Situation Analysis of Safe Motherhood Services of Dhaka City Urban Area

S TASNIM[a], AKM SHAHABUDDIN[b], S CHOWDHURY[c], A RAHMAN[d], PC BARUA[e]
F RAHMAN[d], N BEGUM[a], F ISLAM[a], M SARKER[f]

Summary:

Maternal mortality is still quite high in Bangladesh despite decades of programmes and activities. Maternal health care coverage depends on availability and utilization of services . With trend of increase in urbanization there is increasing demands for maternity care services .

The objective of the study was to assess present status of utilization of the antenatal, childbirth, postnatal and neonatal care services at urban setting.

This was a cross sectional descriptive study done during August to December 2001 in the catchment area of randomly selected ten health care centres run by partner NGOs of Urban Primary Health Care Project and Dhaka City Corporation in Dhaka Metropolitan city. A total 3,000 mothers with under one year child was selected randomly from about 49,526 households and information were collected by interviewer-administered structured questionnaire.

Mean age of respondents was 24.6 ± 5.12 years. Among them, 31.14% were illiterate and 67.87% were multipara. About 87.74% received antenatal care during last pregnancy, of which 23.74% from public sector, 32.63% from NGO and 39.63% from private physicians. Antenatal care was provided by graduate doctors in 51.42% and by paramedics in 29.33%. Institutional delivery was 35% and conducted by a trained person in 39% cases. Reasons for not seeking medical care during pregnancy and delivery were financial difficulties (24.53%), no perceived problem (25.16%), transportation problems (11.70%) and fear of Caesarian operation (4.43%).

Pregnancy and childbirth were perceived to be a natural event and delivery should be done at home. Health centres were thought to be a place for dealing with emergencies and complications only.

(J Bangladesh Coll Phys Surg 2005; 23 : 54-58)

Introduction :

Bangladesh is one of the highest populous country of the world with about 2.6 million childbirth per year. Annual growth rate of urban population is over six percent per annum[1] while national figure is 1.5 percent[2]. Maternal mortality is reported to be 3.2 per thousand live births[3]. The infant mortality rate is 53 per thousand live birth but in urban slums the rate is 142 per thousand live birth, which is 58 percent higher than the national average[4]. Despite decades of programmes and activities, maternal health care coverage is still quite inadequate.

Characteristics of service delivery system i.e. availability of health care provider and facility for services, reflects the probable and potential level of access to medical care. Utilization and satisfaction are the indicators of actual or realized access to services.

About 20% of population in Bangladesh reside in urban areas and there is ever increasing thrust on urbanization[4]. Percentage of urbanization in Dhaka increased from 14.79% in 1961 to 53.90% in 1991[5]. It has been found that 61% of urban household are below absolute poverty line, and countless slums and squatter settlements have evolved in most urban areas[6]. It is natural that healthcare facilities are not expanding in the same pace to cope up with increasing demand and it is even harder for urban poor to have an access to the health services.

The objectives of this study was to explore the prevailing maternity care status in terms of utilization of antenatal, childbirth, postnatal and neonatal care

a. Dr. Saria Tasnim, FCPS, MMED, Dr. N. Begum, Dr. F. Islam, Associate Professor of Obstetrics & Gynaecology, Institute of Child & Mother Health
b. Prof. AKM. Shahabuddin, Professor & Ex- Head of the Department Obstetrics & Gynaecology, Institute of Child & Mother Health
c. Prof. S Chowdhury, Professor, Department Obstetrics & Gynaecology, Institute of Child & Mother Health
d. Dr. A Rahman, Dr. F Rahman, Asstistant Professor of Epidemiology, Institute of Child & Mother Health
e. Prof. PC Barua, Professor of Epidemiology, Institute of Child & Mother Health
f. M Sarker, Nursing Superintendent, Institute of Child & Mother Health

Address of correspondence : Dr. Saria Tasnim, Associate Professor, Department of Obstetrics & Gynaecology, Institute of Child & Mother Health, Matuail, Dhaka-1362.

services at urban settings, and to determine the determinants of non -utilization of such services.

