

Critical Issues in Child and Maternal Nutrition

Mainul Hoque



**BIDS CRITICAL
CONVERSATIONS**

2017

Nutrition and Economic Development

- **Nutrition is a critical factor for improved health and successful economic development**
 - about one-third of the increase in income in Britain during the 19th and 20th centuries could be a result of improvements in health and nutrition(Fogel, 2004).
- **Bangladesh has made remarkable progress in reducing poverty, maternal and child mortality rate. Nutrition scenario has improved as well.**
 - proportion of children under 5 years of age moderately or severely stunted has declined from 55% in 1997, to 36% in 2014.
 - Maternal malnutrition has declined from 52% in 1996-97 to 17% in 2014.
- **Although Bangladesh has recently been upgraded from Low Income Country(LIC) to Lower Middle Income Country(LMIC) by World Bank classification, the nutrition indicators are still lower than LMIC's average.**
 - Stunting Rate(children under 5) is much higher than LMICs(36.4% vs. 25.5%).
 - Recent analyses suggest that the *poor diets of children in the first years of life, the poor nutrition of women before and during pregnancy* and the *prevailing poor sanitation practices in households and communities* are important drivers of stunting.
 - Probably because of underlying conditions of women's status, food insecurity, poverty, and social inequalities.

Implication of Nutrition for the Development Path of Bangladesh

- **Undernutrition costs Bangladesh more than US\$1 billion in lost productivity every year(GOB and USAID).**
 - The return to investment in nutrition-related program is enormous as well.
 - *Every taka spent pays back 18-23 taka of benefits, at least 50% through rise in earnings(Copenhagen Consensus, 2016).*
- **Targets of the 7th Five Year Plan(2016–2020) and the fourth health sector program(2017–2021) are aligned with global commitments to nutrition, such as SDG 2 and SDG5.**
 - *Proportion of stunting among under-five children (%) to 25% by 2020.*
 - *Almost universal coverage for safe water and sanitation.*
- **What are the critical issues for implementation of the nutrition targets?**
 - *This presentation will briefly highlight several relevant areas, aided with data obtained from a recent survey conducted by BBS and UNICEF(2016) and several other secondary sources.*

Gaps in the Accessibility and Utilization of Nutrition-specific Essential Social Services

- **Accessibility for Basic Social Services is not Universal.**
 - 36% of the lactating mothers in rural areas and 23% in urban areas do not have access to IYCF trained health workers within 30 minutes distance.
 - 28%(32% Rural vs. 13% Urban) of the mothers in the age group 15-49 *do not have* access to ANC health facilities within 2 km.
- **Accessibility does not always translate into Utilization**
 - 39% (37% Rural vs. 44% Urban) caregivers received promotion/ counseling session on complementary feeding in the past 3 months.
 - Only 47% of women with accessibility received IFA supplements during their last pregnancy.
- **Regional and Rural-Urban Disparity**

Appropriate Child Feeding is Essential for Setting a Solid Foundation for Adult Life

- Child malnutrition is mainly caused by suboptimal breastfeeding and complementary feeding, poor dietary diversity, and improper hygiene.
- **Breastfeeding is not Practiced in the Recommended Manner**
 - *Only 36%(35% Rural vs. 39% Urban) could initiate breastfeeding within the first hour after birth(BBS, UNICEF, 2016).*
 - *Almost 2/3rd of the children in the age group below 6 months are exposed to non-breast milk items(BBS, UNICEF, 2016).*
- **Complementary Feeding Practices are driven by both affordability and Socio-cultural Norms.**
 - It is recommended that children in the 6-23 months age group consume daily at least four of the following items including cereal, tubers and root crops, beans and peas, flesh foods, eggs, dairy, vitamin A, and fruits and vegetables (WHO, 2010).
 - *Only 45% of Women/Caregivers Know Correct Time to Start Solid and Semi-Solid Food.*
 - *20%(19% Rural vs. 24% Urban) children meet the minimum acceptable diet requirements.*

Maternal Nutrition Has Profound and Direct Impact for Intrauterine and Early Year Growth of Child

- **Pregnant and lactating Women(PLW) are not following recommended increase in their dietary intake.**
 - *53%PLWs in urban areas and 42% in rural areas did not increase their dietary intake during pregnancy or lactation period.*
 - *It is recommended that PLWs consume daily at least 5 of the 9 food items: rice, bean, seed, dairy milk, meat, eggs, vegetables, vitamins, and fruits.*
 - *Only 37% PLWs (35% in rural areas and 47% in urban areas) meet such minimum requirement of standard dietary diversity.*
- **Less Educated PLWs are less likely to follow advice on appropriate types of food and quantity recommended during pregnancy or lactation.**
 - Compared to a PLW with no schooling, mothers with SSC/HSC level schooling are 18 percentage points more likely to change dietary pattern during pregnancy and lactation, 20 percentage points more likely to ensure adequate food consumption, and 20 percentage points more likely to consume at least five-items/day from 9 key food groups.
- **Old age PLWs (>40) are not changing their dietary habits during pregnancy and lactation.**

The Nexus between mother's health and child malnutrition is a persistent bad equilibrium

