



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 5.2  
IJAR 2018; 4(5): 445-449  
www.allresearchjournal.com  
Received: 12-03-2018  
Accepted: 17-04-2018

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## A study to assess effect of information booklet on care of low-birth weight neonate on knowledge and practices of mothers in selected areas

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### Abstract

**Introduction:** Low birth weight is one whose birth is less than 2500 gm irrespective of the gestational age. India is one of the country with the highest incidence of Low Birth Weight, which has nearly 7.5-million Low Birth Weight babies' annually- the highest of any other country. Motherhood is a beautiful and joyous experience to a woman. The health of the mother during pregnancy is important to give birth to a healthy baby. A study to assess effect of information booklet on care of low-birth weight neonate on knowledge and practices of mothers in selected areas materials and.

**Methods Research Approach:** evaluative approach. Research design used was Pre experimental one group pretest post test research design. The General Systems Theory was used for the study which is developed by Ludwig Von Bertalanffy. The setting for this study was the selected areas in PCMC, Pune. Probability purposive Sampling Technique was used for 60 sample. The tool developed which includes section I= the demographic variables SECTION II: Self structured questionnaire SECTION III: Observation checklist. Tool validity was done and tool found reliable. Study found feasible after pilot study.

**Results:** It has been observed that. The education, occupation of mother are the demographic variables which were found to have non significant association with knowledge of mothers regarding care of low birth weight neonate. Since all the p-values are large, (greater than 0.05), No other demographic variables was found to have non significant association with practice of mothers regarding care of low birth weight neonate. The 't' value between pre and post test computed for knowledge and practices on care of low birth weight neonate indicates that there is a significant improvement in scores from pre to post test at 5 % level i.e.  $p < 0.05$ . Hence Research Hypothesis H1 is accepted.

**Conclusion:** It has been observed that pre test and post test level of knowledge and practice score was found to be significant. This result shows that information booklet is effective for improving knowledge and practice of mother.

**Keywords:** Assess, effect, information booklet, care of low-birth weight neonate, knowledge, mothers

### Introduction

Birth is the most important determine of perinatal, neonatal and post neonatal outcome. The birth weight of an infant is the single most important determined of its chance of survival, health, growth and development. The average weight of newborn varies from 2 to 3.1 Kg. WHO has defined LBW as one whose birth is less than 2500 gm irrespective of the gestational age. India is one of the country with the highest incidence of Low Birth Weight, which has nearly 7.5-million Low Birth Weight babies' annually- the highest of any other country. Motherhood is a beautiful and joyous experience to a woman. The health of the mother during pregnancy is important to give birth to a healthy baby. Birth weight is a critical determinant for survival in the neonatal period and for future growth and development of the newborn. The newborn with the low -birth weight starts life with a handicap and this way persists in life. Low -birth weight (LBW) refers to all newborn whose weight at birth is less than 2500g irrespective of the duration of gestation.

### Research Design

Pre experimental one group pre test –post test Research design.

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## **Variables Under Study**

### **Dependent Variable**

In this study dependent variable is Knowledge and practice of mothers regarding care of low -birth weight neonate.

### **Independent Variable**

In this study independent variable is Information booklet on care of low-birth weight neonate.

### **Research Setting**

The setting for this study was the selected areas like Phulenagar, Balaginagar and Gavalimatha. in PCMC, Pune.

### **Population**

The population of the present study conducted in Mothers having low-birth weight neonates residing in PCMC area.

### **Sample**

The sample selected for the present study comprised of Mothers of low-birth weight neonate and are selected areas (Phule nagar, Balaginagar, and Gavalimatha

### **Sample Selection criteria (Inclusion and Exclusion)**

#### **Inclusion criteria**

- Postnatal mothers who have low birth weight neonate
- Mothers who know to speak, read and write in English or Marathi
- Mothers who are willing to participate

#### **Exclusion criteria**

- Mothers who are sick during the period of data collection

**Sample Size:** 60

### **Sampling technique**

Non Probability purposive Sampling Technique

### **Development of tool**

Opinions and suggestions were taken from the experts, which helped in determining the important areas to be included.

### **Description of the tool**

It includes three sections:

**Section A:** Demographic variable consist of age, religion, occupation, education, type of family, family monthly income, previous knowledge and source of knowledge.

**Section B:** Self structured questionnaire to assess effect of information booklet on the knowledge of mothers on care of low birth weight neonate. Questions different areas like of low birth weight neonate, causes, characteristics, problems of low birth weight, care low birth weight, prevention of low birth weight.

