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"A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING CAUSES AND PREVENTION OF LOW BIRTH WEIGHT BABIES AMONG ANTENATAL MOTHERS OF SELECTED PRIMARY HEALTH CENTRE, KOLHAPUR."

Nursing

Ms. Leena Lokhande
Dept. of Child Health Nursing, D. Y. Patil College of Nursing, Kolhapur.

ABSTRACT

OBJECTIVE: 1.To assess the knowledge regarding causes and prevention of low birth weight baby among antenatal mothers.
METHOD: The samples for the present study were 100 antenatal mothers of selected primary health centre, Kolhapur. Non probability purposive sampling technique was used for the study. Tool consist of structured knowledge questionnaire .The demographic variables include age, education, diet, source of information, monthly income, occupation, type of family.
RESULT: 100 samples were selected conveniently from selected Primary Health Center of Kolhapur. The findings of the study revealed that the level of knowledge scores among antenatal mothers. The samples were having average knowledge 60(60%), were31 (31%) good knowledge and 09(09%) of them were having poor knowledge. The Mean was 14.09, Median was 13.5, Mode was 16,Range was 13 and Sd was 2.43 knowledge scores of antenatal mothers.
CONCLUSION: Findings of the shows that majority of the ante natal mothers .Overall 09 (09%) having poor knowledge, therefore it is necessary to provide adequate knowledge regarding causes and prevention of low birth weight baby.

KEYWORDS

knowledge; causes; prevention; LBW; mothers.

INTRODUCTION

"Prevention is the key, and rest is the cure for most people."
Charles Carroll

India ranks second in population all over the world. India is also called as a diversered country as it has a great diversity in culture, religion, caste, creed, race, society, class etc. Due to which India is well versed all over the world.

But every coin has two sides which is a fact of the truth. India is not only well versed for diversity, technology, inventions but also for health and environmental issues. This gives India a black spot. There are many health issues right from the new born till the old age.

A history of morbidity and mortality is also considered in health record of India, especially the neonatal and infants' rate. This rate is used to detect the exact rate of all the complications in neonates and infants. There are different kinds and types of complications in neonates and infants example: - Low birth weight, prematurity, intra uterine grown retardation, jaundice, etc. These are mostly seen in developing countries. Countries can reduce their neonatal and infant mortality rates by improving the care to the neonates.[1]

There are different kinds and types of treatment given to different types of complication, but there is one treatment in common that's Prevention. Prevention can be one method of treatment. The complications can be prevented by providing proper care, medications, health education, and regular checkups e t c. All this can be prevented in the mother's antenatal period. Child bearing is a beautiful and joyful experience of a women's life so taking care of it is a big responsibility not only the mothers but also the society. The weight of the infant at birth is a powerful predictor of infant growth and survival, and is dependent on maternal health and nutrition during pregnancy. Pregnancy is the fertilization and development of one or more offspring, known as an embryo or fetus, in a woman's uterus. The period from conception to birth. After the egg is fertilized by a sperm and then implanted in the lining of the uterus, it develops into the placenta and embryo, and later into a fetus. Pregnancy usually lasts 40 weeks, beginning from the first day of the woman's last menstrual period, and is divided into three trimesters, each lasting three months. The most common complication is low birth weight baby.[2]

Lowbirth weight (LBW) has been defined by the World Health Organization (WHO) as weight at birth of less than 2.5 kg. The global prevalence of LBW is 15.5%, which amounts to about 20 million LBW infants born each year, 96.5% of them in developing countries. LBW can be a consequence of preterm birth (before 37 completed weeks of gestation), small size for gestational age (SGA, defined as weight for gestation less than 10th percentile), or a combination of both. Intrauterine growth retardation, defined as slower than normal velocity of fetal growth, is usually responsible for SGA. The term "LBW" thus includes a heterogeneous group of infants: some who are born early, some who are born at term but SGA, and some who are both born early and SGA.Being born with LBW is generally recognized as a disadvantage for the infant. Preterm birth is a direct cause of 27% of the 4 million neonatal deaths that occur globally every year.

Preterm birth and SGA are also important indirect causes of neonatal deaths. Directly or indirectly, LBW may contribute to60% to 80% of all neonatal deaths. LBW infants are at higher risk of early growth retardation, infection, developmental delay and death during infancy and childhood. Experience from developed and low- and middle-income countries has clearly shown that appropriate care of LBW infants, including their feeding, temperature maintenance, hygienic cord and skin care, and early detection and treatment of problems such as infections can substantially reduce mortality. Interventions to improve feeding are likely to improve the immediate and longer-term health and well-being of the individual infant and have a significant impact on neonatal and infant mortality at a population level. In the 1960s in the United Kingdom, better feeding was one of the first interventions for preterm babies that were associated with reduced case fatality in hospital settings before the advent of intensive care. Kangaroo Mother Care for LBW infants weighing less than 2 kg, which includes exclusive and frequent breastfeeding in addition to skin-to-skin contact and support for the mother- infant dyad, has been shown to reduce mortality in hospital-based studies in low- and middle-income countries.[3]

Studies from India have shown that improved care of LBW infants in the community can be highly effective in improving their survival. LBW infants can be classified according to their gestation into term (born after 37 and before 42 completed weeks of gestation) and preterm (born up to 37 completed weeks of gestation). Infants in each of these categories can be further divided into two groups based on whether or not they are SGA. LBW infants are classified as very low birth weight (VLBW) if their birth weight is less than 1.5 kg, and as extremely low birth weight (ELBW) if their birth weight is less than 1 kg. Preterm infants of less than 32 weeks gestation are at greatest mortality risk, followed by preterm infants of 32-36 weeks gestation who are also SGA, preterm infants of 32-36 weeks gestation who are not SGA, and term. LBW infants. All these groups have a higher mortality risk than infants who do not have LBW.

