00
	Others	2	3.33
6.	**Gestational week**		
	37-38	2	3.33
	38-39	5	8.33
	39-40	53	88.33
7.	**Type of delivery**		
	Normal vaginal delivery	25	41.67
	LSCS	34	56.67
	Forceps	1	1.67
	Vacum	0	0.00

The above table 4.1.2 shows frequency and percentage distribution of demographic variables of Primi gravid mothers with respect to occupation of the mother, gestational week and type of delivery

With regard to the primigravid mothers about 50 (83.33%) were homemakers, 53(88.33%) of the mother delivered a newborn born in 39-40 of gestational week and 34(56.67%) born by L.S.C.S

Table 4.1.1 to 4.1.2 described the frequency and percentage distribution of demographic variables of primi gravid mothers.

SECTION 4.2: ASSESSMENT AND COMPARISON OF PRETEST AND POST TEST LEVEL OF KNOWLEDGE REGARDING NEONATAL CARE AMONG PRIMI GRAVID MOTHERS.

N: **N=60**

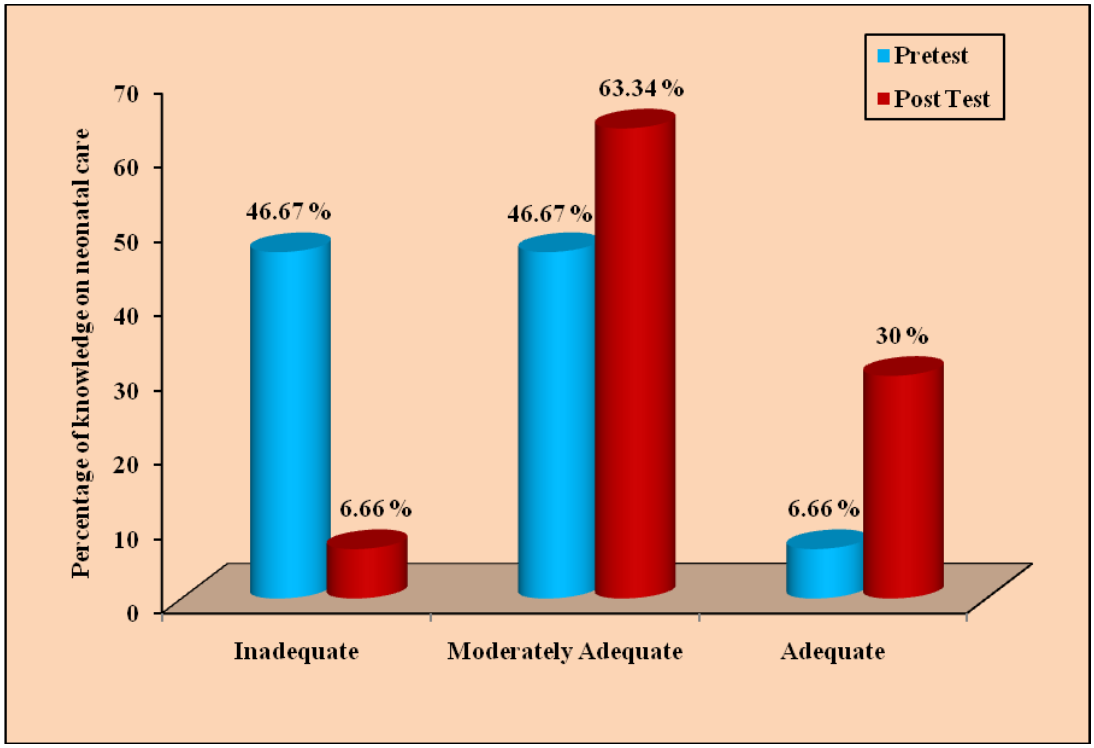


Fig 4.2.1 Percentage distribution of pretest and post test level of knowledge regarding neonatal care among primi gravid mothers

The above figure shows the pretest and post test level of knowledge regarding neonatal care package, 28(46.67%) primi gravid mothers had inadequate and moderately adequate knowledge in the pretest, whereas in the post test 38(63.34%) had moderately adequate knowledge, 18(30%) had adequate knowledge on newborn care package.

This above result shows that Neonatal care package has helped the primi gravid mothers to gain knowledge an aspects related to neonatal care.

Table 4.2.2: Comparison of pretest and post test knowledge scores regarding neonatal care among primi gravid mothers.

N = 60

Knowledge	Mean	S.D	Paired 't' Value
Pretest	7.68	2.27	t = 7.826***
Post Test	10.21	1.88	p = 0.000, S

***p<0.001, S – Significant, N.S- Non Significant

The above table 4.3.2 illustrates the comparison of pre and post test level of knowledge among primi gravid mothers. The comparison reveals , the pretest mean score of knowledge was 7.68 with SD 2.27 whereas in the post test the mean score was 10.21 with SD of 1.88. The calculated paired t value of t=7.826*** was found to be statistically significant at p<0.001 level. This indicated that the Neonatal care package given to the primi gravid mothers had significantly effective to improve the level of knowledge of primi gravid mothers.

SECTION 4.3: ASSESSMENT OF THE POST TEST LEVEL OF PRACTICE REGARDING NEONATAL CARE AMONG PRIMI GRAVID MOTHERS

Table 4.3.1: Frequency and percentage distribution of post test level of practice regarding neonatal care among primi gravid mothers.

N= 60

Practice	Inadequate		Moderately Adequate		Adequate	
	No.	%	No.	%	No.	%
Mummification	0	0	18	30.0	42	70.0
Breast Feeding	0	0	12	21.67	47	78.33
Hand Washing	23	38.33	0	0	37	61.67

The above table 4.3.1 shows the post test level of practice regarding neonatal care among primi gravid mothers.

With regard to mummification 42(70%) had adequate practice and 18(30%) had moderately adequate practice. With respect to breast feeding 47(78.33%) had adequate practice and 12(21.67%) had moderately adequate practice. Considering the hand washing, 37(61.67%) had adequate practice and 23(38.33%) had inadequate practice regarding neonatal care among primi gravid mothers.

SECTION 4.4: CORRELATION BETWEEN POST TEST KNOWLEDGE AND PRACTICE SCORES REGARDING NEONATAL CARE AMONG PRIMI GRAVID MOTHERS.

Table 4.4.1: Correlation between post test knowledge and practice scores regarding neonatal care among primi gravid mothers.

N = 60

Variables	**Mean**	**S.D**	**'r' Value**
Knowledge	10.21	1.88	r = 0.4
Practice	33.83	3.82	p =002, S**

**p<0.01, S – Significant

The above table 4.4.1 shows that the post test mean score of knowledge was 10.21 with S.D 1.88 and the post test mean score of practice was 33.83 with S.D 3.82. The calculated Karl Pearson's Correlation value of r = 0.4 shows a positive correlation and was found to be statistically significant at p<0.01 level. This clearly indicates that when the knowledge on neonatal care among primi gravid mothers increases their practice level also increases.

SECTION 4.5: ASSOCIATION OF SELECTED DEMOGRAPHIC VARIABLES WITH THE MEAN DIFFERED SCORE OF KNOWLEDGE AND POST TEST LEVEL OF PRACTICE REGARDING NEONATAL CARE AMONG PRIMI GRAVID MOTHERS

Table 4.5.1: Association of demographic variables with mean differed score level of practice regarding neonatal care among primi gravid mothers

N=60

Demographic Variables	Moderately Adequate		Adequate		Chi-Square Value
	Mean	S.D	Mean	S.D	
Age in years					$\chi^2 = 6.473$
18 – 22	3	5.0	13	21.7	d.f = 2
22 – 26	12	20.0	15	25.0	P = 0.039
26 – 30	2	3.3	15	25.0	S*
Type of delivery					
Normal vaginal delivery	2	3.3	23	38.3	$\chi^2 = 9.657$
LSCS	15	25.0	19	31.7	d.f = 2
Forceps	0	0	1	1.7	P = 0.008
Vacum	-	-	-	-	S**
Others					

** P<0.01, *P<0.05, S- Significant, N.S – Not Significant

None of the demographic variables was not significant association with mean differed score of knowledge level

The above table 4.5.1 shows that the demographic variables of age in years and type of delivery shown statistical significant association with mean differed score of practice at p<0.01 level. In this especially age of the primi gravid mothers 22-26 years of primi gravid mothers and L.S.C.S mothers shown statistical significant association with mean differed score of practice. The other demographic variables of neonates had not shown any statistical association with the mean differed score of practice level .

Significant association with level of practice that age of the mother plays an important role to understand about concepts of newborn care and type of delivery plays an important role to gain practice on newborn care.

CHAPTER 5

DISCUSSION

DISCUSSION

This chapter discusses in detail the findings of the study derived from the statistical analysis and its pertinence to the objectives of the study and further discussion will exemplify these objectives were satisfied by the study. The purpose of the study was to assess the effectiveness of neonatal care package among primi gravid mothers.

The findings of the study discussed were based on the objectives as stated.

5.1 Description of the demographic variables among primi gravid mothers.

The demographic variables as shown in table 4.1.1 to 4.1.2 depicts that the age of primi gravid mothers 27(45%) were belong to the age group of 22-24, 51(85%) were Hindus, and 39(65%) belong to nuclear family, 50 (83.33%) were homemakers, with 53(88.33%) in 39-40 of gestational week and 34(56.67%) of the newborn born by L.S.C.S.

5.2 The first objective was to assess and compare pre and post level of knowledge regarding neonatal care among primi gravid mothers.

The analysis revealed that in the pretest, 28(46.67%) primi gravid mothers had moderately adequate knowledge regarding neonatal care. In the post test, 38(63.34%) had moderately adequate knowledge, 18(30%) had adequate knowledge which clearly showed that the Neonatal care package had significant improvement in the level of knowledge among primi gravid mothers.

The findings of the study was supported by **Vidhya K (2012)** a pre-experimental study among 30 antenatal mothers in Raja Muthiah Medical College and Hospital, Chidambaram by convenient sampling technique. Result showed in pretest 97% of the antenatal mothers had inadequate knowledge on newborn care and in the post test 70% of the antenatal mothers had adequate knowledge on newborn care and 30% of antenatal mothers gained moderately adequate knowledge on newborn care.

The finding of the study was supported by **Tumla Shrestha, Saraswoti Gautam Bhattarai and Kalpana Silwal (2013)** conducted a descriptive study among 100 purposively selected post natal mothers admitted in Teaching Hospital, Nepal. Semi-structured interview questionnaire and observation checklist was used to collect the data. All (100%) respondents had knowledge and practice to feed colostrums and exclusive breast feeding, 70% knew about early initiation of breastfeeding. Mean knowledge and practice of respondents was on measures to keep warm 8.5 and 17. Although 60 (60%) had knowledge to wash hands before breastfeeding, and after diaper care, only 10 (10%) followed it in practice. Mean practice of successful breast feeding was 37.5, 12 (60%) applied nothing kept cord dry. The study concluded that postnatal mothers have adequate knowledge regarding newborn care.

Thus the null hypothesis NH_1 stated earlier that "**there is no significant difference between pre and post test level of knowledge on Neonatal care package among primi gravid mothers at p< 0.05'' was rejected.**

5.3 The second objective was to assess the post test level of practice regarding neonatal care among primi gravid mothers

The result showed in table 4.3.1 depicts that the post test level of practice regarding neonatal care among primi gravid mothers revealed regarding mummification, majority 42(70%) had adequate practice and 18(30%) had moderately adequate practice. With respect to breast feeding, majority 47(78.33%) had adequate practice and 12(21.67%) had moderately adequate practice. Considering the hand washing, majority 37(61.67%) had adequate practice and 23(38.33%) had inadequate practice regarding neonatal care among primi gravid mothers.

The findings of the study was supported by **Castalino F, Nayak B.S, D' Souza A (2014**) conducted a descriptive study among 30 post natal mothers in Kasturba Hospital in Manipal to assess the knowledge and practice on newborn care. Data was collected using structured knowledge questionnaire and observation checklist respectively. Result showed that 24(80%) were in the age group of 21-30yrs, 16(53.3%) were primipara, 15(50%) undergone normal vaginal delivery and 15(50%) were undergone LSCS. In this 25(83.3%) belongs to hindu religion, 19(63.3%) were joint family, 17(56.7%) were in rural area and 17(56.7%) were housewives. 24(80%) newborns are in 37 weeks of gestation, 21(70%) are

below 6 days of age, 24(80%) were male and 16(53.35%) newborn weight were 3000 grams. Through this 23(76.7%) of mothers had good knowledge and 16(53.33%) of mother had excellent practice on newborn. Relationship between knowledge and practice was not statistically significant at 0.05.

