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A Study To Assess The Effectiveness Of Planned Teaching On Knowledge Regarding Prevention of Low Birth Weight Babies Among Primigravida Mothers

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ABSTRACT

Background : A newborn baby is a god's divine precious gift given to a mother. Hence the birth of a Newborn is one of the most marvelous joyful events that occur in every woman's lifetime. The primary cause of very low birth weight is premature birth (born before 37 weeks gestation). Very low birth weight babies are often born before 30 weeks of pregnancy. **Method:** This study was based on Quasi experimental one group pre-test and post-test research design. In this study, 50 primigravida mothers are included. The sampling technique used in this study was non probability convenience method of sampling. Data was collected by using questionnaires. **Results:** that in pre test 14(28%) of the primigravida mothers were having poor knowledge, 68% of them had average and 4% of them had good level of knowledge score. The minimum score in pre-test was 3 and the maximum score was 11, the mean score for the pre-test was 6.88 ± 2.04with a mean percentage score of 34.40 ±10.23 whereas in post-test 8(16%) of the primigravida mothers were having average knowledge, 70% of them had good and 14% of them had excellent level of knowledge score. **Conclusion** Thus it is concluded that the planned teaching on prevention of low birth weight among primigravida mothers was effective in improving the knowledge.

KEYWORDS Planned Teaching, Low Birth Weight Babies, Knowledge, Primigravida Mothers.

INTRODUCTION

Birth is the most important determine of perinatal, neonatal and post neonatal outcomes. The birth weight of an infant is the single most important determine do fits chance of survival, health growth and development. WHO has defined LBW as one whose birth is less than 2500 gm irrespective of the gestational age[1]

Low birth weight is a term used to describe babies who are born weighting less than 2.500 grams (5 pounds, 8 ounces). Pre-term babies are those who are born before the 37th week of pregnancy. Since they have not completed their full term and development in their mother's womb, they have a low birth weight. However, low birth weight babies are full term babies (born in the 39th or 40th week of pregnancy) but weigh much less than 2500 grams.[2]

The greater numbers of multiple birth babies who are more likely to be born early and weight less. Over half of multiple birth babies have low birth weight compared with only about 6 percent of single birth babies. Babies with low birth weight look much smaller than other babies of normal birth weight. A low birth weight baby's head may appear to be bigger than the rest of the body and he/she often looks thin with little body fat.[3]

Much of a baby's weight is gained during the latter part of pregnancy. Another cause of very low birth weight is intrauterine growth restriction (IUGR). This is when a baby does not grow well during pregnancy because of problems with the placenta, the mother's health, or birth defects. Most very low birth weight babies who have IUGR are also born early, and are both very small and physically immature. these infants may suffer from infection, weakened immunity, learning disabilities, impaired physical development and, in severe cases, die soon after birth.[4]

Global incidence of LBW according to WHO (2012) states that Bangladesh has the Height incidence of 35 percent and India ranks second with30%. The rates in other Countries are: Pakistan-21%, Sri Lanka-17%, Singapore-8%, USA-8%, UK-8%, Thailand-7%, China-6%, Switzerland-6%, and Sweden-4%.Globally, more than 20 million infants are born with low birth weight. The number of low birth weight babies is concentrated in two regions of the developing world. Whereas 72% of LBW infants are born in developing countries.[5]

Researcher, during her clinical posting found that the problem of low birth weight in the hospital. Researcher felt that each mother should have adequate knowledge to take care of her baby. Sometimes unfortunately she will face some situation that she will not expect in her life. Some birth abnormalities and other problems may affect mother as well as family. Hence, the investigator felt the need to strengthen the existing maternal services to reduce low birth weight (LBW) and importance to educate primigravida mothers to have enough knowledge regarding what the responsible factors for low birth weight are. These made the researcher to select planned teaching, one of the best teaching method, by which, the primigravida mother will acquire knowledge regarding prevention of low birth weight.

OBJECTIVES:

- To assess the knowledge of primigravida mothers on prevention of low birth weight babies.
- To assess the effectiveness of planned teaching on prevention of low birth weight babies among the primigravida mothers.
- To find out the association between post-test knowledge scores with demographic variable..

ASSUMPTIONS:

1. Primigravida mothers will have some knowledge regarding prevention of low birth weight babies.
2. The plan teaching will enhance knowledge of primigravida mothers about prevention related to low birth weight.

