

Original Article

Maternal and Newborn Health Care Practices in Rural Bangladesh

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Abstract

Maternal and child health indicators have improved in Bangladesh but still pregnancy and child birth related complications are the leading causes of death of mother and children. Practices associated with these mortality reductions are not followed similarly throughout the country. This descriptive study was carried out to examine the prevalence of maternal and newborn-care practices in the rural area of Bangladesh. Face to face interview was conducted to collect data using closed end questionnaire from the purposively selected 589 women of reproductive age having at least one child. SPSS version 16 software was used for computation and analysis of data. Among the respondents, 58.4% received ANC visits but only 32.3% had completed minimum required visits (≥ 3). Effective immunization of mothers against tetanus was 93.3%. Home delivery incidence was 72.3 % and 92.2% of all deliveries were attended by trained health professionals. Only 17.0% got PNC visits. Birth weight recording coverage was only 34.5%. Maternal and newborn health care practices could not be eulogized for low coverage of ANC, PNC, birth weight recording and high incidence of home delivery. Recommendations were made to improve the quality of MCH service and service providers and to strengthen the motivational program for community participation.

Keywords: Maternal care, Newborn care, Practices, Rural Bangladesh.

Introduction

In Bangladesh, impressive improvements have occurred in the reduction of maternal, neonatal as well as infant mortality rates. There has been marked reduction in maternal mortality ratio (from 1991 to 2008, 4.7 to 3.4 per 1000 live births), total fertility rate (from 6.3 to 2.2. in between 1975 and 2010), neonatal mortality rate (from 1979 to 2010, 78 to 27 per 1000 live births) and infant mortality rate (from 1979 to 2010, 117 to 38 per 1000 live birth) that reflect the contribution of country's health sector and the socio-economical development in Bangladesh¹⁻⁶. Maternal health care namely antenatal

care (ANC), intra-natal care (INC) and postnatal care (PNC) and the care of the newborn, especially immediate neonatal cares play contributory roles in these aspects⁷⁻¹¹. The institutes to provide these services, their utilization and ongoing concerned practices are not similar in urban and rural areas¹². This research was designed to examine the prevalence of maternal and newborn-care practices among women of reproductive age having at least one child by observing the practice of the utilization of ANC, INC, PNC services and the newborn care in the rural areas of Bangladesh.

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Methodology

This descriptive study was carried out in a rural area of Shahjadpur upazila (sub district) of Bangladesh in the month of February 2013 during the Residential Field Site Training (RFST) program for 4th year MBBS students of Khwaja Yunus Ali Medical College (KYAMC). The students collected data by face to face interview with pretested closed end questionnaire from purposively selected women of reproductive age having at least one child. They got information about number of visits, place of visits and T T vaccination during the ANC, place, attendant and mode of delivery during INC, number of visits during PNC as indicators of maternal health care. Some immediate care of newborn after birth like keeping baby warm, birth weight recording, colostrum feeding, initiation of breast feeding and first bathing as the newborn care practice. Correct and complete data of 589 respondents were selected and entered in the data sheet using SPSS version 16 software and analyzed.

Results

The mean age of the 589 respondent women was 28.03 years (SD±8.86), range=35 years (15-50) and median=27 years. Among them, 398 (67.6%) were

married at early age (before 18) and 41.4% (244) had first childbirth before the age of 18 years. The number of respondent having 1 and 2 children was 165 (28.0%) and 215 (36.6) respectively with a mean number of 2.3 children per couple. A very large majority (545, 92.5%) of the respondents were house wife and only 34.1% (201) had attended school for 1-5 years but 207 (35.1%) were illiterate. Among the respondents, 58.4% (344) received ANC visits and only 190 (32.3%) completed minimum number of required visits (≥ 3). Of the ANC recipients, 68.0% (234) had attended at the government institutes and among them, 93.3 % (321) were brought under effective T T immunization coverage. The incidence of home delivery was 72.3 % (426) and 56 (9.4%) had needed cesarean section. But 92.2% of deliveries were attended by trained health professionals. A big majority (518, 87.9%) did not receive PNC. Birth weight of 34.5% (203) of the newborns was recorded and the incidence of LBW was 22.3% among the 'weighed and weight informed to respondents' group. A large majority (495, 84.0%) of the newborn was kept warm after birth, 399 (65.7%) was put on breast feed within 1-2 hours of birth and 455 (77.2%) were given colostrums properly. Majority of the newborn (367, 62.3%) was given first bath on the last day of the first week.