**Section C:** Observation checklist to assess practice of mother on care of low birth weight neonate

### **Validity**

The tool was validated by 15 experts from different specialties i.e., child Health Nursing, doctors from pediatric department, community health nursing, obstetrics nursing,

statistics etc. Based on the suggestions given by the experts modification like in section B que.no1 all potions are same so they suggest change options. etc. and rearrangements in the all three sections were done. Their valuable suggestions and corrections were taken into consideration and after discussion with the guide the tool was finalized.

### **Ethical consideration**

- Researcher had obtained approval from appropriate review boards to conduct the study.
- Researcher had taken formal permission from mothers of low birth weight neonate to conduct study.
- Only the samples who had signed the consent form are included in the study.
- Confidentiality of the data is maintained strictly.

### **Reliability**

The reliability was done by test retest method for knowledge and Inter Rater Method for practices. the reliability coefficient of the tool was( 0.82), Reliability of tool (Checklist) by Intra Class Co relation (0.71) Hence the tool was reliable.

### **Plan for data collection**

- Ethical committee clearance
- Permission from the carporator of the selected areas.
- Consent from mothers of low birth weight neonate
- The investigator approached the mothers of selected samples, informed them regarding the objectives of the study and obtained their informed consent after assuring the confidentiality of the data.
- The data collection was done among selected sample by using structured questionnaires and observation checklist.
- The duration of the data collection for each sample was 45 minutes.
- Pre test was administered followed by Information booklet was given to the samples then the post test was conducted after one week. In data collection demographic data was also obtained to find out the association between knowledge and practices.

### **Data analysis and interpretation**

- Items related to the background variables were be analyzed in terms of frequency and percentage
- Frequency distribution were plotted to represent the final score.
- Mean, standard deviation of the test was computed.
- The association with the selected demographic variables would be assessed by t test
- The findings were documented in tables, graphs and diagrams.

### **Pilot study**

After doing pilot study investigator found that it is feasible to carry out actual study. In these study data was done among selected mothers of low birth weight neonate

### **Result**

The major findings of the study were based on the objective of the study.

### **Section I Demographic characteristics**

I have included of age, religion, occupation, education, type of family, family monthly income, previous knowledge and source of knowledge

Majority i.e.66.7% of the samples were in the 20 to 30 years of age. The highest i.e. 40 % of samples are educated up to secondary level.

- Majority i.e. 63.3 % of the samples were house wife and highest percentage. i.e. 46.7 % of samples were from nuclear family.
- Majority i.e.30% had a monthly family income below Rs.5000 and the highest percentage i.e. 60 % of samples were Hindu.
- Majority i.e. 58.3 % of samples were having previous knowledge about low birth weight and. majority i.e. 26.7 % of samples gained this knowledge from health personnel.

### **Section II: Assessment of knowledge and practice of mothers regarding care of low birth weight neonate before information booklet**

- In pre test, the maximum knowledge score was in the meaning (i.e.) 0.51 (51.7 %). Whereas the minimum knowledge score was in the eye care i.e.0.26 (13.3%).
- In pre test practice score was 7.23 (40.18 %) level regarding care of low-birth weight neonate among mothers.

### **Section III: Findings related to knowledge of mothers regarding care of low-birth weight neonate after information booklet**

- In the post test, the maximum knowledge score was in the characteristic (i.e.) 0.71 (77.3 %). Whereas the minimum knowledge score was in the causes (i.e.).58.8 %.
- In post test practice mean score was 14.45(80.27%) regarding care of low-birth weight neonate among mothers.

### **Section IV - Analysis of data related to the effect of information booklet on care of low birth weight neonate.**

In pre test the highest mean score was 0.86 which was 43.3 % of the total score which was observed on the area of "cord care" whereas the lowest mean score was 0.21 which was 21.7 % of the total score was observed on the area of "Problems" of low birth weight neonate. Whereas during post test it was observed that the highest mean score was 1.45 which was 73.2 % of the total score on the area of "cord care" and the lowest mean score was 0.55 which were 58.8 % of the total score on "causes" in low birth weight neonate. In pre test practice scores on care of low weight neonate reveals that during pre test that the mean score was 7.23 which was 40.80 % Whereas during post test it was observed that the mean score was 14.45 which was 80.27 % . which indicates that each gain in the post test is significant at 0.05 level of significance.

