Introduction

Bangladesh has made considerable progress in improving nutrition over the last two decades. The reduction in the prevalence of stunted children under five years old, from 55% in 1997 to 41% in 2011 and 36% in 2014, is one of the most sustained reductions in child stunting in the world. However, the underlying nutrition context in Bangladesh continues to be characterised by poor status of women’s nutrition, contributing to poor maternal and child health outcomes, including a high prevalence of low birth weight infants in the country.

Gaps in the public health service delivery system contribute to the sub-optimal coverage and quality of maternal nutrition interventions in Bangladesh. This is compounded by weaknesses in information systems, which are critical in guiding the planning and monitoring of health service delivery. This article highlights the country’s efforts to improve evidence-based planning and data-driven decision-making through strengthening its nutrition information systems (NIS) and how the NIS is influencing the scaling up of maternal nutrition services in turn.

Mainstreaming and scaling up nutrition interventions

In 2011 Bangladesh introduced its first integrated plan for nutrition, the National Nutrition Services Operational Plan (NNS-OP), to deliver nutrition-specific interventions to address maternal and child nutrition challenges. In order to accelerate progress, the Government of Bangladesh committed to scaling up the delivery of essential nutrition interventions.

The Directorate General of Health Services (DGHS) and Directorate General of Family Planning (DGFP) of the Ministry of Health and Family Welfare (MoHFW) are both now delivering nutrition services through their own networks of health facilities and health workers. In the past, neither directorate had a standardised system for data collection and reporting on nutrition interventions. In the absence of a harmonised set of nutrition indicators, common indicator definitions and systems to aggregate the coverage data from both directorates, the MoHFW did not have data to accurately assess the coverage of essential nutrition interventions. There were also issues with the quality and use of data for decision-making.

The challenges were highlighted in an assessment of the effectiveness of the delivery of the NNS strategies and actions, which identified a number of shortcomings in the governance and institutional arrangements, service delivery and monitoring of the operational plan. The assessment made recommendations to strengthen the programme’s record-keeping and reporting through existing data portals and to review the existing NNS indicators, with the prioritisation of a set of indicators that are indicative of extent and quality of service delivery. Moreover, a critical need was identified for a web-based data system for data visualisation in order to analyse and review performance at district and sub-district level.

A nutrition information and planning unit

To address the governance and institutional gaps identified in the assessment of the NNS–OP, the Government established the Nutrition Information and Planning Unit (NIPU) as part of the Institute of Public Health Nutrition in the MoHFW. The unit is staffed by six people and co-funded by the Government of Bangladesh and UNICEF.

NIPU has coordinated the review, standardisation and streamlining of indicators under the NNS–OP. This has led to development of a single information system, underpinned by a common nutrition indicator framework, to guide information collected by the data systems of the two directorates, to enable
Integration of data into one portal and to strengthen monitoring and reporting of nutrition services at district level.

Identifying missed opportunities

As a result of NIPU’s efforts, reporting has improved dramatically in the past three years, with an increase in reporting rates from 4% to 91% for all nine nutrition-related indicators.

This enhanced NIS has enabled identification of important gaps in provision and utilisation of nutrition services. An NIPU country-wide review of two maternal nutrition indicators – maternal counselling and iron and folic acid (IFA) distribution – revealed gaps in the services delivered through public delivery platforms. For example, of the approximately 13 million women who received IFA supplements from health facilities in the past two years, only three million also received nutrition counselling at the same. This means that only 30% of antenatal clinics and postnatal clinics provided maternal counselling, resulting in a missed opportunity and contributing to poor coverage of maternal nutrition services.

Data-driven service prioritisation

In October 2017 over 400 stakeholders made a call to action (#Unite4Nutrition) to address undernutrition collectively. At the meeting stakeholders agreed on the need to identify priority indicators for the NNS–OP as part of a wider World Bank Pay for Performance (P4P) health sector financing for results initiative, with a focus on two divisions with the worst maternal and child health indicators, Chittagong and Sylhet. Of these indicators, three maternal nutrition services were prioritised – weight monitoring of pregnant women, nutrition counselling and IFA distribution – that together constitute one maternal result, and all government facilities were mandated to provide these services as part of antenatal care. The maternal result is linked with a USD34 million disbursement on meeting nutrition results against a set annual target.

The P4P initiative is being rolled out in 3,179 community clinics in the 15 focal districts of Chittagong and Sylhet divisions. Now in its third year of implementation, the original target was 10% but, due to an intensive effort, 29% of registered pregnant women have received all three maternal nutrition interventions in one visit. As part of the initiative, innovative tracking mechanisms through an individual tracker application have been adapted to enable monitoring of the services received by each pregnant woman and the quality of care provided.

Strengthening systems and accountabilities

In line with efforts to strengthen NIS for maternal nutrition, the Government has introduced a country-wide data visualisation platform to report and track the performance of priority nutrition results in all 64 districts. Health facilities have also started registering pregnant women and recording services provided during each antenatal care visit, including nutrition services. This individual tracking system enables systematic reporting of the P4P maternal nutrition services in Chittagong and Sylhet. In all districts, the online dashboard visually describes the number of registered pregnant women in the tracker, then the number of interventions each woman has received at any given visit, and the data can be filtered by division, district and upazilla (sub-district) level.

This tool has been a huge boost to districts in enabling them to visualise their performance, easily identify low-performing districts, sub-districts and facilities, and target mentoring and follow-up support where needed. The dashboard also serves as a scorecard. Text messages are sent to sub-districts to share the status of programme implementation, which triggers analysis of performance and actions on how to further improve the coverage of services.

Lessons learned and next steps

Changes to the NIS in Bangladesh – brought about by prioritising and harmonising nutrition indicators, integrating data portals and transforming reporting into data visualisation – have resulted in a clearer picture of programme implementation and coverage. However, there is still a need to ensure this data is used to increase the coverage of maternal nutrition interventions with equity, as only one in three registered pregnant women receive all three maternal nutrition services and there are geographic variations of 20–44% between different divisions.

There is also still no information on the quality of services in the current system, such as adherence to IFA supplementation and the quality of the nutrition counselling offered. The focus should now be on including indicators that assess the quality of service provision for pregnant women in the NIS.

Other concerns focus on overloading frontline workers with record-keeping, including current issues with NIS efficiency; at present, data entry is only possible when the health worker is logged into the system online, which is a huge challenge given internet connectivity. Further work is needed to address capacity gaps for effective use of the data visualisation tools.