

Assessment of Nutritional Status of Pregnant Women

Sudha Maurya^{1*} Dr. Usha Ravindra²

¹Research Scholar, Himalayan University, Arunachal Pradesh

²Associate Professor

Abstract – *Pregnancy is the time of dynamic change for a mother requiring a great deal of care since embryo is supported specifically by the mother through placenta, and infant thoroughly depends upon its mom for sustenance, the pregnant lady is to be conveyed with a sufficient and all around adjusted eating routine, to guarantee that she achieves a palatable weight. Amend dietary adjust is important to guarantee adequate vitality consumption for sufficient development of embryo without drawing alone tissues to keep up her pregnancy. In pregnancy, great nourishment is significant to guarantee upright maternal wellbeing and reduce the danger of birth absconds, imperfect fetal development and advancement and also perpetual medical issues in their youngsters.*

Keywords: Pregnant Women, Nutrition's, Health.

INTRODUCTION

Maternal nourishment and wellbeing is considered as the most vital controller of human fetal development. A solid mother can deliver a sound kid. In the event that ladies are not all around fed, they will probably bring forth powerless children bringing about high newborn child death rate.

Pregnancy is the time of dynamic change for a mother requiring a considerable measure of care. Amid this period the baby is sustained specifically by the mother through placenta. Since the child thoroughly depends upon its mom for sustenance, the pregnant lady is to be furnished with a sufficient and all around adjusted eating routine (Mudambi, 1992). A lady's ordinary nourishing prerequisite increments amid pregnancy so as to address the issues of the developing baby and of maternal tissues related with pregnancy. Legitimate dietary adjust is important to guarantee adequate vitality consumption for satisfactory development of embryo without drawing alone tissues to keep up her pregnancy (Mridula et al., 2003).

In pregnancy weakness significantly affects the wellbeing of the hatchling and also that of the mother. It is the most across the board nourishing confusion on the planet affecting 30 for every penny of the universes populace. It is more typical among the eager mother (Thangaleela and Vijayalaxmi, 1994).

As per Agarwal (1991) maternal iron deficiency brought about 12 to 28 for every penny of fetal

misfortune, 30 for every penny of perinatal and 7 to 10 for each penny of neonatal passages. The rest of the births have around 50 for each penny chance bringing about a low birth weight (LBW) infant. Paleness in pregnancy is likewise connected with expanded maternal horribleness and mortality.

Pregnant ladies have been generally perceived as a powerless gathering from the wellbeing perspective. It has been all around acknowledged that they require more nourishment for the developing hatchling. They constitute the vital portions of the populace with higher supplement necessities. Impressive measure of consideration must be paid to for the dietary admission and wholesome status of pregnant ladies.

The field of sustenance of pregnant ladies in rustic zone is unfortunately a much-disregarded are of research. There is a lack of writing on wellbeing and nourishment of pregnant ladies in provincial zone. Subsequently, the present examination is attempted to know the wellbeing and nourishment status of pregnant ladies in the country region.

WOMEN HEALTH IN INDIA

India is one of only a handful couple of nations on the planet where women and men have about a similar life expectancy during child birth. The way that the normal female favorable position in future is not found in India proposes there are orderly issues with ladies'

wellbeing. Indian ladies have high death rates, especially amid youth and in their regenerative years.

The strength of Indian ladies is inherently connected to their status in the public arena. Research on ladies' status has discovered that the contributions Indian ladies make to families regularly are disregarded, and rather they are seen as economic loads. There is a solid child inclination in India, as children are relied upon to nurture guardians as they age. This child inclination, alongside high settlement costs for little girls, some of the time brings about the abuse of little girls. Further, Indian ladies have low levels of both instruction and formal work constrain cooperation. They normally have little self-sufficiency, living under the control of first their fathers, at that point their spouses, lastly their children (Chatterjee, 1990; Desai, 1994; Horowitz and Kishwar, 1985; The World Bank, 1996). These components apply a negative effect on the wellbeing status of Indian women.

Weakness has repercussions for ladies as well as their families. Women in weakness will probably bring forth low-weight newborn children. They additionally are less inclined to have the capacity to give nourishment and sufficient care to their youngsters. At long last, a lady's wellbeing influences the family unit financial prosperity, as a lady in weakness will be less profitable in the work constrain.

