

Extended Abstract

Title: Financial support for poor pregnant women in Bangladesh: an operations research finding

Md. Moshiur Rahman, MA, MSc.

Ubaidur Rob, Ph.D

Tasnima Kibria, MSS

BACKGROUND

The maternal mortality ratio (MMR) is not merely an indicator of maternal health, but is also considered to be an important indicator of the health status and well being of a nation. Though the maternal mortality ratio in Bangladesh has declined from more than 600 in 1980 to 322 in 2004, it is still one of the highest in the world. Pregnancy and delivery related deaths account for 20 percent of the death in women of reproductive age. The unavailability of trained service providers, low utilization of services by pregnant women, along with the infrastructure difficulties, together contribute to the high rate of maternal deaths in Bangladesh.

The utilization of maternity care provided by trained professionals during and after delivery is alarmingly low in Bangladesh. While there have been some improvements in the recent years, about half of the pregnant women still do not seek any antenatal care. To reduce the health risks for mothers and children, it is important to increase deliveries by skilled providers with adequate medical supervision. Yet, delivery at home remains almost universal (85 percent of babies are born at home) in the country. Women's awareness of potentially life-threatening conditions during pregnancy, delivery and after delivery is comparatively lower in Bangladesh than many countries. Approximately 40 percent of the women with complications during delivery have received treatment from trained providers and another 40 percent consulted unqualified providers. The remaining one-fifth did not seek any care for maternal complications at all.

Several social, religious and economic barriers prevent pregnant women from seeking services from health facilities. The frequently cited reasons for not delivering at a facility are the perceived absence of need (68 percent) followed by the cost of treatment (18 percent), poor quality of services (10 percent) and transportation problems, as reported by another six percent. Only 21 percent of the mothers received any checkups from trained providers within 42 days of delivery. The primary reasons for not receiving postnatal care (PNC) are the perceived absence of need (56 percent) and the cost of treatment, as reported by one-fifth.

The government health facilities located in rural areas provide free antenatal care (ANC), delivery and postnatal care (PNC) services, but the cost related to medicines, transportation and surgical operations in the case of complications discourages poor women to seek services from these facilities. To achieve the Millennium Development Goal (MDG) of reducing maternal mortality to 143 by the year 2015, it is necessary to make a significant change in health care seeking behavior of pregnant women. With this rationale, instituting a financial assistance scheme for poor women for pregnancy and delivery care, including enhancing awareness to avail services could be an effective option for increasing the utilization of maternity services.

OBJECTIVES

The overall objective of this operations research (OR) study was to test the feasibility and effectiveness of introducing voucher scheme for poor women to improve utilization of ANC, delivery and PNC from trained service providers. The specific objectives were to:

- Develop a system to provide maternal health care services among poor pregnant women in exchange of vouchers
- Increase the capacity of providers to offer ANC, delivery and PNC services
- Improve the level of utilization of ANC, delivery and PNC services from trained service providers.

METHODOLOGY

The OR study used a quasi-experimental pre- and post-test design with no control group to test the feasibility and effectiveness of three interventions, which include: capacity building of service providers; strengthening health facilities in terms of providing maternal health care services; and creating awareness through behavior change communication (BCC) activities. Two unions from Nabiganj upazila of Habiganj district were selected purposively as the intervention sites for this OR study considering a set of criteria, which include: existence of female paramedics at HFWCs; availability of field workers; and union health and family welfare centers are near to upazila health complex (UHC). The study was conducted in three phases: preparatory, intervention, and evaluation. The duration of interventions was nine months. Difference between pre- and post-intervention assessments can be attributed to the effect of the interventions.

DATA COLLECTION METHODS

During the study, data were collected both using quantitative and qualitative approaches, including:

Service provider and worker survey: To assess the impact of training and knowledge gained by the service providers and workers, two different sets of data were collected. First, a detailed baseline survey of all the 26 service providers and workers in the study area was conducted using a structure questionnaire. This survey was completed well before the training was given. Second, a detailed survey of all the service providers and workers using the same instruments, ten months after the training, was also conducted to assess retention of maternal health care knowledge taught in the training.