Materials and method:
This was a cross sectional descriptive type of study done during August to December 2001 in the catchment area of randomly selected ten health care centers run by partner NGOs of Urban Primary Health Care Project and Dhaka City Corporation in Dhaka Metropolitan city. The criteria of such geographical clustre was the population size of 20 to 25 thousand, at least 25% were poor and population were stable in a clearly delineated area. Information were collected with a interviewer-administered structured questionnaire. A total of 49,526 households were visited to find out mothers with under one year child, and among them 3,000 were selected randomly as respondents.

Results:
The mean age of respondents was 24.65± 5.12 years and 14.18% belonged to age group 15 – 19 years. About 31.14% were illiterate (Table–I). Obstetric profile showed 32.13% had one child, about 25% were married at or below age 14 years and mean age at marriage was 16.7±3.31 years. Average age at first pregnancy was 18.44 ± 3.26 years and the prevalence of teenage pregnancy was 68.12% (Table–II).

About 87.74% respondents received antenatal care during last pregnancy and mean number of visits was 5.53±3.61. Service was availed from public sector by 23.74%, NGO clinic by 32.63% and private facilities 39.63% (Figure: 1). Majority of this care was from graduate doctors (51.42%) and doctor specialist in 17.08% (Table-III). About two third (63.67%) of respondents suffered from some form of complication during the last pregnancy and 46.63% sought treatment (Table-IV). Care was received from graduate doctors and specialists (52.12% and 31.25% respectively) for complications.

The place of last delivery was at service facilities in 46.83%, of these 13.17% at public hospitals (Figure: 2). The delivery was conducted by a trained person in 38.66% cases (doctors 32.42%, paramedics 6.24%) and traditional birth attendants (TBAs) in 50.34% (Figure: 3).

About a qurter (24.53%) respondents expressed that they did not avail the service of any centre or doctor during delivery due to financial difficulties, perceived absence of problem (25.16%), transportation problem (11.70%) and fear of Caesarian section (4.43%) (Table-V).

Table-I

Socio- demographic characteristics of respondents (N=2,954)

Characteristics	Frequency	Percentage
Age of respondent (years):		
15-19	419	14.25
20-24	1,114	37.62
>25	1,421	48.13
Educational level of respondent (years):		
Illiterate	925	31.14
<5 years schooling	669	22.62
> 5 years schooling	1,356	46.24

Table-II

Reproductive health characteristics of the study populations (N=2,954)

Characteristics	Frequency	Percentage
Para:		
Primi -	949	32.13
Multi -	2,005	67.87
Age at marriage (years):		
≤14	738	24.98
15-19	1,689	57.17
>19Years	527	17.85
Marriage before age 18 years	2,221	75.18
Age at First pregnancy (years):		
10-14	260	8.81
15-19	1,754	59.37
>19	940	31.82

Table-III

Antenatal care service utilization by the respondents (N=2,954)

	Number	Percentage
Received antenatal care during pregnancy	2,592	87.74
Provider for antenatal care:		
Graduate doctor	1,334	51.42
Doctor specialist	490	17.08
Paramedics	761	29.33
Others	56	2.17

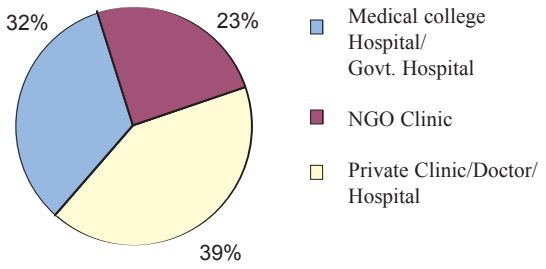

Figure-1 : *Source of antenatal care*

Table-IV

Care received for pregnancy complication by the respondents

Characteristics	Number	Percentage
Suffered from complication	1,881	63.67
Received treatment for complication	1,289	46.63
Source of treatment for complication:		
Medical College Hospital/ Government Hospital	256	20.01
Private clinic/physician/hospital	614	47.63
NGO clinic/UFHP	267	20.74
Others	227	17.62