The findings of the study was supported by **Mohamed Asif Padiyath, Vishnu Bhat B and Maheswari Ekambaram (2012**) conducted a descriptive study among post natal mothers of tertiary hospital in South India among 100 post natal mothers to assess the knowledge, attitude and practice regarding neonatal care. The data was structured questionnaire, rating scale and observational checklist respectively. Scoring was done and the data was analyzed .Knowledge of mothers was inadequate in areas of umbilical cord care (35%), thermal care (76%) and vaccine preventable diseases. Nineteen percentages of them still practice oil instillation into nostrils of newborns and 61% of them administer gripe water to their babies. This study indicates that awareness and attitude of postnatal mothers towards neonatal care has lots of lacunae especially in those who belong to the lower socio-economic status. There is scope for improvement by providing better care and health education for antenatal mothers

The conceptual framework adopted for this study was Von Bertanalefy open system model, which supported the study and was helpful for the investigator to accomplish the study through an organized process. Input in this study was refers to pre assessment of knowledge regarding newborn care and obtaining demographic variables from the Primi gravid mothers. Throughput is the intervention of administering neonatal care package by the investigator to the primigravid mothers on newborn care which includes thermoregulation, breast feeding and prevention of infection, and Output in this study refers to level of knowledge and practice of the primigravid mothers on Neonatal care package after administering the neonatal care package.

5.4 The third objective was to correlate the post test level of knowledge score with post test level of practice score on neonatal care among primi gravid mothers.

The results of the correlation analysis in table 4.3.1 shows that the post test mean score of knowledge was 10.21 with S.D 1.88 and the post test mean score of practice was 33.83 with S.D 3.82. The calculated ‘r’ value of r = 0.4 shows a positive correlation found to be statistically significant at $p<0.01$ level.

The result showed that there was a positive correlation between the mean differed knowledge and practice score which indicated that when the level of knowledge of primi gravid mothers increases their practice level on neonatal care for newborn also increases.

The finding of the study was supported by **Darling .B. Jiji, Ranjita.S Wankhede and Bazil Alfred Benjamin** (**2014**) conducted a descriptive study among 100 post natal mothers to assess the knowledge, attitude and practice regarding newborn care in selected maternity centers in Madurai. Data was collected using structured interview schedule. Result showed that 65% of post natal mothers had moderate knowledge; 61% had favorable attitude and 57% of them had high practice of newborn care. There was a significant association between knowledge and attitude (r=+0.567), knowledge and practice (r=+0.388), attitude and practice (r=+0.321).There was a significant association between knowledge and education, monthly family income and obstetrical score at $p<0.05$.

The findings of the study was supported by **Shilpa G.S and Asha P Shetty (2011)** was conducted a descriptive study among 75 normal delivered primi mother in Government Lady Goschen maternity hospital at Mangalore. Non probability purposive sampling technique was used and tool based on structured knowledge questionnaire. Result shows 47% mother had good knowledge and 53% had excellent knowledge regarding newborn care. 13% mother had average practice and 87% of mother had good practice score regarding newborn care.

Hence the null hypothesis NH_2 stated earlier that **"there is no significant correlation between the post test knowledge score with practice score on neonatal care among primi gravid mothers at $p<0.05$" was rejected.**

5.5 The Fourth objective was to associate the selected demographic variables with the mean differed score of knowledge and post test level of practice regarding neonatal among primi gravid mothers.

The table 4.5 shows that the demographic variable age in years and type of delivery shown statistical significant association with mean differed score of knowledge at $p<0.001$ level. The other demographic variables of neonates had not shown any statistical significant association with the mean differed score of knowledge level .

The findings were supported by **Rama R, Gopalakrishnan S and Udayshankar PM (2014)** conducted a cross sectional study among 100 mothers in Kancheepuram district to assess the knowledge regarding newborn care. Data was collected using structured interview schedule. Results showed that the level of knowledge regarding new born care was adequate only in 15%, feeding practices 39%, immunization 8%, growth and development 42% and newborn illness in 33% of the mothers. The knowledge regarding new born care was found to have a significant association with the educational status of the mother. This study outcome shows the need for a better awareness and education program This study outcome shows the need for better awareness and education program coupled with effective health care delivery system to improve level of knowledge regarding newborn care among mothers.

Hence the null hypothesis NH_3 stated earlier that **" there is no statistical significant association of selected demographic variables with the mean differed score of knowledge was accepted and with post test level of practice regarding neonatal care among primi gravid mothers at P<0.05" was accepted except with demographic variables of age in years and type of delivery**

CHAPTER 6

SUMMARY, CONCLUSION, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

SUMMARY, CONCLUSION, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

This chapter presents the summary, conclusion, implications, recommendations and limitations of the study based on the objectives selected.

6.1 SUMMARY

In India 64 per cent newborns die within the first 28 days. The majority of all neonatal deaths (73%) occur during the first week of life, around 36% occur within the first 24 hours **(WHO 2014).** 300,000 newborn deaths in India are on the very first day of birth. Thus, India accounts for about one-third of all babies dying globally on the first day of birth **(The Hindu - News paper 2014).** So neonatal care is very essential. Mother is the only person to take care of the baby. Especially mother who is delivering a first baby they don't know how to take care of the baby. So the primi gravid mothers can be motivated and encouraged to utilize the Neonatal care package deals with thermoregulation, breast feeding ad prevention of infection. The purpose of the study was to assess the effectiveness of neonatal care package on knowledge and practice among primi gravid mothers. The findings of the study proved to be effective in improving the knowledge and practice of primi gravid mothers on neonatal care.

The objectives of the study were

1. To assess and compare the pre and post test level of knowledge and practice regarding neonatal care among primi gravid mothers
2. To assess the post test level of practice regarding neonatal care among primi gravid mothers
3. To correlate the post test level of knowledge score with post test level of practice score on neonatal care among primi gravid mothers
4. To associate the selected demographic variable with the mean differed level of knowledge and practice score on neonatal care among primi gravid mothers

The Null hypotheses formulated were

NH_1: There is no significant difference in the pre & post test level of knowledge on neonatal care package among primi gravid mothers.

NH_2: There is no significant correlation between the post test knowledge score with practice score on neonatal care among primi gravid mothers

NH_3: There is significant association of selected demographic variables with the mean differed level of knowledge and practice among primi gravid mothers

The review of literature was derived from primary and secondary sources, along with professional experience and expert's guidance from the field of child health nursing provided a strong foundation for the selection of problem. It also strengthened the ideas for conceptual framework, aided to design the methodology and develop the tool for data collection.

In view of explaining and relating various aspects of the study, the investigator had adopted Von Bertalanefy open system model to conceptualize the research.

The researcher adopted pre-experimental one group pre test and post design to assess the effectiveness of Neonatal care package on knowledge and practice among primi gravid mothers. The study was conducted in the maternity ward of Sir Ivan Stedeford Hospital which comprises 36 beds and 300 deliveries were conducted per month and Teja Hospital with 25 beds and 60 deliveries were conducted per month. The sample size was 60 primi gravid mothers selected by non probability purposive sampling technique and who fulfilled the inclusive criteria of the study and were assigned .

The tool for data collection had 3 sections. Data collection tool has two sections; **Section A: Demographic variables** to collect information on age of the mother, religion, type of family, educational qualification, occupation and gestational week and type of delivery.

Section B: Structured Knowledge questionnaire regarding Neonatal care package which includes questions on thermoregulation, breast feeding and prevention of infection.

Section C: Observational check list based on modified IAP guidelines to assess practice of selected components of neonatal care by the primi gravid mothers which consists of mummification, breast feeding techniques and hand washing procedure.

The Medical and Nursing experts validated the tool. Pilot study was conducted at Sir Ivan stedeford Hospital, Ambattur, Chennai and it was found practicable and feasible to proceed with the main study. The reliability of the tool was established for knowledge questionnaire by test- retest method and the score was 0.81and observational check list was done through Inter rater method and the reliability was r= 0.89 . The 'r' value indicated the good positive correlation, which showed that the tool was reliable for conducting the main study.

The ethical aspect of research was maintained throughout the study by obtaining ethical clearance certificate from the International Centre for Collaborative Research (ICCR), formal permission from the respective authorities and consent from the mothers and concerned staff nurse was obtained. Privacy and confidentiality was maintained throughout the data collection period and collected data was used only for the research purpose.

The main study was conducted for a period of 4 weeks. The collected data was during main study was analyzed using SPSS version 13.

Main findings of the study revealed that

- The data collected was analyzed using descriptive and inferential statistics. Interpretation and discussion was done based on the objectives of the study, null hypotheses, conceptual framework and research studies from literature review.
- The analysis revealed that in the pretest, 28(46.67%) of primi gravid mothers had inadequate and moderately adequate knowledge and in the post test, 38(63.34%) had moderately adequate knowledge, 18(30%) had adequate knowledge regarding neonatal care.
- The analysis revealed that in the post test level of practice, 42(70%) of primi gravid mothers had adequate practice, and 18(30%) had moderately adequate practice. With regard to breast feeding techniques, 47(78.33%) had adequate

practice and 12(21.67%) had moderately adequate practice. Considering the hand washing technique 37(61.67%) primi gravid mothers had adequate practice and 23(38.33%) had inadequate practice .

- The analysis revealed that in the pretest the mean score of knowledge was 7.68 with S.D 2.27 and the post test mean score was 10.21 with S.D 1.88. The calculated paired 't' value of t = 7.826 was found to be statistically highly significant at $p<0.001$ level.
- The results of the correlation revealed that the post test mean knowledge score was 10.21 with S.D 1.88 and the post test mean level of practice score was 33.83 with post test practice score S.D 3.82. The calculated 'r' value of r = 0.4 statistically significant at $p<0.01$ level which showed that there was a positive correlation of knowledge with practice. The findings thus proved that the Neonatal care package had a effectiveness on improving knowledge and practice among primi gravid mothers.

6.2 CONCLUSION

The present study was aimed to assess the effectiveness of Neonatal care package on knowledge and practice among primi gravid mothers. The findings revealed that the pretest mean score of knowledge was 7.68 with SD 2.27, whereas in the post test mean score of knowledge was 10.21 with S.D 1.88 and the post test mean score of practice was 33.83 with S.D 3.82. In level of practice handwashing is only 37% adequate practice after giving demonstration. The calculated paired t value =7.826 was found to be statistically significant at $p<0.001$ level and calculated r value =0.4 shows a positive correlation. This clearly indicates that when the knowledge on neonatal care among primi gravid mothers increases their practice level also increases. The findings proved that Neonatal care package was very effective and had a significant effect on knowledge and practice regarding neonatal care. Therefore the intervention tool can be utilized by the health care professional in their practice at the pediatric ward.

6.3 IMPLICATIONS

The investigator has put forward the following implications from the study which is of crucial concern for nursing practice, nursing education, nursing administration and nursing research.

6.3.1 Pediatric Nurse practitioner

- The child health nursing practitioners can formulate a separate protocol for practicing newborn care in their daily routine
- Newborn care can be taught and practiced by the primary health care nurses in the primary health care centers

6.3.2 Pediatric Nurse Educator

- The nurse educator can enable the student nurses to gain practice required to educate the neonatal care package
- The educational institution can provide opportunities for nursing students to get exposed to taking care of the neonate.

6.3.3 Pediatric Nurse Administrator

- This research has been successfully implemented in Sir Ivan Stedeford Hospital, Ambattur and Teja Hospital, Ambattur.
- The child health administrator along with the governing bodies and other health care agencies can formulate a program to focus on the measures to implement neonatal care package and control mortality rate.
- Nurse administrators should take initiation in organizing CNE, conferences and workshop on neonatal care package.
- Nurse administrator can allot separate budget for in-service education to disseminate the research findings to all nurses.

6.3.4 Pediatric Nurse Researcher

- The findings of the study can be disseminated to the nurses working in various hospitals and for student nurses
- The generalization of the study results can be made further replication of the study in various settings and larger population.

6.4 RESEARCH DISSEMINATION

1. Research findings of the main study will be presented in the upcoming National conference
2. Research results will be published in the various Pediatric Journals

3. Research findings will be put up in newspaper articles

6.5 UTILIZATION OF RESEARCH FINDING

1. A protocol on neonatal care package will be framed and utilized in various affiliated institutions and pamphlets will be issued to the mothers at the time of discharge as reinforcement.
2. Leaflets of newborn care will be utilized by the institutions and health care professionals to teach the mothers.

6.6 RECOMMENDATIONS

1. The investigator recommends the affiliated institutions of Omayal Achi College of Nursing to use this Neonatal care package to provide health education to primi gravid mothers.
2. The student nurses from Omayal Achi College of Nursing practicing in the various institutions can use this package for incidental health education.
3. A study can be replicated with large samples in the same setting for reinforce

6.7 LIMITATION

The investigator had difficulty in getting primi gravid mothers

REFERENCES

REFERENCES

BOOKS:

Alligoon, Martha Kaile. (2002). *Nursing theories and their Work.* New Delhi: Mosby Publications

Ball Jone & Bindler Ruth. (1993). *Pediatric Nursing: Caring for Children*. America: Appleton & Lange

Bowden, R. Vicky., et al. (2008). *Pediatric Nursing Procedures.* Philadelphia: W. B. Saunders Company.