Women survey: A baseline survey was conducted to collect necessary information to measure the effects of the interventions. The mothers who had a child less than one year were classified into two groups, poor and non-poor through principal component analysis using household enumeration information collected by ICDDR,B. Finally a total of 436 out of 889 randomly selected poor mothers were interviewed on their health care practices during the last pregnancy. To assess the impact of interventions, a detailed survey using same instruments except programmatic variables, was conducted among 414 randomly selected poor women out of 580 who received voucher book and given birth during the intervention period.

In-depth interviews: To collect detailed information about the mechanism and reasons of voucher utilization, in-depth interviews were conducted with 15 women who utilized maximum number of vouchers for receiving ANC, delivery or PNC services. In addition, 15 in-depth interviews were conducted with women who did not use any vouchers.

PRELIMINARY FINDINGS

Currently, the study is in the evaluation phase. Preliminary findings from the service providers and workers survey suggest that knowledge on the required number of ANC visits and the timing of those visits was fairly high before and after the intervention. Half of the providers and field workers knew all the five danger signs of pregnancy before intervention, which increased to about 90 percent after the intervention. Among the three delays that lead to maternal death, most of the providers/workers mentioned about the delay to reach health center before the intervention. Approximately half of them were aware of the other two delays: delay on decision-making and delay to receive services. Findings reveal that more than 84 percent of the service providers and workers reported all three delays that lead to maternal deaths after the intervention. On the other hand, knowledge on TT and requirement for immunization was almost universal among the service providers and field workers before and after the interventions.

A pregnant woman can utilize the vouchers to receive three ANC, delivery and one PNC services. In addition, voucher can be used for the treatment of pregnancy and delivery related complications. Field workers distributed 580 vouchers among the identified poor pregnant women during the intervention. Findings reveal that financial support to poor pregnant women can notably increase the utilization of maternal health care services from the health facilities. During the last nine months of interventions, 89 percent of voucher recipients received at least one ANC visit from trained service providers against 41 percent before the interventions. One-fifth of the women received iron tablet/syrup during their last pregnancy before the intervention and it has increased to 77 percent after the intervention. Similarly, findings suggest that those women required immunization among them 63 percent received TT during baseline and it has increased to 72 percent during endline survey period.

Deliveries attended by skilled providers can reduce the health risks of mothers and children. Yet, delivery at home remains almost universal in Bangladesh. Findings suggest that only 2.3 percent of mothers visited health facilities for delivery care before the intervention, whereas it has been increased to 18 percent after the intervention. Similarly, findings reveal that the proportion of delivery assisted by trained providers has increased from 6 percent during baseline to 22 percent during nine months of interventions. Those women experienced any form of complications, among them 40 percent sought treatment from trained providers during baseline and 74 percent during endline survey period. PNC from trained service providers has increased from 10 to 60 percent over the same period.

In-depth findings with voucher users reveal that women did not face any problems in receiving services in exchange of vouchers. Fifteen in-depth interviews were conducted with women to identify reasons for not using the vouchers. Most of them reported that they received vouchers at a later stage of pregnancy and were not informed properly about the process of using vouchers. Other reasons for not using vouchers for ANC were: health facility was closed; service providers were not available at the facility; and women visited health facility but did not seek service due to long queue. Even after receiving the voucher book, many women did not visit health facility for receiving delivery care from the trained providers. Most reported reasons for not receiving delivery care from the health facility were: labor pain started suddenly mostly at mid-night and got no opportunity to visit the facility; perceived absence of need; family members were not available to accompany the women to health facility or husband was outside home; traditional birth attendant (dai) assured to perform delivery at home; and stayed at parental house during delivery.