Value of Prenatal Nutrition for Maternal and Infant Outcome

Manjubala Dash*

Professor in Nursing, Obstetrics and Gynecology Department, Mother Theresa Post Graduate and Research Institute of Health Sciences, Pondicherry, India

*Corresponding Author: Manjubala Dash, Professor in Nursing, Obstetrics and Gynecology Department, Mother Theresa Post Graduate and Research Institute of Health Sciences, Pondicherry, India.

Received: October 02, 2017; Published: November 07, 2017

Nutrition for a pregnant mother is very important as like to the growth of a child after birth. It is considered that first 1000 days are most important period for the child i.e. 270 days of pregnancy plus 365 days of 1st yr and 365 days of 2nd yr: the above period is considered as critical for a child’s mental and physical development. Whatever nutrition taken in this period is lasts throughout life and the deficiency occurred during this period can’t be corrected too. So, it’s important to recognize the value of nutrition in the 1000 days period. The right nutrition for the mother and for the child during this time can have a profound impact on the child’s growth and development and reduce disease risk, as well as protect the mother’s health. Fetal growth is affected when the mother is not getting adequate nutrition during pregnancy. Most of these children are shunted and also they are prone to get obesity and non-communicable diseases in their adolescent period. Around 22% of the newborns can be saved by exclusive breastfeeding. Mother and child considered as vulnerable group and their health considered as Nations’ Health.

Objectives: Right nutrition in right time helps for better growth and development improves child’s school performance prevents disparity in education, economy level as well as health condition prevents non-communicable diseases such as type 2 diabetes, hypertension, heart disease etc. Save lives of many people prevents intergeneration cycle of mal-nutrition.

As per WHO/UNICEF guideline optimum IYCF practice highlights that exclusive breastfeeding for 6 months, starting complementary feeding after completion of 6 months and continuing breast feeding for 2 yrs and above which break the intergenerational cycle of poverty. When the mother is starting complementary feeding i.e. after 6 months, it is very important to observe the child’s growth. This period is the transition period, so one should very careful to provide adequate quantity, variety and increase amount of food for proper growth from 6 - 24 months period. Most of the children health is affected this period and leads to malnutrition which cannot be corrected in their adult life too. Data shows that prevalence of shunting is high during this transition period after which any corrective measures is ineffective.

Breast milk alone cannot meet an infant’s energy and nutrient requirements after 6 months. There is energy gap as well as other nutrients. So to fulfill this gap complementary feeding should begin. Introducing complementary foods before this time is both unnecessary and dangerous. It is very important safe handling of complementary foods and hygienic complementary feeding practices. Emphasis to be given how to feed to a child than what to feed.

Best Practices

- Frequent, appropriate, and active feeding for children during and after illness, including oral rehydration with zinc supplementation during diarrhea.
- Timely and therapeutic feeding and care for children with severe malnutrition.

Primary Health care facilities should:

1. Promote and support good maternal nutrition during pregnancy and lactation as maternal nutrition plays a critical role in fetal growth and development and a woman’s own health and survival.
   
   This includes:
   
   - Provision of adequate micronutrients before and during pregnancy and lactation, especially iron, folic acid, calcium, iodine, and vitamin A through supplementation, fortification, and food consumption
   - Standards of nutritional care for prenatal, postnatal, and delivery services developed and followed; guidelines are needed to promote optimum weight gain during pregnancy, to diagnose and treat anemia safely, support dietary diversity, and other facets of nutritional care.
   - Education for mother on the benefits and resources to promote and support early and exclusive breastfeeding should be part of birth preparedness.
   - Health provider and other community worker education and continuing training are essential to deliver quality nutrition services.
   - Engagement of fathers, grandmothers, and other community influencers to assure that pregnant and lactating women receive adequate food and support and are able to rest.

2. Promote and support optimal infant and young child feeding and care practices.

   Health services should promote optimal infant and young child feeding (IYCF) and care practices, with an emphasis on:
   
   - Immediate initiation of breastfeeding after birth
   - Exclusive breastfeeding for the first 6 months of life
   - Starting appropriate complementary feeding (e.g., dietary diversity) after 6 months along with continued breastfeeding to 2 years or beyond
   - Adequate care and feeding of sick children to prevent both acute malnutrition and stunting
   - Management of acute malnutrition
   - Integration of key hygiene practices with IYCF
   - Proper IYCF guidance for HIV-infected mothers and exposed infants
   - National programs to ensure adequate intake of essential micronutrients through supplementation, fortification and food consumption.

3. Give special focus to the 1,000-day i.e. 270 days+365 days of 1st yr+ 365 days of 2nd yr period are readily available, affordable, and cost-effective, and include:

   - Integrate key hygiene actions (safe drinking water, hand-washing with soap, safe disposal of excreta, and food hygiene) as essential components in all targeted nutrition programs.
   - Scale up community management of acute malnutrition in emergency and development settings,
   - Support preventive and curative health and nutrition services in maternal and child health and nutrition programs.
   - Promote healthy timing and spacing of pregnancies to decrease the risk of neonatal mortality, preterm births, small for gestational age, and low birth weight and allow for exclusive and continued breastfeeding until at least 24 months.
   - Promote dietary diversity for women and children.

4. Social and behavior change

A strong multi-channel social and behavior change strategy should address the range of practices that are recommended for specific stages in the 1,000-day window in a culturally-appropriate and timely way, targeting not just those who practice the behaviors but those who influence behavior in a household and community.

Clear, age-appropriate and action oriented messages delivered through repeated, multiple contact points and channels are most effective. Social and behavior change communication messaging reinforced by community mobilization and mass media should include:

- Interpersonal counseling
  - Regular, quality contacts for nutrition-specific services with mothers/direct caregivers and their families
  - Can include home visits, peer support, “mothers groups,” and counseling by health workers
  - Multiple media channels
  - Informal means (community theater and songs), videos, posters, and leaflets
  - Targeted mass media (community radio), mass media (television and social media), cell phones, and other technology
  - Community mobilization and advocacy
  - Educating and motivating influential audiences to take action and support specific measures to advance maternal, infant and young child nutrition. Early and exclusive breastfeeding have been identified by USAID as accelerator behaviors for nutrition. Accelerator behaviors are priority behaviors for programming because they have the highest potential to hasten the decline of child and maternal deaths.

Conclusion

Targeting the important 1,000-day period is one of the best investments that can be made to improve health, nutrition and economic outcomes. Nutrition-specific and nutrition-sensitive interventions will have the most impact when working in collaboration to focus on this critical window of opportunity. Children Lead the Way to A Healthier Tomorrow