Table 1: Antenatal care of the respondents during the last pregnancy.

Characteristics		Respondents	
		Number	Percent
A. ANC visits			
1.	No visit	245	41.6
2.	Paid visits	344	58.4
	< 3 visits	154 (44.8 %)	
	≥ 3 visits	190 (55.2 %)	(32.3)
	Total	344 (100.0 %)	
	Total	589	100.0
B. Place of visit			
1.	Government facilities	234	68.0
2.	NGOs and Private	100	29.1
3.	Others	10	02.9
	Total	344	100.0
C. T T vaccination			
1.	Effective TT vaccination	321 (100.0%)	93.3
	T T 5 schedule completed	228 (71.0%)	(66.3)
	T T 5 schedule Incomplete (2-4 doses)	93 (29.0%)	(27.0)
2.	Ineffective TT vaccination (1 dose)	07	2.0
3.	No T T vaccination	16	4.7
	Total	344	100.0

Table 2: INC and PNC of the respondents during their last pregnancy and child birth.

Characteristics		Respondents	
		Number	Percent
Intra-Natal Care (INC)			
A. Place of delivery			
1.	At home	426	72.3
2.	Government facilities	99	16.8
3.	NGOs and Private clinic	56	9.5
4.	Other	08	1.4
	Total	589	100.0
B. Mode of delivery			
1.	Normal	518	87.9
2.	Normal with episiotomy	15	02.5
3.	Cesarean section	56	09.4
C. Attendant during delivery			
1.	Relative	46	07.8
2.	Trained health professionals	543	92.2
	i). Trained TBAs	210	(35.7)
	ii). TBAs*	165	(28.0)
	iii). FWV, nurses & doctors	168	(28.5)
Postnatal care (PNC)			
A. Postnatal visit after delivery and/or released from health facilities after INC			
1.	No PNC visit	489	83.0
2.	Paid PNC visits	100	17.0
	i). 1 visit	(43)	
	ii). 2 visits	(17)	
	iii). 3 visits	(26)	
	iv). ≥ 4 visits	(14)	
	Total	589	100.0

* Traditional birth attendant

Table 3: Newborn care practices in the case of the respondents' last child.

Characteristics		Respondents	
		Number	Percent
A. Birth weight recording			
1.	Not recorded	386	65.5
2.	Recorded	203	34.5
	Recorded but not informed	64	
	Recorded and informed	139	(23.6)
	< 2.5 kg	31 (22.3%)	
	≥ 2.5 kg	108 (77.7%)	
	Total	139 (100.0%)	
	Total	589	100.0
B. Keeping baby warm after birth			
1.	Yes	495	84.0
2.	No	71	12.1
3.	No idea	23	3.9
	Total	589	100.0
C. Breast feeding initiation time			
1.	Within 1-2 hours of birth	399	67.7
2.	On the first day	111	18.8
3.	After full flow of milk	54	9.2
4.	Other	25	4.2
	Total	589	100.0
D. Colostrum feeding			
1.	Yes	455	77.2
2.	No	134	22.8
	Total	589	100.0
E. First bathing			
1.	Within 1-2 hours	96	16.3
2.	On the first day	57	9.7
3.	On the last day of the first week	367	62.3
4.	After first week	69	11.7
	Total	589	100.0

Discussion

In this study, data of 589 women of reproductive age living in the rural Bangladesh was analyzed to observe the maternal health care practice represented by ANC, INC and PNC during their last pregnancy and newborn care practice by some immediate neonatal care. A remarkable portion of respondents was out of ANC coverage, high incidence of home delivery and a vast section did not get any PNC that denoted the maternal health care practice is not up to the desired level in the rural area. All the studied factors for neonatal health care practice were appreciable but birth weight recording practice needs to be more generalized.