Brenda, Kemp Bigelow., Et al. (1980). *Fundamentals of Nursing A Framework for practice.* America: Foresman & Company.

Christenson Hanriston barbara & Kockrow Oden Elaine. (1995) *Fundamentals of Nursing, Concepts and procedures*. Second edition America: Mosby-Yearbook Inc.

Dorothy R. Marlow & Barbara, A. Redding. (2005). *Textbook of pediatric Nursing.* Philadelphia: W B Saunders Company.

Ghai O.P (2010). *Essentials of pediatrics.* New Delhi: Interprint Publication.

Gupate Suraj. (2005). *The short book of Pediatrics.* New Delhi: Jaypee Brothers Medical publishers (P) Ltd.

Intenzo, Diana. (1991). *The Lippincott Manual Of Nursing practice.* Philadelphia: J.B. Lippincott Company.

Kyle Terri. (2009). *Essentials of Pediatric Nursing.* New Delhi: Wolters Kluver India Private Limited.

Leslie H. Nicoll (1992). *Perspective on Nursing Theory.* Philadelphia: Saunders Company

Martha Kaile Alligoon. (2002). *Nursing theories and their Work.* New Delhi. Mosby Publications

Parthasarathy A. (2009). *IAP Textbook of pediatrics.* New Delhi: Jaypee Brothers Medical Publishers

Parul Dutta . (2009). *Pediatric nursing.* New Delhi: Jaypee Brothers Medical Publishers

Polit, F. Denise., & Hungler, P Bernadette. *(2010). Nursing Research Principles and methods.* Philadelphia: W.B Saunders Company.

Raosunder, P.S. & Richard, J. (1989). *An Introduction to Biostatistics - Manual for students in Healthy Science.* Philadelphia: W.B. Saunders Company

Singh Meharban. (2002). *Care of the Newborn.* New Delhi: Sagar Publications

Vishwanathan, J., & Avalokita, B Desai. (2008). *Achar's Textbook of Pediatrics.* Hyderabad. Orient Longman Publication.

Wesly, L *Ruby*. (1995). *Nursing Theories and models.* Pennsylvania: Spring House Corporation.

Wong L. Donna. (2006). *Whaley and Wongs Nursing care of infants and children.* Philadelphia: Mosby Company.

.

JOURNALS:

Agarwal, P.K., et.al.,(*2012).* Knowledge assessment of neonatal care among primi gravidmothers. *Journal community Health,* 66(8), 755 -58

Castalino, F., Nahaka, B S., & D'Souza A. (2014). Knowledge and practices of postnatal mothers on newborn care. *Nitte University Journal of Health Science.* 4(2), 1-3

Darling B Jiji., Ranjita, S., Wankhede., & Bazil Alfred Benjamin. (2014*).* Assess the knowledge and practice of post natal mothers. *International Journal of Allied Medical Sciences and Clinical Research,* 2(2), 119-124

Dr.Deepan, R., Dr.Abdur Rahman., & Dr Aparajita Dasgupta .(2015). Assess the knowledge of breast feeding among antenatal mothers. *Journal of Denatl and Medical Science.* 14(5), 93-97

Francisca Monebenimp, et al., (2013) Assess the knowledge and practice on essential newborn care. *The Journal Medicine and Health science*. 14(2), 1-6

Kanchana Bala., Rajkumari Sylvia Devi., & Gomathi, B. (2013*).* Effectiveness of structured teaching programme on post natal mothers. *IOSR Journal of Nursing and Health science*. 2, 24-30.

Mohammed Asif Padiyath., Vishnu Bhat B., & Maheswari Ekambaram. *(2012).* Knowledge attitude and practice of neonatal care among post natal mothers. *Bangladesh Journal of Medical Science. 14(2), 147-152*

Nigam., Richa., Sinha., & Umesh. (2012). Assess the knowledge and attitude of ante mothers towards breast feeding. *National Journal of Community Medicine*. 3 93), 381

Reza sharafi., & Hassan Esmaeeli. (2013). Knowledge assessment of neonatal care among postnatal mothers. *Journal Management System.* 4(1), 28-31.

Saida Gul, et. al., (2014) Newborn care practice and knowledge among mothers. *International Journal of Health science*, 8(2), 167 To 175

Sheetal Kadam., & Sunita Tata. (2012). Structrured education programme on antenatal mothers regarding newborn care. *International journal of science and research.* 595-600

Santhi MD., & Kokilavani (2013). Assess the effectiveness of education programme on breast feeding on primi gravid mothers. *International Journal of Nursing car,1(1), 77-82*

Sujatha, P.,& Prasad, K V . (2015). Knowledge of feeding practices among mothers. *International Journal of Interdisciplinary and Mulitidisciplinary Study*. 2(4), 45-49

Sujatha ,V., et al., (2014) Assess the effectiveness of teaching programme on knowledge of antenatal mothers. *International Journal of Nursing Education and Research*. 1(1), 1-3

Vidya, K., (2012). Knowledge of antenatal mothers regarding newborn care. *Journal of Science.* 2(1), 1-5

ONLINE JOURNALS:

Jennifer A Callaghan-Koru, et al., (2013). New born practices at home. *Journal of Bid Med Central Pediatrics*. Vol. 13. 198-199. Doi:10.1186/1471-2431-13-198. Pub.

Rama, R., Gopalakrishnan, S., & Udayashankar, P M .(2014). Assessment of knowledge regarding newborn care among mothers. *International Journal of community medicine and public health.* 1(1), 58-63, Doi:10.5455/ 2394-6040. Ijcmph 20141112

Tohani AL Otaiby., Hoda Jradi., & Amen Bawa Zir. (2013). Assessment of pregnant women knowledge. *Journal of Women's Health Care*. 2(4), 2-5, Doi:org/10. 4172/2167-0420.1000139.

Mbada, C. E., et al., (2013) Assess the knowledge regarding newborn care. *Journal of clinical movement disorder.* 6(2), 552, Doi:10.1186/1756/1756-0500-6-552

Mohite, R. V., Mohite, V. R .,& Kakade. (2012). Knowledge of breast feeding among primigravida mothers. *Bangladesh Journal of Medicine*. 11(4), Doi:http:dx.doi. org/10.3329/bjms.v11i4.1260

REPORTS:

WHO Report

UNICEF (2014)

IAP Report (2014)

SRS Statistical Report (2012)

The Hindu News Paper (2014)

United Nation inter-agency Group for child mortality Estimation (2013)

APPENDICES

Love to Serve
அறஞ்செய விரும்பு

INTERNATIONAL CENTRE FOR COLLABORATIVE RESEARCH
OMAYAL ACHI COLLEGE OF NURSING
Run by MR Omayal Achi MR Arunachalam Trust

ETHICAL CLEARANCE CERTIFICATE

Valid from: April 2013
Valid to: October 2015 (2 Years)

Name of the Principle Investigator: K.J.Punithavathi, M.Sc.(N) Student (Child Health Nursing)

The **ICCR** Ethical Committee meeting had reviewed the project titled **" A pre experimental study to assess the effectiveness of Neonatal care package on knowledge and practice regarding newborn care among primi gravid mothers at selected setting, Chennai ".** The proposal was found to be acceptable on ethical grounds. The Principle Investigator has the responsibility and accountability for any other administrative / regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review.

This certificate of approval is valid for the time period provided, there is no change in the methodology protocol or consent process and documents.

Any significant change should be reported to Director for Research Committee considerations in advance for its implementation.

Signature of Research Director : Research Director
ICCR
Omayal Achi College of Nursing
No. 45, Ambattur Road,
Puzhal, Chennai-600 066.

Signature of Researcher : K.J. Punithavathi

45, AMBATTUR ROAD, PUZHAL, CHENNAI - 600 066. TAMIL NADU, INDIA
Tel : 26591617, 26591618, Fax : 26591616, E-mail : iccrphc@gmail.com, Website : www.omayaln.com

OMAYAL ACHI COLLEGE OF NURSING

Run by MR. Omayal Achi MR.Arunachalam Trust

45, AMBATTUR ROAD, PUZHAL, CHENNAI - 600 066.
(Affiliated to the Tamilnadu Dr.M.G.R. Medical University
Recognized by the Indian Nursing Council & TN Nurses and Midwives Council)

Love to Serve
அறஞ்செய விரும்பு

Tel : 26591617, 26591618
Fax : 26591616
E-mail : oacn1992@gmail.com
Website : omayaln.com

13.12.2014

The Director,
Sir.Ivan Stedeford Hospital,
Ambattur,
Chennai-600 053.

Sir/Madam,

Sub: Request for permission to conduct
Research study-Reg.

Ms.Punithavathi.K.J, is a bonafide M.Sc(Nursing) I year student studying at our College and she is conducting "A STUDY TO ASSESS THE EFFECTIVENESS OF NEONATAL CARE PACKAGE ON LEVEL OF KNOWLEDGE AND PRACTICE ON NEONATAL CARE AMONG PRIMI GRAVID MOTHERS AT SELECTED SETTING, CHENNAI".

This is for her research project to be submitted to the Tamilnadu Dr.M.G.R. Medical University in partial fulfillment of the University requirement for the award of M.Sc(Nursing) Degree.

Further details of the proposed project will be furnished by the student personally. She will not hinder your routine in any way and she will abide by the rules and regulations of the Hospital. The information collected from your hospital will be kept confidential. I kindly request you to grant her permission to conduct the study at your Esteemed Hospital.

Thanking you,

Yours Sincerely,

OMAYAL ACHI COLLEGE OF NURSING
Principal

cc to :
The Nursing
Superintendent.

permitted to
conduct her study

20/12/14

Love to Serve
அறஞ்செய விரும்பு

OMAYAL ACHI COLLEGE OF NURSING

Run by MR. Omayal Achi MR.Arunachalam Trust

45, AMBATTUR ROAD, PUZHAL, CHENNAI - 600 066.
(Affiliated to the Tamilnadu Dr.M.G.R. Medical University
Recognized by the Indian Nursing Council & TN Nurses and Midwives Council)

Tel : 26591617, 26591618
Fax : 26591616
E-mail : oacn1992@gmail.com
Website : omayaln.com

13.12.2014

The Nursing Superintendent,
Sir.Ivan Stedeford Hospital,
Ambattur,
Chennai-600 053.

Sir/Madam,

Sub: Request for permission to conduct
Research study-Reg.

Ms.Punithavathi.K.J, is a bonafide M.Sc(Nursing) I year student studying at our College and she is conducting "A STUDY TO ASSESS THE EFFECTIVENESS OF NEONATAL CARE PACKAGE ON LEVEL OF KNOWLEDGE AND PRACTICE ON NEONATAL CARE AMONG PRIMI GRAVID MOTHERS AT SELECTED SETTING, CHENNAI".

This is for her research project to be submitted to the Tamilnadu Dr.M.G.R. Medical University in partial fulfillment of the University requirement for the award of M.Sc(Nursing) Degree.

Further details of the proposed project will be furnished by the student personally. She will not hinder your routine in any way and she will abide by the rules and regulations of the Hospital. The information collected from your hospital will be kept confidential. I kindly request you to grant her permission to conduct the study at your Esteemed Hospital.

Thanking you,

Yours Sincerely,
OMAYAL ACHI COLLEGE OF NURSING
Principal

cc to :
The Nursing
Superintendent.

G. Manjula RS
20/12/14

Love to Serve
அறஞ்செய விரும்பு

OMAYAL ACHI COLLEGE OF NURSING

Run by MR. Omayal Achi MR.Arunachalam Trust

45, AMBATTUR ROAD, PUZHAL, CHENNAI - 600 066.
(Affiliated to the Tamilnadu Dr.M.G.R. Medical University
Recognized by the Indian Nursing Council & TN Nurses and Midwives Council)

Tel : 26591617, 26591618
Fax : 26591616
E-mail : oacn1992@gmail.com
Website : omayaln.com

10.04.2015.

The Director,
Teja Hospital,
No.471, MTH Road,
Ambattur,
Chennai-600 053.

Sir/Madam,

Sub: Request for permission to conduct Research Study.

Ms.Punithavathi.K.J, is a bonafide M.Sc(Nursing) II year student studying at our College and she is conducting "A PRE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF NEONATAL CARE PACKAGE ON KNOWLEDGE AND PRACTICE AMONG PRIMI GRAVID MOTHERS AT SELECTED SETTING, CHENNAI"

This is for her research project to be submitted to the Tamilnadu Dr.M.G.R. Medical University in partial fulfillment of the University requirement for the award of M.Sc(Nursing) Degree.

