IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

IMPROVMENT OF BIRTH WEIGHT & ENCOURAGEMENTFOR PROPER GROWTH & DEVELOPMENT OF INFANTS OF MUZAFFARPUR DISTRICT

Vaishnavi Bhushan

Research Scholar,

LNMU DARBHANGA, BIHAR.

Abstract: -

Birth weight is important indicator which reveals the health condition of a child. WHO, on the basis of worldwide data has recommended that of full-term baby with birth weight less than 2.5 kg may be considered a low birth weight infants carrying relatively higher risk of substandard growth and development and higher risk of prenatal and neonatal mortality . There is close relationship between maternal and child health. The study reveals that nutritional status of pregnant and lactating mothers has a very significant bearing on the nutritional status of children. A woman who has been well- nourished before conception begins her pregnancy with reserves of several nutrients so that so that the needs of the growing foetus can be met without affecting her health. Infants who are well nourished in the womb, have an enhanced chance of entering life in good physical and mental health. The NFHS results support this as malnutrition among children is highest for underweight mothers. Nutritional status of child is directly linked to a large extent to mother's health conditions and safe delivery conditions, mother's education and countries' health care system. An adolescent girl with good health status can give birth to a healthy baby in future. Care must be taken of the nutritional status of adolescent girls for future mother.

Keywords: -

Nutrition, Low Birth Weight, Malnutrition, COVID-19.

Introduction: -

Infancy and childhood are the period of rapid growth either physical or mental. Growth and development during infancy is much more rapid than any other period of lifetime. Optimal birth weight indicates the health condition of baby according to UNICEF data (2015), 15% of babies born globally are of low birth weight and one-third of the babies born in India of low birth weight, less than
2.5 kg. According to ICMR the incidence of low-birth-weight neonates in India varies between 25% to 30% low birth weight is most often caused by being born too early (premature birth) i.e., before 37 weeks of pregnancy. But in this study, we will discuss full-term infants, chiefly attributable to poor maternal nutrition and health.

The NNMB surveys shows that the birth weight increases with increasing BMI status of mothers. The incidence of low-birth-weight deliveries was highest among women with Grade 3 Chronic Energy Deficiency. On the basis of BMI 2 out of 5 women in Bihar are undernourished. Nutrition deficiency is particularly serious for women in rural areas and women in disadvantage socio- economic group. According to NFHS-5, 63.5% of women surveyed

suffered from anaemia, a serious problem among women in every population group, prevalence rates ranging from 50 to 87%. As many as 50,000 pregnant women die every year in India during childbirth according to UN report.

According to UNICEF data it is estimated that COVID-19 will result additional 2.6 million chronically malnourished children by 2022 reversing the decreasing curve for the first time in 3 decades. According to latest SRS data, India's maternal mortality rate was estimated 113 maternal deaths per 100000 live births. According to NFHS-5 survey infant mortality rate is 43.1 % for urban area and 47.3
% for rural area. Such a high incidence of deaths causes huge loss of human life and balance equilibrium. Therefore, reducing IMR and MMR faster is a fundamental National concern. Nutrition is one important cause. By taking proper diet during pregnancy mother can break the mortality rate.

Undernutrition in children is strongly associated with undernutrition in mothers it often starts in utero and may extend throughout the life cycle. It occurs during pregnancy, childhood, and adolescence and has cumulative effect. The occurrence of low birth weight is the result of inadequate maternal weight gain it is suggested that a low weight gain after 20 weeks of gestation may result in preterm birth and low birth weight. A weight gain of 7 to 11 kg appears to be a measure of adequate foetal growth although probably it should be closer to 10kg is rather than 7 kg.

The following are some of the common problems of Low-Birth-Weight babies:

SHORT TERM PROBLEMS	LONG TERM PROBLEMS
LOW OXYGEN LEVEL AT BIRTH	CEREBRAL PALSYINABILITY TO
MAINTAIN BODY TEMPERATURE	BLINDNESS DIFFICULTY IN
FEEDING & GAINING WEIGHT	DEAFNESS
INFECTION	DEVELOPMENTAL DELAY
BREATHING PROBLEM NEUROLOGICAL	
PROBLEMS GASTROINTESTINAL PROBLEMS	
SIDS (sudden infant death syndrome)	

It is therefore, crucial to ensure proper care and nutrition for these infants to help stay on their optimal course of growth. Measures would include, keeping the babies warm, feeding colostrum, breastfeeding exclusively for the first six months, and providing iron supplementation (liquid iron) as these infants have poor iron store at birth. Additionally, all immunizations must be given on time.