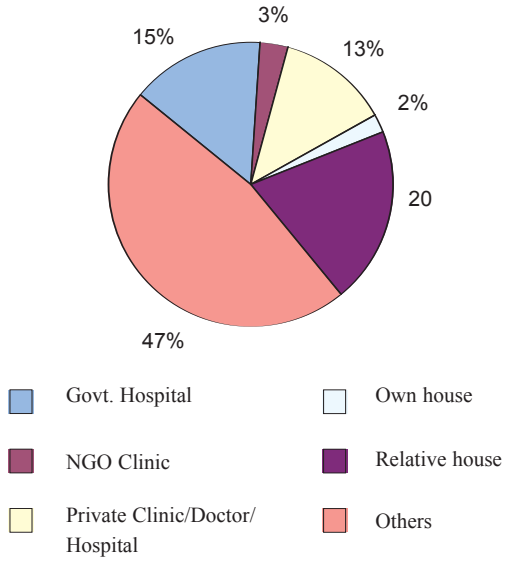

Figure-2: *Distribution of place of delivery*

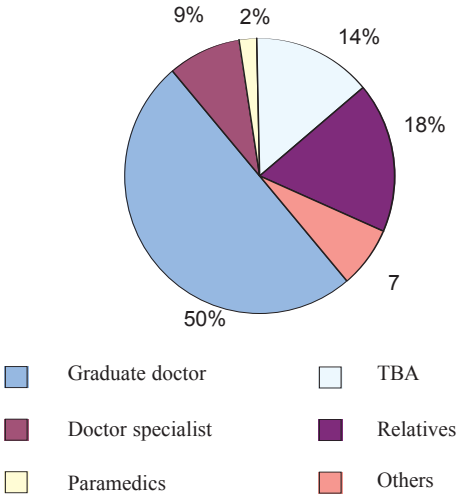

Figure-3 : *Distribution of people conducting delivery*

Table-V

Causes mentioned by the respondents for non-utilization of health centre/physician services during delivery

Causes	Number	Percentage
Long distance	50	2.84
Poor management at the health centres	37	2.12
Financial problem	444	24.53
Transportation problems	216	11.70
Perceived absence of problem	448	25.16
Fear of Cesarean section	129	4.43
Others	184	6.22

Discussion :

A woman's health is intricately entwined with her social status that in turn involves a complex set of interrelated factors. Those factors include her income, employment, education, health and fertility, and society's perception of her role in the family and the community[7].

Teen-age marriage is a reflection of low status of woman, favours high fertility and is a crucial factor in maternal mortality[7]. It is advocated that pregnancy below age 18 years and above 35 years are more susceptible to adverse pregnancy outcome. Bangladesh Demographic and Health Survey, 1997

showed that overall about 60% of Bangladeshi women are married by the time they are 15 years of age and median age at marriage among women of 20-49 years is 14 years. It is reported that 72% of 15- 19 years age group are married and they contribute approximately 20% of total pregnancy[8] . Another study shows currently married teen age women (13-19 years) are 37%[3].

Although antenatal care coverage is reported quite high (87.74%) in the present study but the care did not meet the required routine four visits recommended by WHO[9]. Some of the visits were for doing investigations, collection of report or for associated medical problems and collection of medicine. However, antenatal care coverage was found increased from 30% of births (1996-97)[2] to 35% during 1999-2000[5] and 41% in 2001[3]. Antenatal care was provided by medically trained persons in one third of births and 59% of urban birth and 28% of birth in rural area had antenatal care coverage[10]. Care is most effective if the visits were started early during pregnancy and continued at regular intervals throughout the pregnancy[11]. Women who had attained secondary education or who were from wealthy households were more likely to be assisted at delivery by a medical professional than women with no education or who were from poorer households[4].