Further details of the proposed project will be furnished by the student personally. She will not hinder your routine in any way and she will abide by the rules and regulations of the Institution. The information collected from your Institution will be kept confidential.

I kindly request you to grant her permission to conduct the study at your Esteemed Institution.

Thanking you,

Yours Sincerely,
OMAYAL ACHI COLLEGE OF NURSING
Principal

APPENDIX – C

REQUISITION LETTER FOR CONTENT VALIDITY

From

Mrs. K.J.Punithavathi

M.sc (N) II year

Omayal Achi College of Nursing

Puzhal, Chennai.

To

Respected Madam,

Sub: Requisition from expert opinion for content validity

I am Mrs. K.J.Punithavathi doing my M.sc Nursing II year specializing Child Health Nursing at Omayal Achi College of Nursing. As a part of my research project to be submitted to the Tamil Nadu Dr. M.G.R Medical University and in partial fulfilment of the University requirement for the award of M.sc Nursing degree, I am conducting "A Study to assess the effectiveness of Neonatal care package on knowledge and practice on neonatal care among primi gravid mothers at selected setting chennai". I have enclosed my data collection and intervention tool for your expert guidance and validation. Kindly do the needful.

Thanking you

Yours faithfully,

Mrs.K.J.Punithavathi

Enclosures:

1. Research proposal
2. Data collection tool
3. Intervention tool
4. Content validity form
5. Certificate for content validity

LIST OF EXPERTS FOR CONTENT VALIDITY

MEDICAL EXPERTS

1. **Dr. K. Santhoshini Ramesh**
   DCH, DNB (Peds)
   Sir Ivan Stedeford Hospital,
   Ambattur, Chennai.

2. **Dr. Jayasheela**
   Neonatologist
   Sir Ivan Stedeford Hospital ,
   Ambattur, Chennai.

CHILD HEALTH NURSING EXPERTS:

3. **Mrs. Mary Anbarasi Johnson, M.Sc (N), M.A(Public Adm.).,**
   Professor and Addl.Dy. Nursing Superintendent,
   College of Nursing,
   Christian Medical College and Hospital,
   Vellore- 632004.

4. **Dr.Mrs. R. Sudha, M.sc(N)., Ph.D.,**
   Vice Principal
   MAC College of Nursing
   VHS Adyar,
   Chennai-113.

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the data collection and intervention tool developed by Mrs.K.J.Punithavathi M.Sc.(Nursing) II year student of Omayal Achi College of Nursing for her study **"A pre experimental study to assess the effectiveness of Neonatal care package on knowledge and practice regarding newborn care among primi gravid mothers at selected setting, Chennai ."** is validated by the undersigned and she can proceed with this tool to conduct the main study.

Signature with date.

Seal :

SIR IVAN STEDEFORD HOSPITAL
AVADI, CHENNAI-54

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the data collection and intervention tool developed by **Ms.K.J.Punithavathi**, M.Sc(Nursing) II year student of Omayal Achi College of nursing for her study "**A Study to assess the effectiveness of neonatal care package on level of knowledge and practice on neonatal care among primi gravid mothers at selected setting Chennai**" is validated by the undersigned and she can proceed with this tool to conduct main study.

Signature with date: K Jayashree Neonatologist
22/1/15 SIMS NICU.

Seal: Regn. No: 53913.

SIR IVAN STEDEFORD HOSPITAL
AMBATTUR CHENNAI-53

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the data collection and intervention tool developed by **Ms.K.J.Punithavathi**, M.Sc(Nursing) II year student of Omayal Achi College of nursing for her study "**A Study to assess the effectiveness of neonatal care package on level of knowledge and practice on neonatal care among primi gravid mothers at selected setting Chennai**" is validated by the undersigned and she can proceed with this tool to conduct main study.

Signature with date: 2/2/15

Seal:

COLLEGE OF NURSING
VELLORE-4.
S. INDIA.
CHRISTIAN MEDICAL COLLEGE

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the data collection and intervention tool developed by **Ms.K.J.Punithavathi**, M.Sc(Nursing) II year student of Omayal Achi College of nursing for her study **"A Study to assess the effectiveness of neonatal care package on level of knowledge and practice on neonatal care among primi gravid mothers at selected setting Chennai"** is validated by the undersigned and she can proceed with this tool to conduct main study.

Signature with date: 3/2/15

Vice Principal
MAC College of Nursing
VHS Adyar, Chennai-113

Seal:

APPENDIX D

CERTIFICATE FOR ENGLISH EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mrs.K.J.Punithavathi, M.Sc.Nursing II year student of Omayal Achi College of Nursing, Chennai, conducted a dissertation work on **"A Pre experimental study to assess the effectiveness of neonatal care package on knowledge and practice regarding newborn care among primi gravid mothers at selected setting, Chennai. 2015"** under the guidance of Mrs. Ruthrani Princely.J, as a partial fulfillment of The Tamil Nadu Dr. M.G.R Medical University requirement for the award of M.Sc. Nursing degree is edited for English language appropriateness by M. ANURADHA [PGT ENGLISH]

Signature with Date: 7/8/15

Seal:

Mrs. M. ANURADHA, M.A., B.Ed., M.Phil.
PGT English
Smt. M. J. V. Hr. Sec. School,
Arumbakkam, Chennai-600 106.

CERTIFICATE FOR TAMIL EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mrs.K.J.Punithavathi, M.Sc.Nursing II year student of Omayal Achi College of Nursing, Chennai, conducted a dissertation work on **"A Pre experimental study to assess the effectiveness of neonatal care package on knowledge and practice regarding newborn care among primi gravid mothers at selected setting, Chennai. 2015"** under the guidance of Mrs. Ruthrani Princely.J, as a partial fulfillment of The Tamil Nadu Dr. M.G.R Medical University requirement for the award of M.Sc. Nursing degree is edited for Tamil language appropriateness by K. Jayaraman (PGT Tamil)

7/8/15

Signature with Date:

Seal:

Mr.K.JAYARAMAN, M.A.,M.Ed.,M.Phil.
PGT Tamil
Smt. M.J.V. Hr. Sec. School,
Arumbakkam, Chennai-600 106

☎ 26841126

OMAYAL ACHI COMMUNITY HEALTH CENTRE

ARAKKAMBAKKAM, CHENNAI - 600 055.

INFORMATION EDUCATION COMMUNICATION DEPARTMENT

IEC APPROVAL CERTIFICATE

Name of the Principle Investigator: **Ms. K.J. Punithavathi,**

The **IEC** committee meeting had reviewed the IEC materials – Power Point Presentation, on **"Neonatal care package"** and leaflet on **"Neonatal care".**

The IEC materials were found to be acceptable on principles of AV AIDS preparation. It is certified that the intervention tool based on IEC materials are appropriate and consistent with the lesson plan to administer for the research project titled **"A pre experimental study to assess the effectiveness of Neonatal care package on knowledge and practice regarding newborn care among primi gravid mothers at selected setting, Chennai".**

Any significant change should be reported to coordinator / Director IEC department for considerations in advance for its implementation.

Signature of the IEC Director : Jothi

Signature of the IEC Coordinator : Delina

Signature of the H.O.D : princely

Signature of the Researcher : K.J. punithavathi

Date : 12/8/15

APPENDIX - F

INFORM CONSENT REQUISITION FORM

Good morning,

I Mrs. K.J.Punithavathi M.Sc (Nursing) student from Omayal Achi College of Nursing Chennai conducting "**A pre Experimental study to assess the effectiveness of neonatal care package on knowledge and practice on neonatal care among primi gravid mothers at selected setting, Chennai**" as a partial fulfillment of the requirement for the degree of M.Sc Nursing under the Tamil Nadu Dr. M.G.R Medical University

I assure you that information provided by you will be kept confidential. So, I request you to kindly co operate with me and participate in this study by giving your frank and honest responses to the questions being asked.

Thanking you.

Signature of the Investigator

K.J.Punithavathi

ஒப்புதல் படிவம்

வணக்கம்,

கி.செ.புனிதவதி ஆகிய நான் புழலில் உள்ள உமையின் ஆச்சி செவிலியர் கல்லூரியில் முதுகலை பட்டப்படிப்பு முதலாம் ஆண்டு பயின்று வருகின்றேன். என் படிப்பின் ஒரு பகுதியாக ‘‘முதல் குழந்தையை ஈன்றெடுக்கப்போகும் தாய்மார்களுக்கு பிறந்த குழந்தையின் பாதுகாப்பு முறைகள்’’ பற்றிய ஆய்வை நடத்த உள்ளேன்.

எனது இந்த ஆய்வுக்கு உங்களின் முழு ஒத்துழைப்பை தருமாறு வேண்டிக்கேட்டுக் கொள்கிறேன். தங்களிடமிருந்து சேகரிக்கப்படும். அனைத்து தகவல்களும் இரகசியமாக பாதுகாக்கப்படும் என்பதை கூறிக் கொள்கிறேன்.

நன்றி!

INFORMED WRTTEN CONSENT FORM

I Understand that I am being asked to participate in a research study conducted by Mrs. Punithavathi.K.J., M.Sc (N) student of Omayal Achi College of Nursing. This research study will assess the **"Effectiveness of neonatal care package on knowledge and practice among primi gravid mothers at selected setting, Chennai".** If I agree to participate in the study, I will be given a structured questionnaire to answer for knowledge assessment and I will be observed for practices by using observational check list. The answers will be kept confidential. No identifying information will be included when it is transcribed. I understand that there are no risks associated with this study.

I realise that the knowledge gained from this study may help either me or other people in the future. I realize that my participation in this study is entirely voluntary, and I may withdraw from the study at any time I wish. If I decided to discontinue my participation in this study, I will continue to be treated in the usual and customary fashion.

I understand that all my study data will be kept confidential. However, this information may be used in nursing publication or presentations. If I need to, I can contact Ms. K.J. Punithavathi, M.Sc (N) II year student of Omayal Achi College Of Nursing, #45 Ambattur road, Puzhal, Chennai at any time during the study.

The study has been explained to me . I have read and understood this consent form, all of my questions have been answered, and I agree to participate. I understand that I will be given a copy of this signed consent form.

_____ _____

Signature of Participants **Date**

_____ _____

Signature of Investigator **Date**

முன் அறிவிப்பு ஒப்பந்த படிவம்

மதிப்பிற்குரியவரே வணக்கம்!

கி.செ.புனிதவதி ஆகிய நான் சென்னை புழலில் உள்ள உமையின் ஆச்சி செவிலியர் கல்லூரியில் முதுகலை குழந்தைநல செவிலியர் பட்டத்திற்காக பயிற்சி பெற்று வருகிறேன். எனது படிப்பின் ஒரு பகுதியாக முதல் குழந்தையை ஈன்றெடுக்கப் போகும் தாய்மார்களுக்கு பிறந்த குழந்தையின் பாதுகாப்பு முறைகள் பற்றிய ஆய்வை மேற்கொண்டுள்ளேன். இந்த ஆய்வில் நீங்கள் பங்கு கொள்ளும்போது உங்களால் குழந்தையை எளிதாக பராமரிக்க முடியும். ஆகவே நீங்கள் தயவுகூர்ந்து இந்த ஆய்வில் உங்களை பற்றிய விவரத்தையும் மற்றும் பின்வரும் கேள்விகளுக்கான பதில்களை நிரப்புமாறு கேட்டுக் கொள்கிறேன். உங்கள் பதில்கள் மிகவும் இரகசியமானதாகவும் கனாமதேயாகவும் இருக்கும். மேலும் இந்த ஆய்வுக்காக மட்டுமே பயன்படுத்தப்படும் என்பதை தெரிவித்துக் கொள்கிறேன்.

தங்களுக்கு ஏதாவது சந்தேகம் தோன்றினால் நீங்கள் தயக்கமின்றி தெரிவிக்கவும். அதற்குரிய விளக்கம் உங்களுக்கு தரப்படும். இந்த ஆய்வில் பங்கேற்பது முற்றிலும் உங்களுடைய விருப்பமே. தங்களுக்கு விருப்பம் இல்லையெனில் ஆய்வின் இடையில் கூட நீங்கள் விலகிக் கொள்ளலாம்.

இந்த ஆய்வில் நீங்கள் பங்கேற்பதனால் உங்களுக்கு எவ்வித தீங்கும் ஏற்படாது என்பதை உறுதியாக தெரிவித்துக் கொள்கிறேன். இந்த ஆய்வில் தங்களுடைய பங்கேற்பிற்கு நன்றி!