Methodology: -

The present study was conducted in three different blocks of Muzaffarpur district, namely Kanti, Motipur, and Mushari. A household enumeration exercise was conducted for the selection of the sample. The household containing pregnant and lactating women were selected through stratified sampling method. 186 Infants from birth to 2 years were selected as a sample for study. All the information's were gathered by conducting interview of pregnant and lactating women.

In this study variables are operating. Health status during pregnancy is taken as independent variables whereas economic condition of the family, home environment and mother's educational qualification and awareness towards intake of food, nutritional knowledge and balanced diet is taken as dependantvariables.

A schedule was formed to collect information which include their age, education, income and expenditure pattern, pattern of meal planning and food habit. Birth weight of the Infant was recorded with the help of immunization card or the mother's recall. Few mothers reported that the baby was born at home so the birth weight was not recorded.

Among infants, whose birth weight was recorded 16.44% has low birth weight, that is, they weighed less than 2.5 kg. It was observed that these infants belong to low-income group family or uneducatedfamilies.

LOW BIRTH WEIGHT **NORMAL**

MOTHER AGE AT BIRTH (in years)	LESS THAN 2.5 KG	WEIGHT	TOTAL
18-25	10.7%	89.3%	100
26-35	16.44%	83.56%	100
BIRTH ORDER			
1	11.2%	88.8%	100
2-3	15.5%	84.5%	100
MOTHER EDUCATION			
ILLITERATE	15.9%	84.1%	100
UP TO PRIMARY CLASS	13.4%	86.6%	100
10 TH & ONWARDS	9.3%	90.7%	100
WEALTH INDEX			
LOW INCOME GROUP	16.4%	85.6%	100
MIDDLE ICOME GROUP	10.6%	89.4%	100
HIGH ICOME GROUP	6.8%	93.2%	100

The table shows the distribution of all births by weight (among those with recorded birth weight). The birth weight of infants depends upon the age of the mother, birth order of a child, mothers' literacy and economic status of the family. The socio-economic factors influence profoundly the quality of diet consumed and exposure to infection as a result of living in insanitary surroundings.

Result and Discussion: -

Adequate nutrition and health of pregnant women are of vital importance for efficiency, productivity and for the health of new-born. Nutrition surveys conducted on women related that their diet was mainly based on cereals and deficient in proteins, essential minerals and vitamins. The low intake of protective foods may result in nutritional disorders. Iron deficiency anaemia is the first and foremost problem of women in the reproductive age group, one third of women of reproductive age in India are undernourished, with a body mass index (BMI) of less than 18.5 kg/m². It is well known that an undernourished mother inevitably gives birth to an undernourished baby, perpetuating an intergenerational cycle of undernutrition. Still births and birth defects in babies are largely caused byinadequate nutrition intake of mother before conception and in first trimester.

It was observed during the survey that there is availability of food but because of lack of nutritional knowledge and lack of time specially in the case of working women in agricultural field, unable to take food in proper way and at appropriate time this is a very common factor in all respondent family.

The NFHS indicates that the mean BMI for women is 20.3. BMI below 18.5 indicating high prevalence chronic energy deficiency BMI is useful in predicting low birth weight.

PREDICTION OF LOW BIRTH WEIGHT ON THE BASIS OF BMI	
BMI	LOW BIRTH WEIGHT %
16-17	53
17-18.5	49
18.5-25	18
25-30	24
>30	42

The table depicts the relationship between increasing body mass index and reducing low birth weight. It is well known that the health status both before and after conception hold great significance for both the mother and infants. It was found in the survey, when mother's take only short intervals between pregnancies and have many children, this can exacerbate nutrition deficit, which are then passed on to their children. The birth order of the

child affects the weight of the Infant. The NFHS-5 results also indicates that malnutrition is more prevalent among children in higher birth category.