WHO guidelines for feeding of LBW infants have not been available. The quality of care received by LBW infants in many low- and middle-income countries is inadequate. These infants are often not breastfed and many times not fed at all in the first hours and days of life. The objective of these guidelines is to improve the quality of care received by LBW infants through improved capacity of the health workers who care for these infants. These guidelines were developed using funding to the Department of Maternal, Newborn, Child and Adolescent Health from the United States Agency for International Development. The guidelines will be reviewed and updated in 2014, i.e. three years from the date of their publication.[4]

Need For The Study:

Low birth weight (less than 2,500 grams) is the single most important factor affecting neonatal mortality and a significant determinant of post neonatal mortality. Low birth weight infants who survive are at increased risk for health problems ranging from neuro developmental disabilities to respiratory disorders. The Healthy People 2010 objective for low birth weight established the target prevalence of 5 percent. In 2001, the U.S. prevalence of low birth weight (National Vital Statistics Reports) for all race/ethnicity groups was 7.7%, above the Healthy People 2010 target of 5% and therefore, considered to be a public health problem. To determine if low birth weight is a health problem within the state PNSS population, we will compare the percent of low birth weight infants from a state WIC program to the Healthy People 2010 target of 5 percent and the U.S.[5]

Low birth weight is a leading cause of neonatal mortality (death before 28 days of age). According to preliminary data, 8.2 percent of infants were born low birth weight in 2009. In 2006, the rate of low birth weight was the highest recorded in four decades (8.3 percent). The increase in multiple births, which are at high risk of low birth weight, strongly influenced this increase; however, rates of low birth weight also rose for singleton births. In 2009, the rate of low birth weight was much higher among infants born to non-Hispanic Black women (13.6 percent) than infants born to mothers of other racial/ethnic groups. The second highest rate, which occurred among Asian/Pacific Islanders, was 8.3 percent, followed by a rate of 7.3 percent among American Indian/Alaska Natives. Low birth weight occurred among 7.2 percent of infants born to non-Hispanic White women, while infants of Hispanic women experienced the lowest rate (6.9 percent). In 2008 (the latest year for which data are available), the rate of low birth weight was highest among babies born to women younger than 15 years of age (12.4 percent), followed by babies born to women aged 40–54 years (11.8 percent). The lowest rates occurred among babies born to mothers aged 25–29 years and 30–34 years (7.4 and 7.6 percent, respectively).[6]

In rural Nepal maternal supplementation with folic acid-iron reduced the incidence of low birth weight by 16%.A multiple micronutrient supplement of 14 micronutrients, including folic acid, iron, and zinc, reduced low birth weight by 14%, thus conferring no advantage over folic acid-iron. Low Birth Weight (LBW) is one of the main predictors of infant mortality. The global incidence of LBW is around 17%, although estimates vary from 19% in the developing countries (countries where it is an important public health problem) to 5–7% in the developed countries. The incidence in Spain in the decade 1980–1989 was about 5.7%. LBW is generally associated with situations in which uterine malnutrition is produced due to alterations in placental circulation. There are many known risk factors, the most important of which are socio-economic factors, medical risks before or during gestation and maternal lifestyles. However, although interventions exist to prevent many of these factors before and during pregnancy, the incidence of LBW has not decreased.[7]

A Prospective observational study was conducted in Bangalore City, India, regarding to assess the maternal socio demographic, anthropometric, and dietary micronutrient status in apparently healthy pregnant women in order to determine their associations with intrauterine growth retardation. There was a strong inverse relationship between maternal educational level and risk of IUGR. Importantly, in a subsample, there were strong associations of vitamin B_{12} status with IUGR, suggesting that better socioeconomic conditions, improved nutritional status and early detection of vitamin B_{12} deficiency in pregnancy combined with appropriate interventions are likely to play an important role in reducing IUGR. The collective evidence regarding the efficacy of prenatal care to prevent low birth weight continues to be mixed, the literature indicates that the most likely known targets for prenatal interventions to prevent low birth weight rates are (1) psychosocial (aimed at smoking); (2) nutritional (aimed at low prepregnancy weight and inadequate weight gain); and (3) medical (aimed at general morbidity). System level approaches to impact the accessibility and the appropriateness of prenatal health care services to entire groups of women and population wide health promotion.[8]