பங்கு கொள்பவரின் கையொப்பம் , கைரேகை **தேதி:**

ஆராய்ச்சியாளரின் கையொப்பம் **தேதி:**

APPENDIX – G

RESEARCH TOOL

PART-1: DEMOGRAPHIC DATA

1. Age of the mother in years
    a. 18-22
    b. 22-26
    c. 26-30

2. Religion of mother
    a. Hindu
    b. Christian
    c. Muslim
    d. Other

3. Type of family
    a. Nuclear family
    b. Joint family
    c. Separated
    d. Others

4. Education of the mother
    a. Illiterate
    b. Primary education
    c. Secondary education
    d. High school
    e. Higher secondary
    f. Degree and above.

5. Occupation of mother
    a. Homemaker
    b Coolie
    c Private sector

d Government sector

e Business

6. Gestational week
    a. 36-37
    b. 37-38
    c. 38-39
    d. 39-40

7. Type of delivery
    a. Normal vaginal delivery
    b. LSCS
    c. Forceps
    d. Vacuum

PART II: STRUCTURED KNOWLEDGE QUESTIONNAIRE

I . THERMAL PROTECTION

1. Method of prevention of heat loss for newborn baby in postnatal ward can be achieved by
    a) mummifying the baby
    b) maintaining room temperature up to 20°C
    c) breast feeding
    d) promoting excessive sleep of baby

2. Baby loses heat by the following ways except
    a) radiation
    b) conduction
    c) convection
    d) conviction

3. Kangaroo mother care promotes
    a) bonding only
    b) thermoregulation
    c) bonding & thermoregulation
    d) Promotes lactation

4. Newborn should be kept covered
    a) always
    b) during night time
    c) during day time
    d) during transport

5. The normal range of newborn temperature is
    a) 30.5-32.5◦c
    b) 34-35.5^{o}c
    c) 35-36^{o}c
    d) 36.5-37.5^{o}c

II. BREAST FEEDING

6. Exclusive breast feeding should be given for babies up to
    a) 3 months
    b) 6 months
    c) 9 months
    d) 12 months

7. Indicator for adequate breast feeding
    a) Baby passes urine 3-4 times in 24hrs
    b) Goes to sleep for 2-3hrs after feeds
    c) Gains weight by 25gm/day
    d) Crosses birth weight by 1 week

8. Signs of good attachment are except
    a) baby's mouth wide open
    b) lower lip turned outwards
    c) gums biting the nipple well
    d) majority of areola inside baby's mouth

9. Breast feeding provides except
    a) moist
    b) energy
    c) brain growth
    d) protein

10. Exclusive breast feeding should be given
    a) hourly
    b) on demand
    c) Second hourly
    d) Third hourly

III. PREVENTION OF INFECTION

11. Hand washing prevents

a) heat loss
b) infection
c) weight gain
d) feeding problems

12. Hand washing should be performed

a) before and after touching the baby
b) early morning
c) before going to bed
d) when hand is dirt or soiled

13. Hand washing should be done with

a) bar soap
b) liquid soap
c) running water
d) rinsing hands with alcohol

14. Time duration for washing hands

a) 30 minutes
b) 15 minutes
c) 20 minutes
d) 2 minutes

15. For drying the hands, it is preferable to use

a) common towel
b) separate clean towel
c) autoclaved napkins
d) hand drier

PART III: PRACTICE ASSESSMENT USING OBSERVATIONAL CHECK LIST BASED ON IAP GUIDELINES

i) OBSERVATION CHECKLIST FOR MUMMIFICATION

S.NO.	ITEMS	YES	NO
1.	Preparation of the article • Selection of clean cloth		
2.	Preparation of the environment • Put off the fan		
3	Preparation of the mother a) Removes wrist watch, bangles ,ring b) Places the baby in a comfortable position		
4	Procedure a) Washes her hand b) Selects a blanket folded to a square c) Folds the top corner under the infant shoulder d) Aligns the infant head with folded edge e) Folds one point of the sheet across the child and tuck it firmly behind the back f) Folds the bottom corner of the sheet up to cover and restrain the infant's feet g) Folds the remaining corner over the child and tuck firmly behind the back		
5	Places the infant comfortably on the cot & wash hands.		

OBSERVATION CHECKLIST FOR BREAST FEEDING TECHNIQUE BASED ON IAP GUIDELINES

S.NO.	ITEMS	YES	NO
1	**Preparation of articles** a) Bowl with warm water b) Two mittens c) Dry towel		
2	**Preparation of environment** a) Mother sits in a separate area b) Switches off the fan		
3	**Preparation of the mother** a) Removes watch b) Washes hands c) Dries hands		
4	**Procedure:** **<u>Position</u>:** **For cradle hold** a) Mother sits comfortably b) Positions the infants head at or near the antecubital space and level with her nipple c) Arms supports the infants body d) Other hand holds the breast **<u>Attachment:</u>** a) Newborn showed positive rooting, b) wides open mouth c) lower lip turned outward d) Baby latches on to her nipple and areola correctly		

S.NO.	ITEMS	YES	NO
	Sucking: a) (Effective sucking pattern) Newborn initially sucks rapidly then slowly with pause b) Audible, regular ,soft swallowing with no clicking **After care:** a) Wipes the nipple and breast with wet clean towel b) Burps the baby after the feed. c) Wraps the baby and lays baby on his or her sides in the crib		

iii) OBSERVATION CHECK LIST FOR HAND WASHING BASED ON IAP GUIDELINES

S.NO.	ITEMS	YES	NO
1	**Preparation of article** a) Soap and towel		
2	**Preparation of mother** a) Removes wrist watch, bangles, rings.		
3	**Procedure** a) Wets hands & wrist under running water b) Applies soap over wrist, back of hands, in between fingers, palms, each finger individually and nails c) Rinses the hands using running water d) Dries the hands using a separate clean towel		

SCORING KEY

Part- A:

Section -1 Structured Knowledge Questionnaire:

This section consisted of structured knowledge questionnaire developed to assess level of knowledge among primi gravid mothers on new born care

Each item was a closed ended multiple choice questions with single correct answer. Each correct answer response was awarded with a score of 1 mark and the wrong answer awarded with a score of 0 mark. Total score was 15. Maximum score was 15 and minimum score was 0.

Score	Interpretation
≤50%	Inadequate knowledge
51-75%	Moderately adequate knowledge
>75%	Adequate Knowledge

Section 2: Practice Assessment Using Observational Check list

This section consisted of the observational checklist to assess the level of practice on newborn care using observational check list.

Each step performed were given a score of 1 mark and not performed were given a score of 0 mark. Total maximum score was 40 and assessed with the range of:

Score	Interpretation
≤50%	Inadequate practice
51-75%	Moderately adequate practice
>75%	Adequate practice

பிரிவு–அ

1. தாயின் வயது ஆண்டு கணக்கில்

   அ. 18–22

   ஆ. 22–26

   இ. 26–30

2. தாயின் மதம்

   அ. இந்து

   ஆ. கிருத்துவம்

   இ. முஸ்லீம்

   ஈ. பிற

3. குடும்ப வகை

   அ. தனிக் குடும்பம்

   ஆ. கூட்டுக் குடும்பம்

   இ. பிரிந்த குடும்பம்

   ஈ. பிற

4. தாயின் கல்வித் தகுதி

   அ. ஆரம்பக் கல்வி

   ஆ. நடுநிலைக் கல்வி

   இ. பள்ளிக் கல்வி

   ஈ. பள்ளிக் கல்வி

   உ. மேல்நிலைக் கல்வி

   ஊ. பட்டப்படிப்பு மற்றும் அதற்குமேல்

5. தாயின் தொழில்

   அ. இல்லத்தரசி

   ஆ. கூலித்தொழிலாளி

   இ. தனியார் நிறுவனம்

ஈ. அரசுப்பணி

உ. வணிகம் / வியாபாரம்

ஊ. மற்றவை

6.கர்ப்ப காலம் (வாரம்)

அ.. 37–38

ஆ 38–39

இ. 39–40

7.பிரசவத்தின் வகை

அ. சுகப்பிரசவம்

ஆ. அறுவை சிகிச்சை

இ. ஆயுத பிரசவம்

ஈ. வேக்யூம்

பிரிவு–ஆ

வெப்ப நிலையை பாதுகாத்தல் :

1. பிறந்த குழந்தையின் வெப்பவீழ்ச்சியை கீழ்க்கண்ட வகையில் பாதுகாக்கலாம்.

   அ. பருத்தி துணியால் குழந்தையை போர்த்தி வைத்தல்.

   ஆ. அறையை 20^0C இருக்கும்படி வைத்துக் கொள்ளுதல்.

   இ. தாய்ப்பால் கொடுத்தல்.

   ஈ. அதிக காலஅளவு தூங்க வைத்தல்.

2. பிறந்த குழந்தை தன் வெப்ப நிலையை கீழ்கண்ட ஒன்றால் இழக்காது.

   அ. கதிர்வீச்சு

   ஆ. வெப்பக்கடத்தல்

   இ. வெப்பச்சலனம்

   ஈ. குற்றம் சாட்டல்

3. கங்காரு தாய் பாதுகாப்பு மேம்பாடு

   அ. உடலால் மட்டும்

   ஆ. வெப்பநிலை பாதுகாத்தல்

   இ. தாய்சேய் இணைப்பு மற்றும் வெப்பநிலை பாதுகாத்தல்

   ஈ. பாலூட்டுதலை மேம்படுத்துதல்

4. பிறந்த குழந்தையை போர்த்தி வைத்தல்

   அ. எப்பொழுதும்

   ஆ. இரவில் மட்டும்

   இ. பகலில் மட்டும்

   ஈ. பிரயாணத்தின் போது

5. பிறந்த குழந்தையின் இயல்பான வெப்பநிலையின் அளவு

   அ. $30.5 – 32.5^0c$

   ஆ.$34.5 – 32.5^0c$

   இ. $35 – 33^0c$

   ஈ. $36.5 – 37.5^0c$

தாய்ப்பால் ஊட்டுதல் :

6. பிறந்த குழந்தைக்கு தாய்ப்பால் மட்டுமே கொடுக்க போதுமான கால அளவு

அ. மூன்று மாதம்

ஆ. ஆறு மாதம்

இ. ஒன்பது மாதம்

ஈ. பண்ணிரண்டு மாதம்

7. போதுமான அளவு தாய்ப்பால் அருந்தியதற்கான அறிகுறி :

அ. குழந்தை 24 மணி நேரத்தில் மூன்று அல்லது நான்கு முறை சிறுநீர் கழித்தல்

ஆ. பால் அருந்தியபின் இரண்டு அல்லது மூன்று மணி நேரம் தூங்குதல்

இ. நாள் ஒன்றுக்கு 25 கிராம் எடை கூடுதல்

ஈ. பிறந்த குழந்தையின் எடை ஒரு வாரத்தில் அதிகரித்தல்

8. பாலூட்டும்போது தாயின் மார்பகம் மற்றும் குழந்தையின் வாய்ப்பகுதி எவ்வாறு இருத்தல் கூடாது

அ. குழந்தையின் வாய் அதிகஅளவு திறந்திருத்தல்

ஆ. கீழ் உதடு வெளிப்புறம் வளைந்திருத்தல்

இ. ஈருப்பகுதி மார்பகத்தின் முனையை நன்கு கடித்தபடி இருத்தல்

ஈ. மார்பகத்தின் முனைப்பகுதி முழுவதுமாக குழந்தையின் வாயின் உள்ளிருத்தல்.

9. தாய்ப்பாலின் நன்மைகளில் கீழ்கண்டவற்றுள் எவை அடங்காது

அ. ஈரப்பதம்

ஆ. சக்தி

இ. மூளை வளர்ச்சி

ஈ. புரதம்

10. தாய்ப்பால் ஊட்டுதல்

அ. மணிக்கு ஒருமுறை

ஆ. தேவைப்படும் பொழுதெல்லாம்

இ. இரண்டு மணிக்கு ஒருமுறை

ஈ. மூன்று மணிக்கு ஒருமுறை

தொற்றுநோய் தடுப்பு முறை

11. கைகழுவுதல் பின்வருவனவற்றுள் இதனை தடுக்கும் :

அ. வெப்ப இழப்பு

ஆ. தொற்றுநோய்

இ. எடை கூடுதல்

ஈ. பாலூட்டலில் ஏற்படும் சிக்கல்

12. கைகழுவும் நேரம் :

அ. குழந்தையை தொடுவதற்கு முன்பும், பின்பும்

ஆ. அதிகாலை

இ. தூங்கச் செல்லும்முன்

ஈ. கையில் அழுக்கு மற்றும் மண் படிந்த போது

13. பின்வரும் ஒன்றைக்கொண்டு கைகழுவ வேண்டும்.