It was striking that about 60% of women reported one or more complications during last pregnancy but only 46% sought treatment. The utilization of private clinic/doctor services was more than government facility (47.63% vs 20.01%) and NGO clinic utilization (47.63% vs 20.74%). However, the national survey has revealed that women sought medical care for pregnancy with complication in 56% cases; among them, about 40% attended government facilities, 20% private doctors, 19% NGOs/private clinic and 16% traditional healers[3]. It has been found that utilization of NGO/Private clinic is preferred much more among urban than national (30% versus 15%) and use of antenatal care is strongly associated with level of education and household economic status[3].

It is well appreciated that most important intervention for reduction of maternal mortality is ensuring skilled attendants during delivery. A study has revealed that nationally only 12% births are done by medical trained people (doctors 7%, and nurse, midwives or FWV 5%)[3]. In the urban area, doctors and nurses attend 21% and 16.2% deliveries respectively and 65% are attended by TBAs[12]. This study also showed that 60% of births were conducted by TBAs and relatives. Survey has revealed that in urban areas, 43.3%, 47.7% and 9% births are conducted by nurse/doctor, midwife and relatives respectevly[2].

According to Associates for Community and Population Research the number of deliveries at government facilities constituted 5.33% of the total estimated annual deliveries and 3.97% of complicated obstetric cases attended emergency obstetric care facilities for treatment. Of the institutional deliveries, 64.62% took place in government facilities[13]. Another study found 32% of metropolitan/ town deliveries took place in a service facility[3].

There are a number of socio-cultural determinants for availing maternity care services. Cost is often cited as a barrier (24.53%) even though free services are available in the government facilities. A great proportion (25.16%) did not feel the need to go to any centre, 11.70% mentioned transport problems and 4.43% were afraid of Caesarian section. Another study revealed reasons for not going to a facility during delivery was the perceived absence of need (68%), cost of visit (18%), transport problem (6%), 10% mentioned poor quality service and 4% had fear of service[3]. Many a times delivery occurred at parental home in rural areas, so even for those availing antenatal care from a centre the delivery service of that center was not utilized.

It is often stated that one of the most pressing barrier to attain safe motherhood service is rooted in the powerlessness of women and their unequal access to resources in families, society and economic sectors. Women's limited exposure to information causes them to accept pain and suffering as "women's tale" and they do not perceive pregnancy as an event requiring any additional care. In the current study, 28.16% expressed that they did not perceive any problem so did not avail any antenatal care in their last pregnancy. Studies have shown that use of antenatal care is strongly associated with level of education and economic status[14].

World Health Organization defines the accessibility of the service facilities as the proportion of the given

population that can be expected to use a specified facility, service etc. The barriers of accessibility may be physical e.g. distance, economic e.g. travel cost or fee charged, and socio- cultural e.g. cast or language[15].

Access is not to be equated with the use of services. Utilization proves that access has been achieved, but utilization rates do not permit determination of the degree to which services were not used for any reason. Before deciding whether a pregnant women can or will use a particular health service, following factors should be considered. She must perceive a need for them, she must be aware of her condition, and feel that it warrants medical intervention. The appropriate services must be available to her and the service must be acceptable to her (i.e. she should have confidence in the technical competence and 'humanness' of the facility and its provider). She should also have the ability to obtain the service (the necessary income and time).

Utilization of antenatal care service was quite impressive in Dhaka city but the care provided was, to some extent, incomplete and inadequate. Health seeking for complication during pregnancy and childbirth, although limited, was more from private sector. There is an universal preference for home delivery and majority of deliveries are conducted by traditional birth attendants. Pregnancy and childbirth is traditionally regarded as a natural event and perceived to be dealt with at home, and hospital or health facilities are place for dealing with emergency and abnormal situations.

Acknowledgement:
Financial support for this research was provided by Asian Development Bank (ADB) through Urban Primary Health Care Project (UPHCP) under Local Government division, Ministry of Rural Development & Co-Operatives, Government of the People's Republic of Bangladesh.

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