HYPOTHESIS:

- H0: There is no significant difference between pre-test and post-test knowledge scores of the primigravida mothers regarding prevention of low birth weight.
- H1: There will be a difference between pre-test and post-test knowledge scores of the primigravida mothers regarding prevention of low birth weight.

MATERIAL AND METHOD: This study was based on Quasi experimental one group pre-test and post-test research design. In this study, 50 primigravida mothers are included**. Inclusion Criteria** 1) Primigravida mother (First trimester and second trimester) 2) Who are willing to participate in the study 3) Those who can able to understand and speak Marathi and Hindi.

Exclusion Criteria 1) Multipara, primipara, Nullipara 2) Those who are mentally ill. **Development of tools:** Structured questionnaire for accessing the knowledge of primigravida mother regarding selected prevention of low birth weight babies A structure questionnaire consists of two section, section 1, and section 2.**Section 1** is consisting of demographic characteristics regarding primigravida mothers, i.e. age, religion, type of family, education, occupation. **Section 2** is consisting of 20 multiple choice questions to assess the knowledge regarding prevention of low birth weight babies in primigravida mothers. For the present study the validated tool used was structured questionnaire. The tool was in Hindi. Data was collected within 6 days by the group members' pre test data collection was followed by structured teaching programme. Structured teaching programme was given to the subject on the same day after pre test any queries raised by the subjects were clarified after the structured programme. Post test data collection with the same questionnaire was done 6 days after structured teaching programme. Samples were selected by Non- probability convenience sampling, which were available during the study. Prior to collection of the data, permission was obtained from the authority persons. And the informed consent from the entire participants was taken before starting the study. Data was collected by using questionnaires. The investigator introduced herself and obtained consent from women who were willing to participate. Purpose and important of research study was explained before collection of data.

RESULTS:

This study shows that 46.0% of the samples were in the age group of 21-24 years. Religion reveals that the majorities 80.0% of the samples were having Hindu; educational status reveals that the majorities 58.0 % of the samples were having higher secondary education. Occupation shows that the majority 94.0%of the samples were house wives. Their income, illustrates that the majorities 50.0 %had the family income below 20000-30000(Rs.). 64.0% of sample were in nuclear family . 66.0% of sample were mixed vegetarian.

The study shows that in pre test 14(28%) of the primigravida mothers were having poor knowledge, 68% of them had average and 4% of them had good level of knowledge score. The minimum score in pre-test was 3 and the maximum score was 11, the mean score for the pre-test was 6.88 ± 2.04with a mean percentage score of 34.40 ±10.23 whereas in post-test 8(16%) of the primigravida mothers were having average knowledge, 70% of them had good and 14% of them had excellent level of knowledge score. The minimum score in post-test was 8 and the maximum score was 19, the mean score for the post-test was 13.28 ± 2.49 with a mean percentage score of 66.40 ± 12.45. The planned teaching programme on overall knowledge regarding prevention of low birth weight babies among primigravida mothers of rural area in Wardha district was effective. Thus the H_1 is accepted. This shows the association of knowledge scores with age in years of primigravida mothers. The tabulated 'F' values was 2.76 (DF=3, 46) which is much less than the calculated 'F' i.e. 2.89 at 5% level of significance. Also the calculated 'p'=0.045 which was much less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that age in years of primigravida mothers is statistically associated with their post-test knowledge score. There was no any association with demographic variables.

DISCUSSION: A study was conducted on major birth defects in very low birth weight infants in the Vermont oxford network, major birth defects were reported from a list of 40 defined major defect or if they were considered lethal or life threatening. The most common categories were chromosomal anomalies [20%] named syndromes, sequences, and associations [90%] and gastrointestinal [14%], cardiovascular [11%] and nervous system [10%] anomalies. Infants with major birth defects accounted for 16.3% of deaths and 18.9%of major surgical procedures but only for 2.9% of total hospital days. Major birth defects accounted for 16% of all deaths in VLBW infants.[6]

A study conducted on mortality and rate of low birth weight in multiple pregnancies some statistical problems, by means of statistical methods there will be demanded the increased rate of premature and mortality of multiple pregnancies. Mortality by birth weight and percentiles by birth weight to gestational age are used at this study. The special position of multiple pregnancies has been discussed and compared with singletons related to the different distribution of birth weight and the associated problems.[7]

