ABSTRACT

The Micronutrient Initiative (MI) supported governments of Bangladesh and Indonesia in revitalizing iron and folic acid (IFA) supplementation programs as a key component of the ANC package through demonstration of strategies to improve the coverage and adherence of IFA among pregnant women in selected districts with the objective of reducing iron deficiency anaemia in pregnancy.

The program package consisted of: strengthening the supply chain of IFA supplements; capacity building of health staff in monitoring and tracking design of evidence-based Behavior Change Interventions (BCIs) for increasing adherence, with a focus on improved interpersonal counselling (IPC); modifying monitoring systems to track coverage; and improving supportive supervision. The demonstration projects were implemented in Narsinghpur and Sakthira districts of Bangladesh, and in Lebak and Puncakbaru districts in Indonesia.

The program was assessed by a pre-post intervention study design with comparison areas in Bangladesh and a post-intervention study design with comparison areas was adopted in Indonesia. Socio-demographically similar districts were considered as comparison areas. In both the countries in the intervention areas, adherence to 90+ IFA tablets was found to be more than 50%. Logistic regression showed that among all women interviewed, those who were exposed to improved IPC were 2-7 times more likely to consume 90+ IFA tablets in the most recent surveys undertaken [Indonesia: Unadjusted odds ratio (UOR): 2.124 (95% CI: 1.386-3.256, p<0.001) and Bangladesh: UOR: 7.560 (95% CI: 3.850-14.486, p=0.000)].

The results reveal that the program strategy of improved IPC might have contributed towards high adherence to IFA. Considering the positive results of the program package, it is being scaled up in four provinces in Indonesia and in ten low performing districts of Bangladesh with a focus on improved IPC.

BACKGROUND

- MI supported governments of Bangladesh and Indonesia in revitalizing IFA supplementation programs as a key component of the ANC package through demonstration of strategies to improve the coverage and adherence of IFA supplementation among pregnant women in selected districts with the objective of reducing iron deficiency anaemia.
- This poster documents the program experiences and effective strategies to understand the contributory influence of IPC on IFA adherence.
- Anaemia pregnancy is a grave public health problem in pregnancy in both Bangladesh and Indonesia. IFA supplements among pregnant women are under-utilized.
- IPC is a key component of IFA programs in ANC as it provides an opportunity to improve understanding of maternal anaemia, provide strategies to cope with possible side effects of supplementation, and encourage the recommended daily adherence.
- In Bangladesh, MI-Bangladesh supported the Government of Bangladesh (GoB) to demonstrate an effective program model for increasing the coverage and particularly the utilization of IFA supplements among pregnant women. IPC was strengthened by using print BCC materials developed based on the findings of the formative research to aid in improved interpersonal counselling (see Photo 1).
- In Indonesia, MI in partnership with the District Health Offices (DHOs) of Lebak and Puncakbaru, demonstrated a model for strengthening the existing IFA supplementation programs to improve coverage and utilization rates among pregnant women. Here also, IPC was strengthened by using print BCC materials based on the findings of the formative research to aid in improved interpersonal counselling (see Photo 2).

OBJECTIVES

The objectives of this poster are twofold:
- To document the program experiences in improving adherence to IFA supplementation among pregnant women in selected areas in Bangladesh and Indonesia; and,
- To assess the influence of interpersonal counselling by health workers on the adherence of IFA tablets among pregnant women in these two countries.

METHODS

Indonesia

In Indonesia, a post intervention survey with a comparison group was carried out in two intervention districts of Lebak (Banten province) and Puncakbaru (West Java province) and two comparison districts of Pandeglang (Banten province) and Subang (West Java province) to assess coverage and utilization of IFA supplementation among pregnant women, as well as knowledge and practices of pregnant women and health workers with regards to IFA supplementation by an independent organization.

380 and 382 recently delivered women (delivered in the past six months preceding the survey) in the intervention areas and comparison areas respectively were interviewed. Ethical clearance for the survey was obtained from the Ethics Committee, Faculty of Public Health, Universitas Indonesia (see Figure 1).

Bangladesh

A baseline survey of the program was undertaken prior to initiation of program activities in early 2012 in the two selected program districts (Sadhara and Nasirpur) and two comparison (Mymensingh and Jessore) districts. An endline survey was conducted in April 2014.

The target respondents were recently delivered women with an infant less than six months interviewed in their last pregnancy. The other respondents for the survey were the health officials, service providers and workers. A total of 805 and 1,200 recently delivered mothers were interviewed in the baseline and end-line respectively. Ethical clearance was obtained from Bangladesh Medical Research Council (BMRC) (see Figure 2).

Bivariate and multivariate analyses were carried out. Cross tabulations between IFA adherence and IPC was conducted to understand the association. Binary logistic regression analysis was carried out to understand the contributory influence of IPC on IFA adherence.

RESULTS

Indonesia

Figure 1 shows the endline percentage of women who reportedly consumed at least 90 IFA supplements during the most recent pregnancy. Without baseline data, it was not possible to analyze difference in adherence.

Bangladesh

Baseline and endline surveys in Bangladesh found that the proportion of women consuming 90 or more IFA supplements during most recent pregnancy increased more in intervention than comparison sites (see Figure 2).

CONCLUSIONS

- Consumption of at least 90 IFA tablets registered a substantial increase in all the districts over the project period except in one of the comparison districts.
- The increase in consumption of at least 90 IFA tablets was found to be associated with IPC provided by health workers to the pregnant women.
- Based on these promising results, the program is being scaled up to ten additional districts in Bangladesh with a focus on improved IPC to pregnant women by health workers.

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