அ. கட்டி சோப்பு

ஆ. திரவ சோப்பு

இ. ஓடும் நீரில்

ஈ. ஆல்கஹால்

14. கைக்கழுவ எடுத்துக் கொள்ளும் கால அளவு

அ. 30 நிமிடம்

ஆ. 15 நிமிடம்

இ. 20 நிமிடம்

ஈ. 2 நிமிடம்

15. கழுவப்பட்ட கையை உலர்த்த

அ. பொதுவான துண்டை பயன்படுத்த வேண்டும்.

ஆ. நல்ல தனித்துண்டை பயன்படுத்த வேண்டும்.

இ. சுடுநீரில் தூய்மை செய்யப்பட்ட துண்டை பயன்படுத்த வேண்டும்.

ஈ.கையை காய வைக்கும் கருவி.

APPENDIX - H

CODING FOR DEMOGRAPHIC VARIABLES

Demographic Variables	**code**
1. Age of the mother in years:	
A. 18-22	1
B. 22-26	2
C. 26-30	3
2 Religion of mother	
A. Hindu	1
B. Christian	2
C. Muslim	3
D. Other	4
3 Type of family	
A. Nuclear family	1
B. Joint family	2
C. Separated	3
D. Others	4
4 Education of the mother	
A. Non Illiterate	1
B. Primary education	2
C. Secondary education	3
D. High school	4
E. Higher secondary	5
F. Degree and above.	6
5 Occupation of mother	
A. Homemaker	1
B. Coolie	2
C. Private sector	3

D. Government sector 4

E. Business 5

F. Others 6

6. Gestational week

A. 37-38 1

B. 38-39 2

C. 39-40 3

7 Type of delivery

A. Normal vaginal delivery 1

B LSCS 2

C Forceps 3

D Vacuum 4

APPENDIX – I

BLUE PRINT

S.No.	Content	Item	Total Item	Percentage
1	Demographic variables	1-7	**7**	**100%**
2	**Knowledge questionnaire**			
	Thermoregulation	1-5	**5**	33.33%
	Breast feeding	6-10	**5**	33.33%
	Prevention of infection	11-15	**5**	33.33%
	Total		**15**	**100%**
3	**Practice**			
	Mummification	1-12	12	30.0%
	Breast feeding technique	13-20	7	17.5%
	Hand washing technique	21-40	21	52.5%
	Total		**40**	**100%**

APPENDIX – J

NEONATAL CARE PACKAGE

- Lecture cum discussion.
- Lecture cum demonstration
- Leaflet

LESSON PLAN ON NEONATAL CARE PACKAGE

Topic	:	Neonatal care package
Focus Group	:	Primigravid Antenatal mothers and who undergoes delivery at Sir Ivan Stedeford Hospital
Place	:	Sir ivan Stede Ford Hospital, Ante natal ward, Ambattur
Duration	:	30 minutes
Teaching method	:	Lecture cum video show & Lecture cum demonstration
Instructor	:	Investigator
Instructional Aids	:	Power point presentation & leaflet
Seating arrangement	:	Theatre method

General objectives : At the end of the class the primigravid mothers will gain adequate knowledge and practice regarding newborn care.

Specific objectives : At the end of the class the primigravid mothers will be able to

1. state the meaning of neonatal care
2. list the principles of maternal newborn care
3. enlist the components of neonatal care
4. discuss on thermoregulation
5. demonstrate on mummification procedure
6. demonstrate the techniques of breast feeding
7. demonstrate the steps of hand washing

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
		INTRODUCTION Newborn care aims at ensuring that the baby is made comfortable, is able to feed and facilities are available to help parents with the attachment process. It is also important to ensure that the baby is protected form airway obstruction, hypothermia, injuries and infections		
1	State the meaning of newborn care	**MEANING:** Neonatal care is defined as management of neonate during the transition to extrautrine life and subsequent period of stabilization	Lecture by Power point presentation	Listening
2	List the principles of maternal newborn care	**PRINCIPLES OF MATERNAL NEWBORN CARE** 1. Feed with love and respect 2. Respond with sensitivity 3. Use nurturing touch 4. Ensure safe sleep, physically and emotionally.	Lecture by Power point presentation	Listening
3	Enlist the components of newborn care	**COMPONENTS OF NEONATAL CARE** 1. Thermoregulation 2. Breast Feeding 3. Prevention of infection	Lecture by Power point presentation	Listening

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
4	Discuss on thermoregulation	**1.THERMOREGULATION-KNOWLEDGE** **a) Definition:** Thermoregulation is the process that allows the human body to maintain its core internal temperature **b) Normal body temperature range** Axillary: 36.5 to 37.5°c (97.7 to 99.5°F) **c) Poor maintenance of temperature:** Temperature is not maintained properly it will lead to hypothermia (low body temperature) and hyperthermia (increased body temperature) • Hypothermia lead to lethargy, bradycardia, apnea, poorfeeding, hypoglycemia, hypoxia ,distress, tacypnea • Hyperthermia lead to vasodilation, increased fluid loss, poor feeding, nausea and vomiting, headache, decreased blood pressure, fainting Very low temperature lead to cold stress and very high temperature lead to heat stroke. **d) For maintaining thermoregulation of the baby** • Always keep the baby near to the mother • Swaddling the baby or mummification • Kangaroo mother care	Lecture by Power point presentation	Listening

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
5	Demonstrate on mummification procedure	**PRACTICE-MUMMIFICATION OR SWADDLING** Swaddling or mummification is the art of snugly wrapping a baby in a blanket for warmth and security. **a) Preparation of articles :** • Long Blanket. **b) Procedure** • Washes her hand to prevent infection • Selects a blanket folded to a square to place the newborn comfortably • Folds the top corner under the infant shoulder • Aligns the infant head with folded edge • Folds one point of the sheet across the child and tuck it firmly behind the back • Folds the bottom corner of the sheet up to cover and restrain the infant's feet • Folds the remaining corner over the child and tuck firmly behind the back **c)Time to stop swaddling:** Once the baby is about a month old stop swaddling while awake, as it can interfere with mobility and development in older babies.	Lecture cum demonstration	Listening

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
		2 BREAST FEEDING:KNOWLEDGE **a) Definition of breast feeding:** Breast feeding is the feeding of an infant or young child with breast milk directly from female human breasts (ie via lactation). Babies have a sucking reflex that enables them to suck and swallow milk **b) Exclusive breast feeding**: To enable mothers to establish and sustain exclusive breastfeeding for 6 months, WHO and UNICEF recommend: • Initiation of breastfeeding within the first hour of life after normal delivery and 4hrs for delivered by LSCS • Exclusive breastfeeding – that is the infant only receives breast milk without any additional food or drink, not even water • Breastfeeding on demand – that is as often as the child wants, day and night • No use of bottles, teats or pacifiers **c) Demand feeding:** Each newborn is different. Some may feel hungry every 30 minutes. Others may be fine with much longer intervals between feedings. Be sensitive to our baby's hunger cues. These include ➢ Rooting (searching for a breast)and-sucking and hand-to-mouth movements		

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
		➢ Increased alertness or restlessness ➢ Don't wait for our newborn to cry. Crying is a late sign of hunger, and once a newborn begins crying it may take time for him to settle down and feed **d) Benefits of breast feeding :** **To the baby:** • Complete food • Easily digested and well absorbed • Protects against infection • Promote emotional bonding • Better brain growth **To the mother** • Helps in involution of uterus • Delays pregnancy • Lowers risk of breast and ovarian cancer • Decreases mother's workload		
6	Demonstrate the technique of breast feeding	**e) BREAST FEEDING TECHNIQUE-PRACTICE** **Position of the breast feeding** Various position for breast feeding a baby • Cradle hold	Lecture cum demonstration	Listening

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
		• Football hold • Cross-cradle or modified cradle hold **For cradle hold** • Mother must be seated comfortably • Position the infants head at or near the antecubital space and level with her nipple • Arm supporting the infants body • Other hand to hold the breast **For football hold** • Mother must be seated comfortably • Instruct mother to support the infant's head in her hand • Infant's body resting on pillows alongside her hip **For cross-cradle or modified cradle hold** • Mother must be seated comfortably and right angles to her lap • Place a pillow on her lap • Mother holds the baby supporting his head with her extended arms • Move the baby near the breast, turned towards the mother's body with neck slightly extended and the mouth near the nipple		

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
		3) PREVENTION OF INFECTION-KNOWLEDGE Hand washing is very important as it comes in contact with more surface and elements than any other body part. Mother has to be taught about hand washing to prevent spread of infection **a) Baby bath** Baby bath can begin once the infant's temperature has stabilized to at least 36.5° C (97.7° F). A complete sponge bath should be given within the first 1 to 2 hr after birth under a radiant heat source to prevent heat loss. If necessary, the first bathing will be postponed until thermoregulation stabilizes .After the initial bath, the newborn's face, diaper area, and skin folds are cleansed daily. Complete bathing is performed 2 to 3 times a week .Bathing by immersion is not done until the umbilical cord has fallen off and the circumcision has healed on males. **b)Immunization** Immunization are an excellent way to protect your child against many childhood diseases .Babies are born with protection against certain diseases because antibodies from their mothers were passed to them through the placenta. After birth, breastfeed babies got the continued benefits of additional antibodies in breast milk. But in both cases, the protection is temporary.		

<table>
<tr><th>S.NO</th><th>CONTRIBUTORY OBJECTIVE</th><th>CONTENT</th><th>INVESTIGATOR'S ACTIVITY</th><th>LEARNER'S ACTIVITY</th></tr>
<tr><td></td><td></td><td>Immunization (vaccination) is a way of creating immunity to certain diseases by using small amounts of a killed or weakened microorganism that causes the particular disease.

Immunization Schedule

<table>
<tr><th>Age</th><th>Name</th></tr>
<tr><td>Birth</td><td>BCG
Polio-0
Hep-B1</td></tr>
<tr><td>6 week</td><td>DTP-1
Polio-1
Hep-B2
Hib-1
Rota virus-1
PCV-1</td></tr>
<tr><td>10 th week</td><td>DTP-2
Poilo-2
Hib-2
Rota Virus-2
PCV-2</td></tr>
<tr><td>14 th week</td><td>DTP-3
Polio-3</td></tr>
</table>
</td><td></td><td></td></tr>
</table>

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY

	Hib-3 **Rota Virus-3** **PCV-3**
6th month	**Polio-1** **Hep-B3**
9th month	**Polio-2** **M.M.R-1**
12th month	**Typhoid**
15th month	**M.M.R-2** **Varicella-1** **PCV Booster**
16-18 month	**DTP B1** **Hib B1**
18month-2year	**Hep A2** **Typhoid Booster**
4-6 year	**DTP B2** **Polio-3** **Varicella-2** **Typhoid Booster**

IAP-2014

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
		c) Change of diapers • Remove the baby's from dirty diaper. If it's wet, places baby on his back and remove the diaper and wipe the genital area with wet cloth.. Wipe girls from front to back to avoid UTIs .If we saw a rash, place some ointment on it. • Open the new diaper and slide it under your baby, gently lifting your baby's legs and feet. Move the front of the diaper up between your baby's legs, over the belly. Then, bring the adhesive strips around and snugly fasten them so the diaper is nice and secure.To avoid diaper rash, change your baby's diaper as soon as possible after a bowel movement, using soap and water to wipe your baby **d) Elimination need** Meconium consists of black, tarry stools passed after birth, changing to brownish green. At the fourth or fifth day, stools change according to the type of feeding. Human milk produces watery stools that may sometimes be light green. A newborn can have as many as eight to ten bowel movements a day. Six or more wet diapers in a 24-hour period show that the infant is getting enough fluids. The color of the urine should be pale yellow. **e) Clothing:** Wear always cotton clothes for the baby because cotton clothes are soft and don't rub harshly against baby's soft skin. It will absorb and remove body		

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
7	Demonstrate the steps of hand washing	moist easily. Cotton permit better aeration and always keep the baby cool. New clothes should be washed before wearing for the baby. Washing makes clothes softer and may help to prevent skin rash. Clothes should be washed by special baby detergent and dried in sunlight. **f) HAND WASHING TECHNIQUE –PRACTICE** • Wet hands with water • Apply enough soap to cover all hand surfaces • Rub hands palm to palm • Continue washing all surfaces including interlaced fingers, the back of hands and thumbs • Rinse hands with water • Dry thoroughly with a clean towel **CONCLUSION:** The postnatal period is a critical phase in the lives of mothers and newborn babies. Most maternal and infant deaths occur during this time. Hence mothers should be educated with the following components The following signs should be assessed during each postnatal care contact, and the newborn should be referred for further evaluation if any of the sign is present:	Lecture cum demonstration	Listening

S.NO	CONTRIBUTORY OBJECTIVE	CONTENT	INVESTIGATOR'S ACTIVITY	LEARNER'S ACTIVITY
		• Stopped feeding well • History of convulsions • Fast breathing(breathing rate>37.5 * c) • Severe chest in drawing • No spontaneous movement • Fever (temperature>35.5*c) • Low body temperature (temperature<35.5*c) • Any jaundice in first 24 hours of life, or yellow palms and soles at any age. The family should be encouraged to seek health care early if they identify any of the danger signs in between postnatal care visits.		

