Extended Abstract

A Study on Obstetric Morbidity in India: Evidences from Reproductive and Child Health Survey -II

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Introduction and Context

In many parts of the developing countries, complications related to pregnancy and childbirth is among the leading cause of mortality for women of reproductive age. The causes of maternal deaths have direct attitude upon the obstetric complications of the pregnant state (i.e. pregnancy, labour and puerperium) arising from interventions, omissions, incorrect treatment or a chain of events resulting from any of these (United Nations, 1996). The ICPD program of action states that all countries should make reproductive health care accessible to all individuals of appropriate ages by 2015 (United Nations, 1994). Reproductive health therefore implies that people are able to have a satisfying and safe sex life and they have the capability to reproduce and freedom to decide if, when, and how often to do so?

Obstetric morbidity refers to ill health in relation to pregnancy, delivery and post delivery periods. Life-threatening morbidity during pregnancy is swelling of hands and feet, paleness, vaginal bleeding, hypertension and convulsions etc. Morbidity conditions during delivery are prolonged/obstructed labor, excessive bleeding, loss of consciousness and rupture of uterus/vagina or cervix etc. Potential life-threatening morbidity conditions during the post-partum period are hemorrhages, foul discharge, high fever, lower abdominal pain and severe headache etc.

Women are at risk of complications right from the onset of menstruation. They have to deal with unwanted pregnancy, suffer from the complications of unsafe abortions and bear the problems arising out of contraception. A study by Mukhopadhyay (Mukhopadhyay, Ray, Ghosh & Mukhopadhyay, 2002) among women of rural West-Bengal showed the influence of some socio-economic factors on reported obstetric morbidity and observed that factors like age and pregnancy order affect obstetric morbidity differently in different religious groups.

Over half a million women die each year worldwide because of the complications of pregnancy and childbirth. Most of these deaths occur among young, poor mothers in developing countries of Asia and Africa. A women living in eastern, middle or western Africa is 75 to 100 times more likely to die when she becomes pregnant than a women who lives in western Europe (Weekly epidemiological record, 1991). One of the International Organization *Engender health*, who is currently involved with Maternal and Child Health activities in 17 countries, found that

"Every minute a women dies from complications related to childbirth, pregnancy or unsafe abortion. Nearly all (99 percent) of these deaths occur in developing countries."

Indian women suffer from various reproductive health problems and more than one lakhs women die in India annually for reasons related to pregnancy, abortion accounts for 12.3 percent of all maternal deaths in India (RGI, 1993). Obstetric Morbidity is very high among currently married women in India because cultural norms and values promote early marriage of women in some states. The rural women, who are under-nourished and have early pregnancy along with this malnourishment, would enhance the risk of hazardous pregnancy outcomes. The available evidence regarding the level of obstetric morbidity is not comprehensive enough to give an accurate picture of India in current scenario. The National Population Policy adopted by Government of India in 2000 (MOHFW) reiterates the government's commitments to safe motherhood programme within wider context of reproductive health.

Broadly, the present study attempts to understand the levels of obstetric morbidity during pregnancy, delivery and post-delivery period and the relationship of these morbidities with socio-economic and demographic factors. Also the paper to analyze the treatment seeking behaviour among currently married women in India.

Data and Methodology

The present study utilizes the data from District Level Household Survey (DLHS-2, 2002-04) under Reproductive and Child Health Survey in India. The survey DLHS-2 was completed during 2002-04 in 593 districts as per the 2001 census in two phases. DLHS-2 has collected information from India through a representative sample of 620,107 households and 507,622 eligible women aged (15-44) respectively. The principal objective of the study was to provide detailed information on reproductive health and child health at district level, state level and national level.

In the survey, all the eligible women who had given last birth or still birth during the three years preceding the survey were asked if at any time during pregnancy, they had experienced any pregnancy related problems. Similar type of question was asked at the time of delivery while the incidence of post-delivery complication is judged by any of the problems during the first six-weeks of delivery if they had experienced any problems, if yes types of health problems, sought treatment (yes or no) and source of the treatment have been asked during the survey.

The data will be analyzed using simple bivariate analysis. For the first objective the data will be analyzed each morbidity separately, firstly we will see at least one problems related to pregnancy, delivery and post-delivery periods and then combining all three complications to see the levels of obstetric morbidity in India. To understand the impact of various background and demographic variables on the obstetric morbidity, multivariate technique will be used. The

logistic regression technique will be used to estimate the net effects of various socio-economic and demographic variables on the likelihood of obstetric morbidity. The following variables will be considered for the analysis:

Dependent variables-

Obstetric morbidity (during pregnancy, delivery and post-delivery period separately)

Independent variables

Social characteristics - *Place of residence, Religion, Caste, Exposure to mass-media, Sanitation facility, Education level of women, Education level of husband, Standard of living index, Place of delivery, reproductive health care service utilization etc.*

Demographic characteristics - *Current age of women, Age at first marriage, Age of women at the time of first birth, Pregnancy wastage (at least one still birth or induced abortion or spontaneous abortion in the reproductive period), Children ever born, No. of children surviving, Marital duration etc*.