Mother's education has a direct impact on birth weight of the infant. Even the high malnutrition of all types prevails in the group of illiterate mothers and mothers with less than 5 years of education. An educated women have knowledge of adequate diet. They are concerned enough about the health of their offspring and have a high motivation to eat right types of food. It was observed that educated women have an antenatal check up by visiting a doctor or at other places. Majority of the pregnant women visit Anganwadi Centre for antenatal check-up and the data are as follows: - 48% - ICDS, 12%
- Doctor, 6% - Dai, 34% - No check-up.

Corona period is very difficult for everyone. Poverty and Food Insecurity is growing dramatically as covid-19 spreads. It results increase in the graph of malnutrition, because of covid-19 a huge number of people become unemployed so they can't even earn enough food for their family. The survey report of May 2021 shows that there is an increase of 2.1 % in children, it was 14.4% in October 2020 and now it is 16.4 5%.

It was also observed during survey, that there were very few pregnant women who have antenatal check- ups by visiting Doctors or Maternity Hospitals. The respondents were very scared of covid-19 and they think that it's better to stay home and deliver their babies at home because hospitals are notpaying proper attention to them.

Impact of government scheme running in survey area: -

The ICDS program running in survey area has benefited a number of people by its Poorak Poshahar Scheme. In order to improve the nutritional status of pregnant women and lactating mother of the scheme provides supplementary nutrition. The scheme is funded by Central and state government on a 50:50 ratio basis. This work is performed by Anganwadi centre.

Immunization of pregnant women at Anganwadi Centre is done to reduce the maternal and neonatal mortality. Health check-up include health care of children, antenatal care of expectant mother and their weight recording and postnatal care of nursing mothers.

Nutrition and health education involve use of Behaviour change communication strategy to build capacity of women especially in the age group of 15 to 45 years so that they can look after their own health and family.

CARE believes that a healthy mother and healthy baby is the route to a productive, developed nation. Hence, CARE has especially focus upon providing comprehensive solutions to address public health problems. In keeping close collaboration with Integrated Child Development Services (ICDS)programme CARE works to promote new-born care, reduce malnutrition in children, anddecrease Infant and maternal mortality.

The government launched Janani Suraksha Yojana (JSY:Mother's Protection Programme) to reduce maternal and child mortality by promoting institutional delivery, too many Indian mothers die of causes related to childbirth. The Scheme focuses on poor pregnant women. Under this scheme pregnant women is given Rs.1400 and ASHA's package is Rs.600. The incentive package in this scheme has promoted institutional delivery which is safe for mother and Infant both.

In survey area Aga Khan Foundation, an international development agency, works to improve our community's health by integrating behavioural change in its related programme. Its ultimate aim is to create awareness in mothers attending antenatal clinics, immunization sessions, infant feeding, hygienic practices and safeguarding against diseases. In survey area this agency has done marvellous work.

Suggestion and Recommendation: -

Nutrition education regarding the importance of balanced diet which can be obtained from the traditional Indian diets and locally and seasonally available foods can go a long way in improving the nutritional status of the mother and the child. Government should also sensitize pregnant women through the radio, television about the importance of adequate diet and attending antenatal clinic. There is no doubt that with improvement in income, diet and sanitary conditions, the maternal and infant mortality rates will be reduced and the nutrition and health of the mothers and infants with improve.

Government has to arrange special doctors and health workers who can help in regular antenatal check-up during this COVID- 19 period and provide some more schemes, funds and employment to poor people.

Conclusion:-

The server depicts that there is improvement in birth weight but it does not commensurate well with the observed improvement in socio-economic indicators therefore in concluding it is important to mention that economic performance alone would be insufficient to achieve growth economic growth may help initiate improvement in birthweight simultaneous investment is important in strengthening the health system the planner need to educate and implement help services at their door step whichwould help them to lead healthy life.

References: -

- Philip F.B.1997.obesteric & Newborn Saundra Press Limited; Great Britain.
- Me Carthy J and DA Maine (1992) Framework for analyzing the determinants ofmaternal mortality studies in Family Planning.
- Morley,D,1997,Pediatrics and Priorities in the developing world. Butter warm & copublishers Ltd. London
- Tendon BN, A co-ordinated approach to children's health in India. Lancet 1981,650-653.
- Jeffrey, P&R Jeffrey (2010) only when the boat has started sinking. A maternaldeath in rural North India Social Science & Medicine.
- www.righttofoodindia.org
- www.childinfo.org
- www.data.unicef.org