பிறந்த குழந்தை பாதுகாப்பு பாடத் திட்டம்

தலைப்பு	:	பிறந்த குழந்தை பாதுகாப்பு
வகை	:	முதல் குழந்தை ஈன்றெடுக்கப்போகும் தாய்மார்கள், சர் ஐவன் ஸ்டெட்போர்டு மருத்துவமனையில் பிரசவத்தை மேற்கொள்ளுதல்.
இடம்	:	சர்.ஐவன் ஸ்டெட் போர்டு மருத்துவ மனை, அம்பத்தூர்
காலம்	:	30 –நிமிடம்
தொழில் நுட்ப முறை	:	விரிவுரை, ஒளிக்காட்சி மற்றும் செயல்முறை
பயிற்றுநர்	:	ஆய்வாளர்
துணைக்கருவிகள்	:	பவர் பாயிண்ட், துண்டு பிரசுரம்
அமர்வு	:	அரங்க அமைப்பு
பொதுவான நோக்கங்கள்	:	வகுப்பு முடிவில் தாய், தனது பிறந்த பச்சிளங்குழந்தையை பேணிக்காக்க தெரிந்து கொள்ளுதல்.

குறிப்பான நோக்கங்கள் :

முதல் குழந்தை ஈன்றெடுக்கப் போகும் தாய்மார்கள் கீழ்க்கண்ட குறிப்புகளை அறிதல்

1 பிறந்த குழந்தையின் பாதுகாப்பு என்பதின் பொருள்.

2 தாய் சேய் பாதுகாப்பின் அம்சங்கள்.

3 குழந்தை பாதுகாத்தலின் முறைகள்.

4 வெப்பநிலை சீராக்குதலை விவரித்தல்.

5 குழந்தையை போர்த்தி வைத்தலை செய்து காட்டுதல்.

6 தாய்ப்பால் ஊட்டலின் முறைகளை செய்து காட்டுதல்.

7 கை கழுவும் முறைகளை செய்து காட்டுதல்.

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		முன்னுரை : பிறந்த குழந்தை பாதுகாப்பின் மிக முக்கிய அம்சம் குழந்தையின் வசதிக்கேற்ப பால் கொடுத்தல் மற்றும் தாயின் அருகில் இருக்க வைத்தல், மற்றம் குழந்தையை காற்று அடைப்பு, குறைந்த வெப்பநிலை, காயம் மற்றும் தொற்றுநோயிலிருந்து பாதுகாத்தல்.		
1.	பிறந்த குழந்தையின் பாதுகாப்பு என்பதின் பொருள்.	**பொருள்:** பிறந்த குழந்தையின் பாதுகாப்பு என்பது தாயின் கருவறையில் இருந்து வெளிவந்த காலம் முதல் சுற்றுசூழலுக்கு ஏற்றவாறு தன்னை திடப்படுத்தி கொள்ளும் காலம் வரை கொடுக்கும் பாதுகாப்பே ஆகும்.	விரிவுரை மற்றும் பவர் பாயிண்ட்	கவனித்தல்
2.	தாய் சேய் பாதுகாப்பின் அம்சங்கள்.	**தாய்சேய் பாதுகாப்பின் அடிப்படைக் கொள்கைகள் :** 1. அன்போடும், மரியாதையோடும் பால் கொடுக்க வேண்டும். 2. உணர்வுக்கு மரியாதை அளித்தல். 3. அன்போடு தொடுதல். 4. உடம்பு மற்றும் மனரீதியாகவும் குழந்தையின் பாதுகாப்பான தூக்கத்தை தெரிந்து கொள்ளுதல்.	விரிவுரை மற்றும் பவர் பாயிண்ட்	கவனித்தல்
3.	குழந்தை பாதுகாத்தலின் முறைகள்.	**குழந்தை பாதுகாத்தலின் முறைகள் :** 1. வெப்பநிலை சீராக்குதல் 2. தாய்ப் பாலூட்டல்	விரிவுரை மற்றும் பவர் பாயிண்ட்	கவனித்தல்

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		3. நோய் தடுத்தல்		
4.	வெப்பநிலை சீராக்குதலை விவரித்தல்.	**வெப்பநிலை சீராக்குதல் :** அ) வெளி வெப்பநிலையை சீராக்குவதன் மூலம் மனித உடலின் வெப்பநிலையை சீராக வைத்துக் கொள்ள இயலும். பொதுவான வெப்பநிலை : ஆ) சரியான வெப்பநிலையின் அளவு 36.5 முதல் 37.5°C (97.7°F முதல் 99.5°F வரை) **இ) சரியான வெப்ப பராமரிப்பின்மை :** குறைந்த வெப்பநிலையால் குழந்தைக்கு சோர்வுத்தன்மை, சுவாசமின்மை, குறைவான வகிதத்தில் பால் அருந்துதல், இரத்தத்தில் சர்க்கரையின் அளவு குறைதல், மூச்சு திணறல், நாடித்துடிப்பு குறைதல் ஆகியவை ஏற்பட வாய்ப்புள்ளது. அதிக வெப்பநிலையால், இரத்தக்குழாய் விரிவடைதல், உடலில் தண்ணீரில் அளவு குறைதல், வாந்தி, தலைவலி, இரத்த அழுத்தம் குறைதல், மயக்கத்தன்மை ஏற்படும் உயர்வெப்பநிலையால் வலிப்பு நோய் ஏற்பட வாய்ப்புள்ளது. **ஈ) குழந்தையின் வெப்பநிலையை பாதுகாக்கும் முறைகள்:** ➢ குழந்தையை தாயின் அருகில் படுக்க வைத்தல்	விரிவுரை மற்றும் பவர் பாயிண்ட்	கவனித்தல்

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
5.	குழந்தையை போர்த்தி வைத்தலை செய்து காட்டுதல்.	➢ குழந்தையை துணியில் போர்த்தி வைத்தல் ➢ கங்காரு முறைப்படி பாதுகாத்தல் இம்மூன்று முறைகளின் மூலம் குழந்தையின் வெப்பநிலையை பாதுகாக்கலாம். **குழந்தையை போர்த்தி வைத்தல்:** குழந்தையை துணியால் போர்த்தி வைத்தல் என்பது, குழந்தையை குளிரிலிருந்தும் மற்றும் பயத்திலிருந்தும் பாதுகாத்தல் ஆகும். அ). தேவையான உபகரணம்: பெரிய அகலமான போர்வை. ஆ) செய்முறை: 1. கை கழுவ வேண்டும். 2. துணியை முக்கோணமாக மடித்தல். 3. மேல்பாகத்தை மடித்து விட வேண்டும். 4. குழந்தையின் தலைப்பகுதியை மடித்த பகுதியில் வைத்தல். 5. ஒரு முனையை மடித்து குழந்தையின் ஒரு பகுதியை போர்த்த வேண்டும். 6. கீழ்பகுதியில் உள்ள துணியால் குழந்தையின் கால் பகுதியை போர்த்த வேண்டும். 7. மீதம் உள்ள துணியால் குழந்தையின் முழுப்பகுதியையும் போர்த்த	விரிவுரை மற்றும் பவர் பாயிண்ட்	கவனித்தல்

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		வேண்டும். இ) போர்த்தி வைத்தலை நிறுத்தும் நேரம்: குழந்தைக்கு ஒரு வயது ஆகும்போது நிறுத்தி விட வேண்டும். ஏனெனில் குழந்தையால் கை, கால்களை சரிவர அசைக்க இயலாது.		
		தாய்ப்பால் : **அ). தாய்ப்பால் ஊட்டல் – விளக்கம் :** தாய்ப்பால் ஊட்டல் முறை என்பது பச்சிளங்குழந்தை (அ) குழந்தைகளுக்கு தாயின் மார்பகத்திலிருந்து நேரடியாக பாலூட்டுவதாகும். இதனால் குழந்தை தாயின் மார்பகத்திலிருந்து உறிஞ்சி அருந்துகிறது. **ஆ). தாய்ப்பால் ஊட்டலின் சிறப்பு முறை :** தாய், தான் ஈன்ற குழந்தைக்கு குறைந்த பட்சம் 6 மாதகாலம் பாலூட்ட வேண்டும். என்று WHO நிறுவனமும் UNICEF நிறுவனமும் பரிந்துரைக்கின்றன. ➢ குழந்தை பிறந்த ஒரு மணி நேரத்திற்குள் தாய் பாலூட்ட முற்படுதல். ➢ பிறந்த குழந்தை தாய்ப்பால் மட்டுமே கொடுக்க வேண்டும். வேறு எந்த திரவ உணவையும் கொடுக்ககூடாது. ➢ பிறந்த குழந்தையின் தேவைக்கேற்ப இரவு பகல் பாராது பாலூட்ட வேண்டும். ➢ பாட்டிலோ பிற ஆறுதல் பொருட்களையே பயன் படுத்தக்கூடாது.		

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		இ). தேவைக்கேற்ப பாலூட்டல் : பிறந்த குழந்தை ஒவ்வொன்றும் வேறுபடும். சில குழந்தைகள் 30 நிமிடத்திற்கு ஒரு முறையும், சில குழந்தைகள் நீண்ட இடைவெளிக்குப் பிறகும் தனது பசிக்கேற்ப பால்வேண்டும். மேலும் தாய், குழந்தையின் பசியை அறிந்து பாலூட்ட வேண்டும். பசி ஏற்பட்ட குழந்தையின் செயல்களாவன. ➢ குழந்தை தாயின் மார்பகத்தைத் தேடல் ➢ கை சூப்புதல் ➢ நீண்ட நேரம் தூங்காமல் விழித்திருத்தல். குழந்தை அழும்வரை காத்திருத்தல் கூடாது. ஏனெனில் அது குழந்தைக்கு ஏற்படும் பசியின் உச்சிநிலையாகும். குழந்தை அழத்தொடங்கினால் பாலூட்ட சிறிது நேரம் தேவைப்படும். **ஈ). தாய்ப்பால் ஊட்டலின் பயன்கள் :** **குழந்தைக்கு ஏற்படும் பலன்கள் :** ➢ தாய்ப்பால் குழந்தைக்கு முழுமையான உணவு ➢ எளிதில் ஜீரணமாகும் ➢ தொற்று நோய்களைத் தடுக்கும். ➢ தாயிடம் பாசம் வளர்தல் ➢ மூளை வளர்ச்சி அதிகரிக்கும்		

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		தாய்க்கு ஏற்படும் பலன்கள் : ➢ கருப்பை விரைவில் சுருங்குதல். ➢ கருதரித்தலின் கால இடைவெளி அதிகரிப்பு. ➢ மார்பகம் மற்றும் கருப்பை புற்றுநோய் கேடு குறைவு. ➢ தாயின் வேலை பளு குறைவு.		
6.	தாய்ப்பால் ஊட்டலின் முறைகளை செய்து காட்டுதல்.	**தாய்ப்பால் ஊட்டல் – அமைப்பு முறை :** **தாய்ப்பால் ஊட்டல் அமைப்பு முறை பலவகைப்படும்.** ➢ தொட்டில் முறை ➢ கால்பந்து முறை ➢ குறுக்குத் தொட்டில் முறை **தொட்டில் முறை :** ➢ தாய் சௌகரியமாக அமர்ந்து கொள்ள வேண்டும். ➢ குழந்தையின் தலை மார்பகத்தோடு பொருந்தும்படி பார்த்துக் கொள்ள வேண்டும். ➢ தாயின், ஒரு கை குழந்தையை தாங்கியவாறு இருத்தல் வேண்டும். ➢ மற்றொரு கை தன் மார்பத்தை ஏந்தியவாறு இருத்தல் வேண்டும். **கால்பந்து முறை :** ➢ தாய் சௌகரியமாக அமர்ந்து கொள்ள வேண்டும். ➢ தாய், தன் குழந்தையின் தலையை தன் கையால் தாங்கிக் கொள்ள அறிவுறுத்த வேண்டும்.	விரிவுரை மற்றும் பவர் பாயிண்ட்	கவனித்தல்