In this study, maternal health care practice was assessed by antenatal, intra-natal and postnatal care utilization by the respondent women in reproductive age during their last pregnancy and child birth. Among the respondents, 41.6% (245) did not receive any ANC visit i.e. a remarkable portion of the pregnancy was exposed at risk. ANC visit has positive benefit both for mother and fetus and the outcomes. Among those who received ANC visits (344, 58.4%), only 190 (55.2%) had completed minimum required number of visits. From this statistics, it was proved that only 32.3% (190) of the respondent actually got ANC visits and might be supposed as under 'risk coverage approach'. What so ever the reason for vast 'no ANC visit' coverage, all the stakeholders in this respect should come forward. Government and NGO service availability, community participation and motivation of the expectant recipients might be the essential factors to bring all the pregnant women under ANC coverage. Use of government facilities for ANC service was an appreciating item. In this study, T T vaccination coverage was included as a yard stick of maternal care because it was included in EPI program to prevent neonatal mortality from tetanus, which has additional benefit to prevent maternal mortality from tetanus also. A very large section of ANC recipients (321, 93.3%) had completed effective T T immunization schedule that was the bright side of maternal health care and reflected the success of EPI program in Bangladesh.

About INC, data about place of delivery, mode of delivery and delivery attendants were collected. High home delivery incidence (72.3%), low institutional delivery and rate of cesarean section reflected the lack of institutional facilities and/or motivation in the community to utilize this care. It was very positive side

of INC that a larger section of delivery was conducted under the supervision of qualified persons. From these findings, it can be concluded that the institutional INC might be utilized if the facilities are made available. On the other hand, PNC was an underutilized sector in the study area. Only 17.0% respondents had consulted with the service provider for the check up or problems they faced after delivery. PNC had been described as an essential part of maternal care in many studies¹². Health education and community participation are essential to enhance the compulsory utilization of PNC in the study area.

In this study, data on birth weight recording, keeping newborn warm, initiation of breast feeding, colostrum feeding and first bathing was collected to assess the childcare practice. Only 34.5% (203) respondents reported the recording of their babies' birth weight by the delivery attendants but 23.6% (139) knew those as they were informed. Among those who knew their babies' birth weight, 22.3% baby was LBW baby, the weight was consistent with the LBW incidence of Bangladesh⁵. Birth weight recording and record keeping is essential for further care of baby and planning for the country. The system of compulsory recording and record keeping of birth weight should be introduced and the service providers would be motivated to do accordingly. Other practices like keeping baby warm, initiating breast feeding and colostrum feeding were at appreciable levels which were essential part of good neonatal care for the survival of children. In this study, majority (62.3%) of the newborn was given first bath on the last day of the first week. It was a good practice because bath within 3 days of birth removes the vernix caseosa from the newborn skin, thereby increases the risk of infection.

In this study, the mean and median value of the age of the respondents were 28.03 and 27 years respectively. More couples of lower age, the higher incidence of early marriage and early child birth and 2.3 children per couple along with the remaining long reproductive age of respondents had added the possibility of exceeding present TFR. Most of the respondents were housewives and had low level of education indicating rearward position of women in the society.

Conclusion and Recommendations

Maternal health care practice in the study area was not satisfactory as (a) antenatal care service utilization was

low because only a third of the total respondents received ANC visits, (b) high incidence of home delivery indicated the improper use or lack of INC service facilities in the study area and (c) post natal care service utilization was negligible. Newborn health care practice was relatively acceptable other than birth weight recording. Recommendation was made (a) to increase the MCH service facilities, (b) to improve quality of the service providers and (c) to strengthen the motivational programs for ensuring community participation in the study area.

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