While women in India confront numerous genuine wellbeing concerns, this profile concentrates on just five key issues: regenerative wellbeing, viciousness against ladies, wholesome status, unequal treatment of young ladies and young men, and HIV/AIDS. In light of the wide variety in societies, religions, and levels of improvement among India's 25 states and 7 union domains, it is not shocking that ladies' wellbeing additionally shifts enormously from state to state. To give a more point by point picture, information for the significant states will be exhibited at whatever point conceivable.

FERTILITY INTERTWINED WITH WOMEN'S HEALTH

A considerable lot of the medical issues of Indian ladies are identified with or exacerbated by elevated amounts of fruitfulness. By and large, fruitfulness has been declining in India; by 1992-93 the aggregate Fertility rate was 3.4 (International Institute for Population Science (IIPS), 1995).¹ However, there are substantial contrasts in richness levels by state, instruction, religion, rank and place of residence. Articulate Pradesh, the most crowded state in India, has an aggregate richness rate of more than 5 kids for each lady. Then again, Kerala, which has generally large amounts of female instruction and self-sufficiency, has an aggregate Fertility rate under 2.

Elevated amounts of newborn child mortality consolidated with the solid child inclination rouse

ladies to hold up under high quantities of youngsters trying to have a child or two get by to adulthood. Research has demonstrated that various pregnancies and firmly divided births disintegrate a mother's dietary status, which can adversely influence the pregnancy result (e.g., premature births, low birth-weight babies) and furthermore increment the wellbeing hazard for moms (Jejeebhoy and Rao, 1995). Unwanted pregnancies ended by risky premature births additionally have negative outcomes for ladies' wellbeing. Lessening Fertility is an imperative component in enhancing the general wellbeing of Indian ladies.

Expanding the utilization of contraceptives is one approach to diminish richness. While the information of family arranging is almost widespread in India, just 36 percent of wedded ladies matured 13 to 49 at present utilize modern contraception (IIPS, 1995). Female sanitization is the fundamental type of contraception; more than 66% of the wedded ladies utilizing contraception have been cleaned. Place of living arrangement, training, and religion are emphatically identified with both fruitfulness and preventative utilize. The greater part of wedded ladies with a secondary school training or above utilize contraceptives, contrasted with just a single third of unskilled ladies. Of course, the aggregate richness rates for these two gatherings are essentially unique: 4.0 youngsters for uneducated ladies contrasted with 2.2 kids for ladies with a secondary school education or above. Differentials among the religious gatherings additionally are articulated; e.g., Muslims have the most astounding aggregate richness rate and the least preventative utilize (IIPS, 1995).

DEATHS OF PREGNANCY RELATED CAUSES

Over 100,000 Indian Women Die Each Year from Pregnancy-Related Causes. Maternal mortality and morbidity are two health concerns that are related to high levels of fertility. India has a high maternal mortality ratio—approximately 453 deaths per 100,000 births in 1993. This ratio is 57 times the ratio in the United States. The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) estimate that India's maternal mortality ratio is lower than ratios for Bangladesh and Nepal but higher than those for Pakistan and Sri Lanka (WHO, 1996). The level of maternal mortality varies greatly by state, with Kerala having the lowest ratio (87) and two states (Madhya Pradesh and Orissa) having ratios over 700 (Figure 3) (UNICEF, 1995). This differential maternal mortality is most likely related to differences in the socioeconomic status of women and access to health care services among the states.

The high levels of maternal mortality are especially distressing because the majority of these deaths could be prevented if women had adequate health services (either proper prenatal care or referral to appropriate health care facilities) (Jejeebhoy and Rao, 1995). In fact, the leading contributor to high maternal mortality ratios in India is lack of access to health care (The World Bank, 1996).