- **Two important components of maternal health care are antenatal care (ANC) and iron and folic acid (IFA) supplementation.**
 - *Epidemiological studies find that low birth weight, which is primarily caused by poor nutrition, micronutrient deficiency, and inadequate monitoring during pregnancy, is associated with pre-term delivery.*
- **Uptake of Antenatal Care and Micronutrients during Pregnancy is Low**
 - *In spite of having access to a health facility within 2 km, 43% Rural and 65% Urban women in the age group 15-49 received antenatal care from a skilled provider at ANC health facilities.*
 - 76-79% of the ANC recipients rural women made <4 visits.
 - *Only 12%(11% Rural vs. 21% Urban) women received at least 100 Iron and Folic Acid Supplements(IFA) from 4 ANC visits at FWC or CC.*
 - *Only 3-6% Consumed all 100 tablets.*
 - Reasons for not taking IFA tablets: bad taste or smell (41%), forgetting to take the supplement (37%), side effects (22%), long course of the tablets (14%), and lacking information on correct dose (10%).

Quality of WASH Influences Child Nutrition Status

- Unsafe water usage, unimproved sanitation, and improper hand washing practices, together result in stunting as well as impairment of physical and cognitive development among children, mainly through the repeated diarrhea, infection, reduced immunity, nutrient loss and decreased nutrient absorption.
- **Although 87% of the households (86% rural vs. 91% urban) have access to improved functional water sources within 150 meters, coverage is far from being adequate.**
 - *Regional Disparity is high: 1/5th of the households in Barisal, Khulna and Sylhet do not have access to safe drinking water.*
 - *Around 1/10th of the households do not have continuous water supply throughout the year.*
 - *Almost 2/3rd of the households use less than 20 liters of water/person/day.*
- **Although at the national level, 80% of the households use an improved latrine within 20m of the household, 35-38% of the households in Rajshahi, Rangpur, and Sylhet divisions do not have access to improved latrine.**
 - *Only 11% of the households have access to clean, round the year usable latrines.*
 - *Majority of the households share latrines with 3 other households*
 - *Approx. 1/4th of rural households with children under 5 do not have hand wash facilities with both soap & water within 5 m of latrine.*
- **At the national level, only 54% of the caregivers are knowledgeable on washing both hands with soap. Approx. 2/5th of households having hand wash facilities are not aware of hand washing requirement before preparing food and serving it.**

Early Childbearing, often due to Early Marriage, Exacerbates an Intergenerational Cycle of Undernutrition

- **Although Child marriage scenario is gradually improving, marriage and childbearing before age 18 still exhibits an alarming rate.**
 - In the age group 15-49, 11% were married before age 15 while in age group 20-49, 47% were married before age 18.
 - 35% women in age group 20-24 were married before reaching age 18 whereas 48% in age group 30-34 were married by age 18.
 - Among the women in age group 25-49, 12% have given birth by age 15 while 48% have given birth before reaching age 18, and 70 percent have given birth by age 20.
- **Early Marriage negatively affects the girls in many ways, such as retarded physical and mental growth as well as accumulation of human capital. Early marriage exposes the girl to become sexually active and start reproductive cycle early with least power balance in spousal decision-making.**
 - Children born to small and/or undernourished mothers are more likely to be undernourished themselves, with weakened immune systems and lifelong physical and mental disabilities.
 - Stunted Mothers are more likely to give preterm delivery due to intrauterine growth retardation.

Situation in Urban Slums Needs Attention

- **Factors which underlie food insecurity and nutrition in urban areas are different from those in rural settings. For urban poor**
 - Access to land for growing own food is almost zero;
 - Inter-generational support networks tend to be weaker;
 - Unhygienic living conditions along with limited access to public services translate into poorer nutrition and health outcomes.
- **Urban slums remain behind other urban areas in several indicators: stunting at birth, women's empowerment, caring practices for women and children, infant feeding, and health environment.**
 - The Bangladesh Urban Health Survey (BUHS) 2013 reported that
 - 50 percent of slum children below five years were stunted compared to 33 percent in non-slum areas.
 - more than one in five women aged 15-19 years in slum areas reported having ever been pregnant.
 - 25 percent of adolescent girls(15-19 years) are of short stature while 41 percent are underweight.
- **Social Protection Coverage in urban areas is extremely low (9% in 2013).**

Social Security Programs Need to be Nutrition Sensitive

- Although Bangladesh spends over 16 percent of its budget (or 2.5 percent of GDP) on over 120 safety net programs, the proportion of programs aiming to improve maternal and child nutrition is small.
 - Targeting Food Security Alone is Insufficient to Address Malnutrition
- An option is to phase out all food based social safety net programs by Cash Transfer under the National Social Security Strategy(NSSS).
 - the food based programs play critical role during emergencies(e.g., food price hike, floods, cyclones etc.)
- Design and Implementation of nutrition-focused Social transfer program will be a major challenge.
 - Conditional Cash Transfer vs. Cash Transfer
 - Feasibility of effective interventions, such as bundling cash transfers with behavior change communication, at a wider scale.
 - A recent study undertaken by the International Food Policy Research Institute (IFPRI) shows that programmes with both transfer and behaviour change communication (BCC) components saw greater impact on types of nutritious food consumed compared to 'food' alone and cash alone.

Thank You