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		➢ குழந்தையின் உடலை தலையணையில் வைத்து, தாயின் இடுப்பில் அணைத்தவாறு வைத்துக் கொள்ள வேண்டும். **குறுக்குத் தொட்டில் முறை :** ➢ தாய் சௌகரியமாக அமர்ந்து கொண்டு ➢ தலையணையை தன் தொடையில் வைத்துக் கொள்ள வேண்டும். ➢ தாய், தன் குழந்தையின் தலையை தன் கரங்களால் ஏந்தியவாறு தாங்கிக் கொள்ள வேண்டும். ➢ குழந்தையை தன் மார்பகத்தின் அருகே அணைத்து, குழந்தையின் வாயில் மார்பக நுனியை வைக்க வேண்டும். **தொற்று நோய் தடுப்பு :** கிருமிகளிலிருந்து காத்தல் மூலம் தொற்று நோய் வருதலை தடுக்கலாம், சற்று ஏறக்குறைய 50 சதவீதம் கையை சுத்தமாக வைத்துக் கொள்வதன் மூலம் குளிர் மற்றும் காய்ச்சலிருந்து குழந்தையைக் காக்கலாம். **நோய் தடுப்பு முறை :** **கை கழுவுதல் :** இதன் மூலம் நோய் பரவுவதைத் தடுக்கலாம். **அ). குழந்தையை குளிப்பாட்டல் :** குழந்தையின் உடல் வெப்பநிலை சுமார் 36.5°C (97.7F)	விரிவுரை மற்றும் பவர் பாயிண்ட்	

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		இருக்கும்போது குளிப்பாட்டலாம். பிறந்த குழந்தையை 1 முதல் 2 மணிக்குள் மிருதுவான காட்டன் துணியால் துடைத்து விடவேண்டும். தேவைப்பட்டால் குழந்தையின் உடல் வெப்பநிலைக்கேற்ப முதல் குளிப்பாட்லை தள்ளி வைக்கலாம். முதல் குளிப்பாட்டலின் பின் குழந்தையின் முகம், இடுப்புப் பகுதி மற்றும் தோல் மடிப்புப் பகுதிகளை தினமும் சுத்தம் செய்ய வேண்டும். முழுமையான குளிப்பாட்டால் ஒருவாரத்தில் 2 முதல் 3 முறை செய்தல் வேண்டும். குழந்தையின் தொப்புள் கொடி விழாதவரை, குழந்தையின் தலைக்கு நீர் ஊற்றி குளிப்பாட்டலை தவிர்த்தல் வேண்டும். **ஆ) தடுப்பூசிகள் :** குழந்தை இயல்பாக தாயின் வயிற்றில் இருக்கும் போது, தாயின் தொப்புள் கொடியின் மூலம் குழந்தைக்கு நோய் எதிர்ப்பு சக்தி ஏற்படுகிறது. குழந்தை பிறந்தவுடன் தாய்ப்பால் குடிப்பதின் மூலம் நோய் எதிர்ப்பு சக்தி ஏற்படுகிறது. ஆனால் இவையெல்லாம் தற்காலிக முறைகள் ஆகும். எனவே தான் தடுப்பூசி மூலம் குழந்தைக்கு நோய்கள் வராமல் தடுக்கலாம்.		

<table>
<tr><th>வரிசை எண்</th><th>குறிப்பான குறிக்கோள்</th><th>பொருளடக்கம்</th><th>ஆய்வாளரின் செயல்பாடு</th><th>கற்போரின் செயல்பாடு</th></tr>
<tr><td></td><td></td><td>

தடுப்பூசி அட்டவணை:

<table>
<tr><th>வயது</th><th>தடுப்பூசியின் பெயர்</th></tr>
<tr><td>பிறந்தவுடன்</td><td>பி.சி.ஜி
போலியோ – 0
ஹெபடைட்டிஸ் – B1</td></tr>
<tr><td>6–வது வாரம்</td><td>டி.பி.டி. – 1, ஹிப் – 1
போலியோ–1, பி.சி.வி–1
ஹெபடைட்டிஸ் – B2
ரோட்டா வைரஸ் – 1</td></tr>
<tr><td>10–வது வாரம்</td><td>டி.பி.டி. – 2
போலியோ–2, ஹிப் – 2
ரோட்டா வைரஸ் – 2
பி.சி.வி – 2</td></tr>
<tr><td>14–வது வாரம்</td><td>டி.பி.டி–3, போலியோ–3, ஹிப்–3,
ரோட்டாவைரஸ் – 3
பி.சி.வி. – 3</td></tr>
<tr><td>6–வது மாதம்</td><td>போலியோ – 1
ஹைபடைட்டிஸ - B3</td></tr>
<tr><td>9–வது மாதம்</td><td>போலியோ – 2
எம்.எம்.ஆர் – 1</td></tr>
<tr><td>12 – வது மாதம்</td><td>டைப்பாய்டு</td></tr>
</table>

</td><td></td><td></td></tr>
</table>

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு

	ஹைபடைட்டிஸ் – A1
15–வது மாதம்	எம். எம். ஆர் – 2 வேரிசெல்லா – 1 பிசிவி கூடுதல்
16–18 வது மாதம்	டிடிபி – B1, ஹிப் – B1
18–ம் மாதம் முதல் 2 வயது வரை	ஹைபடைட்டிஸ் A2 டைப்பாய்டு கூடுதல்
4 வயது முதல் 6 வயது வரை	டிடிபி –2,போலியோ – 3 வேரிசெல்லா – 2 டைப்பாய்டு கூடுதல்

IAP - 2014

இ). குழந்தையின் டயப்பரை மாற்றுதல் :

- குழந்தையின் கால் பகுதியைத் தூக்கி, அழுக்கான டயப்பரை விலக்கி சுத்தமான ஈரத்துணியால், இடுப்புப் பகுதியை சுத்தம் செய்தல் வேண்டும். பெண் குழந்தையாக இருந்தால், முன்பகுதியையும் சேர்த்து சுத்தம் செய்ய வேண்டும். இதன் மூலம் சிறுநீர் தொற்றை தடுக்கலாம்.
- டயப்பரை இடுப்பில் கட்டும்போது, குழந்தையின் கால்களைத் தூக்கி டயப்பரை பின்புறமாக வைத்து, பின் இடுப்புப் பகுதியில் கட்டவோ (அல்லது) ஒட்டவோ வேண்டும். டயப்பர் ஈரமாக இருந்தால் உடனே மாற்ற வேண்டும்.

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
7.	கை கழுவும் முறைகளை செய்து காட்டுதல்.	**ஈ). மலம் கழித்தலின் அவசியம் :** பிறந்த குழந்தையின் மலம் பழுப்பு கலந்த பச்சை நிறமாகத் தோன்றும் நான்கு ஐந்து நாட்களுக்குப்பின் குழந்தைக்கு உணவூட்டலுக்கு ஏற்ப மலத்தின் நிறம் மாறுபடும். சில சமயம்வெளிரா பச்சையாகக் காணப்படும். பிறந்த குழந்தை நாளொன்றுக்கு சுமார் 8 முதல் 10 வரை சிறுநீர் கழிக்கும். ஒரு நாளில் சுமார் 6 முறையாவது குழந்தையின் டயப்பரை மாற்றுதல் அவசியம். பொதுவாக சிறுநீர் வெளிர் மஞ்சளாக இருத்தல் வேண்டும். **உ). ஆடை அணிவித்தல் :** குழந்தைக்கு எப்பொழுதும் பருத்தி ஆடைகளையே அணிவித்தல் வேண்டும். பருத்தி ஆடைகள் தட்பவெப்பநிலைக்கேற்றவாறு குழந்தையின் மிருதுவானத் தோலில் எழும் வியர்வையை உறிஞ்சி காக்கும். புதிய ஆடை ஆனாலும் ஒருமுறை துவைத்து உலர்த்தியே அணிவித்தல் வேண்டும். இதனால் தோலில் ஏற்படும் சொறி மற்றும் அரிப்பு உணர்வுகளைக் காக்கும். பிரத்தியோக சோப்பு பவுடரில் துணிகளை துவைத்து சூரிய ஒளியில் உலர்த்த வேண்டும். **கைகழுவும் முறை :** ➢ படிநிலை 1 : கையை ஈரமாக்கி சோப்பிட்டு நுரை வரும் வரை தேய்த்தல். ➢ படிநிலை 2 : ஒரு கையால் மற்றொரு கையின் பின் புறத்தை	விரிவுரை மற்றும் பவர் பாயிண்ட்	கவனித்தல்

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		தேய்த்தல். ➢ படிநிலை 3 : இரு கைகளின் விரல் நடுப்பகுதியைத் தேய்த்தல். ➢ படிநிலை 4 : இரு கை விரல்களையும் இணைத்துத் தேய்த்தல். ➢ படிநிலை 5 : இரண்டு கட்டை விரல்களையும் சுற்றித் தேய்த்தல். ➢ படிநிலை 6 : இரு உள்ளங்கைகளையும் சுழற்றித் தேய்த்து, நீரால் கழுவி உலர்ந்த துணியால் துடைத்தல் வேண்டும். **முடிவுரை :** குழந்தை பிறப்புக்கு பின் உள்ளகாலகட்டம் குழந்தைக்கும் மற்றும் தாய்க்கும் ஒரு அபாயகரமான காலகட்டம் பின்வரும் முறைகளை தாய்மார்களுக்கு கற்றுத்தர வேண்டும். குழந்தை பிறப்புக்குப் பின் தாய்மார்கள் மருத்துவமனைக்கு வரும்போது குழந்தைக்கு பின்வரும் அறிகுறிகள் காணப்பட்டால் அதற்கான முறையான சிகிச்சையை கையாள வேண்டும். • பால் அருந்தாதிருத்தல் • வலிப்பு நோய் • அதிகப்படியாக (மூச்சுவாங்குதல்) நிமிடத்திற்கு 60 முறை. • வெகுவாக விலா இழுத்தல் • தானாக செயல்படாதிருத்தல் • காய்ச்சல் (37.5° மேலாக) • வெப்பநிலை குறைவு (35.5°C)		

வரிசை எண்	குறிப்பான குறிக்கோள்	பொருளடக்கம்	ஆய்வாளரின் செயல்பாடு	கற்போரின் செயல்பாடு
		• பிறந்த 24 மணிக்குள் மஞ்சள் காமாலை அல்லது உள்ளங்கை மற்றும் பாதங்கள் மஞ்சள் நிறத்தில் இருத்தல். மேற்கூறிய அறிகுறிகள் காணப்பட்டால் குழந்தைகளுக்கு முறையான சிகிச்சையை அளிக்குமாறு தாய்மார்களுக்கு குழந்தை பிறப்புக்குப்பின் மருத்துவமனைக்கு வரும்போது வலியுறுத்த வேண்டும்.		

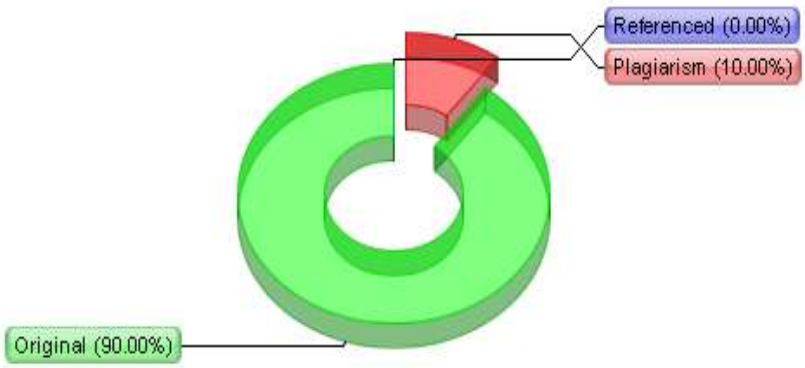
APPENDIX -

Plagiarism Detector - Originality Report:

Analyzed document:

"Ms. Punithavathi.docx"

Relation chart:



Core version:	885
Size:	78606 words
Registered to:	Yayathee Subbarayalu
Generated:	8/12/2015 3:10:29 PM
License type:	Plagiarism Detector

Distribution graph:

APPENDIX – L

M.Sc (N) DISSERTATION EXECUTION PLAN

S.NO	ACADEMIC CALENDER MONTHS	OCTOBER 2013 to SEPTEMBER 2014												OCTOBER 2014 to SEPTEMBER 2015											
		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
A	**Conceptual phase**																								
1	Problem identification																								
2	Literature review																								
3	Clinical fieldwork																								
4	Theoretical framework																								
5	Hypothesis formulation																								
B	**Design & planning phase**																								
6	Research design																								
7	Intervention protocol																								
8	Population specification																								
9	Sampling plan																								
10	Data collection plan																								
11	Ethics procedure																								
12	Finalization of plans																								
C	**Empirical phase**																								
13	Data collection																								
14	Data preparation																								
D	**Analytical phase**																								
15	Data analysis																								
16	Interpretation of results																								
E	**Dissemination phase**																								
17	Presentation or report																								
18	Utilization of findings																								
	Calendar months	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9

PHOTOGRAPHS

Informed written consent obtained for publishing photographs in Research Dissertation Book

Informed written consent obtained for publishing photographs in Research Dissertation Book