IMPORTANCE OF IODINE

Iodine is an essential trace element necessary for the synthesis of thyroid hormones (Delange, 1994; Hetzel and Maberly, 1989). These hormones promote growth and development of bone, muscle, height and weight and maintain the stabilization of energy and material metabolism (Fuge and Johnson, 1986). The thyroid hormones are also vital for growth and development of all organs especially the brain, reproductive organs, nerves, skins, nails and teeth (Fisher and Delange, 1998). Deficiency of iodine resulting from inadequate dietary intake is related to a spectrum of diseases collectively known as iodine deficiency disorders (IDD) (Hetzel, 1983). IDD can be corrected by re-supplying iodine in the diet (Delange,. The impact of IDD is enormous and it affects all the stages of life (Hetzel, 1983; ICCIDD/UNICEF/WHO, Iodine deficiency disorders are primarily the result of inadequate amounts of iodine in soil, water and food as well as consumption of foods rich in goitrogenic substances (Aston and Brazier, 1979; Sharma et al., 1999; Ene-Obong, 2001). Iodine deficiency in the fetus is the result of iodine deficiency in the mother. The consequence of iodine deficiency during pregnancy is impaired synthesis of thyroid hormones by the mother and the fetus. An insufficient supply of thyroid hormones to the developing brain may result in mental retardation (Morreale et al., 2004; Auso et al., 2004; Koibuchi and Chin, 2000; Delange, 2001). It has been established through some experimental evidence that the varying manifestation of IDD in fetus could be as a result of low thyroxine level in the blood of the iodine deficient mother and the lower the level of thyroid hormone of the pregnant women, the greater the threat to the fetus development (WHO, 1996). These children also have a greater occurrence of congenital abnormalities, lower birth weight and lower mortality rate as indicated by higher perinatal and infant mortality (US Foods and Nutrition Board, 2001). The commonest manifestation of iodine deficiency is goitre, which occurs when the iodine level of the blood is low; the cells of the thyroid gland enlarge in an attempt to trap as many particles of iodine as possible. Sometimes the gland enlarges until it is visible (Hamilton et al., 1998; Chatterjea and Rana, 2004). This gland enlargement is caused by an increased production of thyroid stimulating hormone (TSH) (Ubom, 1991).

Inadequate dietary iodine leads to reduced synthesis of thyroid hormones (T3 and T4). Lower level of T4 in the blood stimulates the pituitary gland to secrete TSH to fulfill the production of thyroid gland hormones. It is important not to over consume iodine as it has a relatively narrow range of intakes that reliably support good thyroid function. Consumption of an excessive amount of iodized salt or seaweeds could readily result to complex disruptive effect on the thyroid and may cause either hyperthyroidism or hypothyroidism in susceptible individuals, as well increasing the risk of thyroid cancer.

A large percentage of the world population is at a risk of IDD (Delange and Hetzel, 2003). Several parts of Nigeria have been before now identified with goiter endemicity and hence labeled the "goitre belt" (Nwokolo and Ekpechi, 1966; Olurin, 1975; Isichie et al., 1987; Ubom, 1991). In 1993 a national goitre rate of 20% was reported and 20 million Nigerians were estimated to be affected by IDD (UNICEF, 1993). The Participatory Information Collection Study (1993), using thyroid hormone concentrations as indicators of iodine status reported an iodine deficiency prevalence of 65.6% in South-East, 41% in the South-West, 43% in the North- West of Nigeria. As part of the strategies to reduce the prevalence of IDD in Nigeria, the Universal Salt Iodization (USI) Programme was introduced in 1995. The update from the report of the Nigeria Demographic and Health Survey (NDHS, 2003) showed that almost all Nigerian households (97.3%) consumed adequately iodized salt, while about 1.7% consumed uniodized salt. This study was used to evaluate the iodine nutrition in Orlu suburban area of Nigeria using pregnant women as a case study after several years of availability and consumption of iodized salt.

REVIEW OF RELATED LITERATURE

In the study conducted in Romania in 2005 in association of UNICEF named "NUTRITIONAL STATUS OF PREGNANT WOMEN, CHILDREN UNDER 5 YEARS OLD AND SCHOOLCHILDREN AGED 6-7 YEARS" Researchers conclude that Adequate nutrition, meeting all specific needs, is one of the essential determinants of mother and child health, the right to adequate food being one of the fundamental human rights enshrined in many international documents.

The growth status is considered to be the best indicator of child wellbeing. It is conditioned by the socio-economic level and by the good health of the population, being a prerequisite for the sustainable development of society. Malnutrition, internationally acknowledged as an important indicator for monitoring the population's health status, has a negative impact on the growth status. Recent studies

have indicated that child malnutrition is the first determinant of the "burden of disease" among the general population.

Over the past few years, special attention has been given, apart from macronutrients, to micronutrients, particularly to microminerals. Iron and iodine are nutritional factors of major importance in child health, already in the stage of fetal intrauterine life, a fact which accounts for the attention paid to their status in pregnant women and children.