To study the next objective i.e. treatment seeking behavior, whether the women who experienced any symptoms sought treatment from public sector or private sector for any reproductive health problems. The variable has been divided into three categories: *no treatment, treatment from public medical sector and treatment from private medical sector*. It has aimed to know which groups utilize private health care and up to what extent. The technique of multiple logistic regressions will be carried out.

Note: ***The present study is continuing to prepare the different tables like the relationship between socio-economic and demographic factors with different types of obstetric morbidity and to understand the association between treatments seeking behavior among women with different types of obstetric morbidities.***

Preliminary Results

Table 1: Percentage of currently married women suffering from different type of obstetric morbidity in India, 2002-04

Obstetric Morbidity	India
Pregnancy complication	34.2
Delivery complication	40.8
Post-delivery complication	31.4
Obstetric Morbidity*	63.4
Number of women	**195031**

Note: *any types of complication either during pregnancy, delivery or post-delivery period

Table 1 depicts the levels of different types of obstetric morbidity, like at the time of pregnancy, delivery and post-delivery complication among women in India. The table shows that 34% of the women experienced at least one pregnancy complication while the percentage of delivery and post-delivery complications are 41 % and 31 % respectively. About two third women reported overall obstetric morbidity either at the time of pregnancy, delivery or post-delivery period in India.

Table 2: Percentage of currently married women aged 15-44 who had reported type of complications during pregnancy, delivery and post-delivery periods in India, 2002-04

Obstetric Morbidity	India
Pregnancy Related Problems	**34.2**
Swelling of hands & feet	19.8
Paleness	12.7
Visual disturbance	7.9
Bleeding	2.1
Convulsion	4.2
Weak or no movement of fetus	2.6
Abnormal position of fetus	1.5
Others	6.2
Delivery Complication	**40.8**
Premature labor	11.7
Excessive bleeding	6.4
Prolonged labor	15.5
Obstructed labor	20.6
Breech presentation	3.1
Others	3.2
Post-delivery Complication	**31.4**
High fever	14.3
Lower abdominal pain	18.5
Foul smelling vaginal discharge	5.4
Excessive bleeding	6.7
Convulsion	3.4
Severe headache	12.1
Others	2.9

Table 2 presents the different type of complication during pregnancy, delivery and post-delivery periods in India. The major problems reported by women at the time of pregnancy were swelling of hands and feet (20%), paleness (13%) and visual disturbance (8%). At the time of delivery, the major problems reported were obstructed labor (21%), prolonged labor (16%),

premature labor (12%) and excessive bleeding (6%). Lower abdomen pain (19%), high fever (14%) and severe headache (12%) are the main health problems reported by women at the time of post-delivery complication.

Table 3 Percentage of currently married women who had experienced Pregnancy complications and sought treatment, India, 2002-04

Treatment and Source	***India***
Percentage of women sought treatment who had experienced any pregnancy complication	**50.6**
Number of women	**66747**
Source of treatment	
Government health facility[1]	31.9
Primary health centre	6.1
Sub-centre	3.1
Private health facility[2]	59.6
ISM facility[3]	5.2
Others[4]	5.3
Number of women who sought treatment	**33762**

Note: [1]include municipal hospital, dispensary, urban health centre (UHP), urban health post (UHP), urban family welfare centre (UFWC), community health centre (CHC), rural hospital, primary health centre (PHC), sub centre (SC).
[2]include private hospital/clinic and non-government organization (NGO)/trust hospital/clinic.
[3]include government or private Indian system of medicine and
[4] include home remedy and other source

Table 3 shows the percentage of women sought treatment that had experienced any pregnancy complications in India. About half of the women reported that they had sought treatment for pregnancy complication at India level. Among women who sought treatment for pregnancy complication, approximately one third visited a government health facility including a primary health centre (6 percent) and sub centre (3 percent). Three fifth of women visited a private health facility and 5 percent had gone to a facility with the Indian system of medicine outs, while 5 percent obtained advice from other health facility.

The paper is continuing for some other analysis like if women who experienced any symptoms & sought treatment from public sector or private sector for any reproductive health problems. The variable has been divided into three categories: no treatment, treatment from public medical sector and treatment from private medical sector. It has aimed to know which groups utilize private health care and up to what extent. The technique of multiple logistic regressions will be carried out and will be submitted as soon as possible……..

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