### **Section V- Analysis of data related to association of knowledge scores of mothers with their selected demographic variables**

Since all the p-value are large, (greater than 0.05), the demographic variables was found to have non significant

association with knowledge and practice of mothers regarding care of low birth weight neonate

### **Conclusion**

It has been observed that there is a difference between pre test and post test level of knowledge and practice score was found to be non significant (less than 0.05). This result shows that information booklet is effective for improving knowledge and practice of mother.

### **Discussion**

This study involved one group pre-test and post-test designs, non-probability purposive sampling technique used to draw samples. The size of the sample was 60 mothers of low birth weight neonate.

A similar study was conducted in Mumbai to assess effect of information booklet of knowledge and practices among mothers regarding care of low birth weight neonate. This study was done by Mercy R in 2012. A pre experimental study was done, using pre-tested post test. In this study tool was used structured questionnaires for assessing, knowledge of mother and for practices observational checklist was used. A total of 60 sample was used for data collection. Data was analyzed manually. In pre test 2.67 % of the samples had poor level of knowledge score, 88.33% had average level of knowledge score. And in post test 86.33% of the samples had good level of knowledge score and 54 13.67% had excellent. The difference between pre test and post test level of knowledge score was found to be significant difference. In pre test 80 % of the samples had average level of practice score. In post test 20% of the samples had good level of practice score and 80% had excellent. The difference between pre test and post test level of practice score was found to be significant. In my studies pre test 1.67 % of the samples had poor level of knowledge score, 98.33% had average level of knowledge score. In post test 88.33% of the samples had good level of knowledge score and 11.67% had excellent and In pre test 100 % of the samples had average level of practice score. In post test 15% of the samples had good level of practice score and 85% had excellent. so information booklet is effective for improving knowledge and practice of mothers.

### **Limitations**

The study is limited to:

- Mothers who can understand English Marathi Hindi.
- Limited setting and samples.
- Limited to those who are willing to participate

### **Recommendations**

Following study can be undertaken in relation to present study.

- A similar study can be replicated by taking larger sample to validate and for better generalization of the findings
- Comparative study can be done in different hospitals on the same topic
- The study can be undertaken in different settings and different community settings
- A similar study may be repeated with a control group for more generalization.
- A follow up study is needed to assess the knowledge and practices of mothers regarding care of low birth weight

### Acknowledgement

“Lord, thank you for walking with us through the seasons of our lives. Let us be grateful to the people who make us happy; they are the charming gardeners who make our souls blossom.”

It is something beyond one's human ability to put in words one's sincere feeling of gratitude to those whom one owes something.

I am grateful to DR. Mrs Khurshid Jamadar, Principal, Dr. D. Y. Patil College of Nursing, for her continuous guidance and support for the study. I take this opportunity to sincerely express my gratitude, devotion and regard for my esteemed guide Ms. Vaishali Jagtap Lecturer, Dr. D. Y. Patil, College of Nursing, Pimpri, Pune; for her continuous guidance, sustained patience, valuable suggestions & timely support from the inception till completion of the study. It was a privilege to be guided by her. I sincerely express my gratitude, devotion & regards for my research coordinator Ms. Sucheta Yangad, Associate Professor, Dr. D. Y. Patil College of Nursing, Pimpri, Pune, for her continuous guidance, sustained patience, valuable suggestions and timely support from the inception till completion of the study.

I take this opportunity to express my sincere gratitude towards the entire faculty of Dr. D. Y. Patil College of Nursing, Pimpri Pune-18, as well as the administrative staff for their support & assistance throughout the study period. I would like to take this opportunity to thank all experts in the field of Pediatrics as well as faculty of nursing from various institutes for their valuable suggestions & validation of the tool and planned teaching.

I am grateful to Mrs. Archana Rathod for editing the manuscript. I am also grateful to Mr. Rahul guidance in the statistical analysis. Also express my gratitude to my husband, mother-in-law, parents & all family members who have been a constant source of inspiration; and help throughout the study, without whose support I could not have completed this study.

Lastly, I would like to thank all the participants who have made this study possible.

My sincere thanks to all my colleagues, friends & well-wishers for their good wishes for this study

Above all I owe my efforts and success to Almighty God for His abiding grace, which has made this possible.

The proverb that ‘One can never make it alone’, could never be truer than in this situation. I have so many well-wishers that I find it impossible to name them all however, deep down in my heart; I shall always remember each and every one of them for their contribution.

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