International studies and practice point to the fact that an effective fight against child nutritional disorders, irrespective of the type of deficiency, is inextricably linked to the implementation of programmes based on a careful assessment and monitoring of the mother and child nutritional status and of factors impacting it.

As from 1990, the "Alfred Rusescu" Institute for Mother and Child Care, with technical and financial support from the UNICEF Representative Office, has carried out several projects addressing the nutritional status of the child, with focus also on the intrauterine life.

Particular mention should be made of:

- A cross-section survey assessing the nutritional status of non-institutionalized children under 5 years, conducted in 1991 on a national representative sample of 10,957 de children;
- A survey based on the National Programme of Nutritional Surveillance (NPNS), conducted over 1993-2003, monitoring the nutritional status of under-5 children (a national representative sample of 83,000 children);
- A survey on maternal mortality and the use of prenatal consultations, carried out in 1992 on a representative sample of 1400 pregnant women/mothers;
- A pilot study on "Iron deficiency anaemia in young women" (1996), conducted in 2 Romanian counties and 3 residential districts of Bucharest;
- A survey on the nutritional status of schoolchildren in grade I (7-8 years old), carried out on a national representative sample (2120 pupils were investigated over 2002-2003);
- Surveys conducted in pilot groups concerning iron deficiency anaemia in young women (mothers of the children covered by the NPNS, 1995-1997), pregnant women and institutionalized children (1995);

- A pilot survey on the iodine deficiency in pregnant women (1387 women were investigated over October 2003-January 2004).
- Reproductive Health Survey, Romania 2004
- All carried out surveys pointed to several nutritional deficiencies of young women, pregnant women and children. The findings of these surveys were the basis for an important intervention included in the 3-rd National Health Programme for mother and child, drafted by the Ministry of Health.
- Here are some of the most relevant data highlighted by the surveys:
 - 50% of children under 1 year had iron deficiency anaemia;
 - the average birth weight was constantly of 3200g, 200g less than in the Western European countries;
 - the prevalence of low birth weight children varied between 8% (1991), 6.6% (1999) and 7.7% in 2001;
 - the "low height for age" indicator was three times bigger (7.3% for children under 2 years old and 8.5% for children aged between 2 and 5 years) than the accepted value of 2.3%; all this points to the presence, at that time, of chronic malnutrition in the surveyed population
 - in respect of the nutritional practices of infants:
 - in 1991, over 90% of the infants were breastfed for more than 9 months;

at the same time, cow milk was introduced before the age of 6 months in 50% of the infants; before the publication of the Reproductive Health Survey in 2004, no reliable data on exclusive breastfeeding had been available, yet after corroborating the early introduction of other liquids (tea, fruit juice, cow milk) or solids (fruit puree, farinaceous products) with clinical observations, one could say that exclusive breastfeeding had been practically unknown. Data from 2004 indicate that only 16% of infants aged between 0 and 5 months were exclusively breastfed.

a 16% prevalence rate of the iodine deficiency was reported at national level, with higher rates of up to 25% in certain areas as to the iodine nutrition status, the above mentioned surveys have pointed to a mild iodine deficiency in 7 years old children, while in pregnant women the iodine deficiency was mild

among women in the urban areas and moderate in women living in the rural area. This paper, based on an ample study that started back in April 2004, contains the findings of several surveys addressing major aspects of the nutritional status of children and pregnant women. Under-5 children, schoolchildren in the first grade and pregnant women are considered to be among the high risk groups.

The goal of this survey was to assess the nutritional status of children and pregnant women in general, particularly the status of iron and iodine micronutrients. The survey starts from the assumption that the child development status, right from the moment of birth, is a most useful indicator for assessing the nutrition status and some specific deficiencies.

Health care services targeting these population groups have a major role to play in the early detection of and fight against nutritional disorders; such services should concentrate on monitoring the progress of pregnancy and on the child's physical and mental development. The survey has endeavoured to shed light on specific aspects related to the nutritional status of each group in the target population, while never losing sight of the common thread running through the various component parts.

CONCLUSION

The study concluded that underweight, overweight and low dietary nutrient intakes were nutritional problems of the study sample. Therefore, effective nutrition intervention should be directed towards pregnant women to improve maternal nutritional status.

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Corresponding Author**Sudha Maurya***

Research Scholar, Himalayan University, Arunachal Pradesh

E-Mail – ranirokks.maurya6@gmail.com