A study was conducted on maternal biosocial factors affecting low birth weight. The causes of low birth weight are multifactor with genetic, placental, fetal and maternal factors interplaying with each other. To assess the influence of some of the maternal biosocial factors on the variance of birth weight, this study was undertaken. A total of 984 consecutive live birth delivered at an urban hospital were analysed. The rate of LBW was 28.3% and preterm accounted for 3.2%. a strong correlation existed between birth weight and maternal height, weight, age ANC visits and risk status at pregnancy. A short, malnourished, young, unregistered or primiparous mother was associated with a higher rate of LBW. Result indicates that on multiple regression analysis it was noted that maternal weight, parity and ANC visit independently affected the birth weight of new born. Therefore emphasis needs to be given to maternal biosocial factors which are amenable to improvement to reduce the incidence of low birth weight. This can be done by selectively targeting interventions to improve nutrition and curtailing parity and promoting contraception.[8]

A study was conducted on analysis of factors affecting the incidence of low birth weight babies in hospitals. In this study an analysis was made to observe the incidence of low birth weight babies and to determine significant factors affecting the level of low birth weight by mathematical tests and multiple classification analysis. The finding of the present study show the percent of low birth weight babies of mothers were completely depends upon no prenatal care was high at the time of pregnancy. Thus, significant factors affecting the incidence of low birth weight babies are the young age of the mother, short inter pregnancy interval, low education of mother, lack of prenatal care, and experiencing pregnancy wastages.[9]

The present study shows a baby's low birth weight at birth is either the result of preterm birth (before 37 weeks of gestation) or of restricted fetal (intrauterine) growth. Low birth weight is closely associated with fetal and neonatal mortality and morbidity, inhibited growth and cognitive development, and chronic diseases later in life.

NURSING IMPLICATIONS

Implication in nursing practice: Nurses should enhance their professional knowledge. The findings of the study can be used to bring about the awareness among primigravida mothers regarding the prevention of low birth weight babies. It can be useful for the future generation in the improvement of knowledge.

Nursing education : The student nurse can use the instrument for the study for collecting information regarding prevention of low birth weight babies among primigravida mothers during their community posting and can give proper education to both the students and to parents.

Nursing administration: Nursing administration can use the findings of the study in formulating educational policy for primigravida mothers. It will help to give awareness among primigravida mothers to take action against prevention of low birth weight babies.

Nursing research: The nurse researcher can use findings of the study as base line data to conduct large international research to assess the knowledge and attitude of the primigravida mothers regarding prevention of low birth weight babies.

RECOMMENDATIONS

- A large scale study among primigravida mothers can carry out

to generalize the findings.

- A study to assess the attitude and knowledge of primigravida mothers about the prevention of low birth weight babies.

CONCLUSION

The higher secondary school students have average knowledge regarding prevention of low birth weight babies among primigravida mothers. There was a significant increase in the knowledge of the subjects after the administration planned teaching. The paired 't' test computed for pre test knowledge and post test knowledge score which is indicate a highly significant difference in the knowledge scores among the primigravida mothers. Thus it is concluded that the planned teaching on prevention of low birth weight among primigravida mothers was effective in improving the knowledge.

REFERENCES:

1. Simhan HN, CaritisSN (2009). "Prevention of pre term delivery". New England journal of medicine 357(5):477-482
2. Nursing and Midwifery Research Journal, vol-7,no-4,Oct 2011
3. Gupta suraj, "The short textbook of paediatrics," jaypee brothers medical publisher, 10TH edition, page no:614
4. United Nations children's Fund and the World health organisation, low birth weight; Country regional and global estimates, UNICEF and WHO, New York and Geneva, 200010, p.9.
5. GautahamK.Suresh,Major birth defects in very low birth weight infacts,The journal of pediatrices,volume 139,issue 3,page no.366-373,sep 2002(J)
6. UNICEF, SocialMoniter 2003'UNICEF Innocent Research Centre,Florence,2003,[http;//www.uniceficdc.org/publications
7. Sushma malik, maternal biosocial factors affecting low birth weight, Indian journal of paediatrics,vol64,no.3, 2004(J)
8. http://www.aboutkidshealth.co/
9. Sequelae of low birth weight, annual review of medicine vol.16,405-418,2007