The prevalence of low birth weight most common problem in universally all population and is the single most determinist of the newborn's survival and for healthy growth and development. Low birth weight which leads to high mortality and morbidity contributes to be a major public health problem in India. The investigator observed that primigravida mother will not have knowledge regarding prevention of low birth weight babies. Hence this study was undertaken a comparative study to assess the knowledge regarding prevention of low birth weight babies in primigravida mother and a view to develop an information booklet for the purpose of improving the knowledge of primigravida mothers. This will help to improve the mothers Knowledge regarding causes and prevention for low birth weight babies. Finally this study would contribute towards reducing infant mortality rate and to develop a healthy society in our country.[9]

Low birth weight of the babies has become a major and most common condition in the world. This condition affects not only the child but also the mother, as well as the community. This condition is not only reversible but also preventive. Such conditions like this have a great impact on physical, social, mental and emotionalwell being of the child as well as the mother and the family.

OBJECTIVE:

1.To assess the knowledge regarding causes and prevention of low birth weight baby among antenatal mothers.

METHODOLOGY :

Non Experimental descriptive study design with Quantitative descriptive survey approach. Non probability purposive sampling technique used to select samples of 100 ante natal mothers of Primary Health center , Kolhapur.The data was collected by using demographic Proforma and structured knowledge questionnaire. The selected socio demographic variables were Age, education, diet, source of information, monthly income, occupation, type of family.

RESULTS:

The obtained data were analyzed by busing descriptive statistics, presented on tables and diagrams and interpreted.

Section A: Findings related to distribution socio -demographic variables.

1. Majority of the 61 participants (61%) were from the age group of 21 - 25 years, and minimum 6 participants (6%) were from the age group of above 30 years.
2. Majority of participants of 51 participants (51%) were studied secondary education and minimum 0 participants (0%) were illiterate.
3. Majority of 50 participants (50%) source was medical person, and minimum 9 participants (9%) source was friends/relatives.
4. Majority of participants monthly income 48 participants (48%) were 5000 - 10,000, and minimum 10 participants (10%) were above 15,000.
5. Majority of 79 participants (79%) were housewife, and minimum 3 participants (3%) were in service.
6. Majority of 72 participants (72%) belongs to joint family and minimum 8 participants (8%) belongs to extended family.

Section B :Findings related to of level of knowledge scores regarding causes and prevention of low birth weight babies among ante natal mothers.

Table No. 1Frequency and percentage distribution of antenatal mothers by their level of knowledge scores

***n*=100**

Level of knowledge	Frequency(*f*)	Percentage(%)
Poor	09	09
Average	60	60
Good	31	31

The data indicates that majority of 60 participants (60%) had average knowledge, 31 participants (31%) had good knowledge, 9 participants (09%) had poor level of knowledge

Section C: Findings related to mean, median, mode, standard deviation and range of knowledge of ante natal mothers regarding and prevention of low birth weight babies.

Table No.2 Mean, median, mode, standard deviation and range of knowledge of scores of ante natal mothers regarding causes and prevention of low birth weight babies. *n*=100

Mean	Median	Mode	Range	Sd
14.09	13.5	16	13	2.43

Table no. 2 : The data indicates that,Mean was 14.09, Median was 13.5, Mode was 16,Range was 13 and Sd was 2.43

DISCUSSION :

The purpose of this study was to assess the knowledge regarding causes and prevention of low birth weight babies among ante natal mothers.

Section A: Findings related to distribution socio -demographic variables.

Section B: Finding related of knowledge regarding causes and prevention of low birth weight babies among ante natal mothers.

Section C: Findings related to mean, median, mode, standard deviation and range of knowledge regarding of causes and prevention of low birth weight babies among ante natal mothers.

CONCLUSION

Most of antenatal mothers were unaware about causes and prevention of low birth weight baby. The antenatal mother need more information and guidance to about the causes and prevention about low birth weight It is recommended that each antenatal mother should be assessed for knowledge regarding causes and prevention of low birth weight baby informational booklet may help to improve knowledge regarding causes and prevention of low birth weight baby.

Implication of the Study:

The findings of the study have implication for the written following headings-Nursing practice, administration, nursing education, nursing research, general education in community.

Nursing Practice

- The study finding will help the nursing professionals to identify the knowledge level and to give knowledge effectively to antenatal mother regarding prevention of low birth weight baby.
- Nurses can plan for awareness programme at hospitals and community to educate ANC mothers on causes and prevention of LBW.

Nursing Education:

- The practical knowledge of nurses depends on the education they receive. So the nursing education programme should prepare the nurses to realize their responsibility as nurse educators.
- The content of causes and prevention among antenatal mothers can be used for the student nurses to educate the antenatal mother.

Nursing Service:

- As emphasized through the study findings, providing structured knowledge questionnaire regarding low birth weight baby among antenatal mother will enhance the knowledge.
- Nursing play a vital role in health care system, thus nurse directed educative programmes does play a significant role in improving the knowledge among the antenatal mothers.

Recommendation-

The researcher recommended that :-

1. A similar study can be replicated with large population.
2. A comparative study can be conducted by comparing rural and urban population.
3. A longitudinal study may be carried out to determine the level of retention of knowledge about causes and prevention of low birth weight baby among antenatal mother.

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