

Complications in Previous/Index Pregnancies: A Predictor of Utilization of Maternal Health Services

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ABSTRACT

Background: Maternal mortality is on decline throughout the world, and still India accounts for around 15% maternal mortality of the world. Most of these deaths are preventable and avoidable if high quality care is given to a women. In order to achieve this it is very essential to examine healthcare needs and identify the demand side barriers in access to healthcare services by the women of reproductive age group. The study was thus planned to assess the current level of utilization of maternal health care services and factors associated with it.

Methods: This descriptive, community based, cross-sectional study was conducted in the field practice area of urban health training centre (UHTC) of Department of Community Medicine, J N Medical College, AMU, Aligarh. It was carried out on 211 recently delivered women and the data was analysed using SPSS20.

Results: More than 27% women reported some kind of complication in their last pregnancy. The commonest complications were found to be Anemia and Pre-eclampsia/eclampsia. Significant number of women in our study recognised the need of utilizing MCH care only after experiencing complications.

Conclusions: A large number of women suffer from complications during pregnancy and complications like anemia go unnoticed, which can have grave complications. Most of the women opt for health care only if they had suffered from any complication during the last pregnancy.

Keywords: Recently delivered women, utilization of MCH care, Complications of pregnancy

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INTRODUCTION

According to WHO, UNICEF Trends in maternal mortality (1990 to 2015) globally, maternal survival has improved substantially with an annual maternal mortality decline of 43% reported between 1990 and 2015. Developing regions account for approximately 99% of global maternal deaths in 2015. India alone account for 15% of all global maternal deaths. Everyday nearly 830 women die from preventable causes related to pregnancy and childbirth. Most of these deaths are avoidable and could be prevented with high quality care in pregnancy, skilled care during childbirth, and care and support in the weeks after childbirth (WHO, 2016). The fifth Millennium Development Goal (MDGS) of reducing the global maternal mortality ratio (MMR) by three quarters

between 1990 and 2015 has made the least progress among all the other Goals. To bridge this gap, as a part of the Sustainable Development Agenda, the target set to reduce the global maternal mortality ratio to less than 70 per 100,000 live births under sustainable development goals (SDG).¹⁻⁵ India, being a signatory to many national and international agreements headed in this direction to strengthen maternal and child health (MCH) services as early as first and second few year plans (1951-56 and 1956-61) and bears a legal obligation to make sure that women do not die or suffer complications from preventable pregnancy-related causes. The Government of India has implemented several policies and programmes for the promotion of maternal and child

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health (MCH) since the inception of Family Welfare Programme in India. The maternal and child health programme was integrated with the family welfare programme during fourth five year plan (1964-74) to enhance coverage and quality MCH services. Integrated Child Development services (ICDS) 1975, laid foundation for convergence of maternal and childhood health (MCH) services. In 1992-93, The Child Survival and Safe Motherhood (CSSM) Programme continued the process of integration by bringing together several keys of child survival intervention with safe motherhood initiatives and family planning activities (Ministry of Health and Family Welfare (MOHFW, 1992).¹⁻⁶

Further, to upgrade the existing health infrastructure, under the National Health Mission (NHM) 2013, the Reproductive, Maternal, New born, Child Health & Adolescent Health approach (RMNCH+A) aimed to strengthen the referral linkages between community and facility based health services and laid emphasis on health systems strengthening. Some other special programmes and schemes like, Janani Suraksha Yojna (J SY) 2005, Janani Shishu Suraksha Karyakram (JSSK) 2011, Referral transport for pregnant women, sick neonates and infants, Mother and Child Tracking System (MCTS), National Iron+ Initiative (NIPI) etc. has been launched.¹⁻⁵

In spite of series of national level safe motherhood policies and programmatic initiatives, we have not been able to achieve the goals towards making pregnancy safer in India. Although overall utilization of maternal health care services in India has been improved, however level of uptake is still not considerable and shows a regional diversity in availability and quality of maternal health services despite the uniformity in programme design throughout the country. This disparity in the utilization of maternal health care is a complex phenomenon, may be because of plethora of socio-demographic and cultural factors contributing in maternal mortality and morbidity.⁷⁻¹⁰

Rationale for the study

In order to ensure better health for urban women, it is necessary to examine their healthcare needs and identify the demand side barriers in access to healthcare services. Need for researches aimed at identification of these barriers cannot be overemphasized. The study was thus planned to assess the current level of utilization of maternal health care services and factors associated with it to give feedback to the health planners for formulation of health plan accordingly and will help the government in designing appropriate, context-relevant program and policy responses.

METHODS

The present descriptive, community based, cross-sectional study was conducted in the field practice area of urban health training centre (UHTC) of Department of Community Medicine, J N Medical College, AMU, Aligarh. This study was undertaken to evaluate the utilization of maternal health services in relation to the presence of complication related to a previous or index pregnancy in a Recently Delivered Women. Sample size was calculated by using, $4 pq/L^2$. 211 women were taken as a sample, for the main survey, every house was approached from the starting point of study area and recently delivered women were interviewed after taking informed written consent, using a pretested, structured, and

semi-open questionnaire. The collected data were analyzed using SPSS-20. Proportion, frequencies, χ^2 , and other statistical tests were used to interpret the data. Confidence intervals (CI) of 95% and p-value. WHO criteria was used to define Full Antenatal, Intranatal and Postnatal Care.

RESULTS

Table 1: Complications during Previous pregnancies (N=86)

Complication*	Frequency (No.)	Percentage (%)
Anaemia	14	16.3
Excessive Nausea and Vomiting	11	12.8
Bleeding per Vagina	10	11.6
Leaking per Vagina	07	8.1
Malpresentation	05	5.8
Pre-Eclampsia/ Eclampsia	04	4.6
Pain Abdomen	04	4.6
Oedema/ Swelling	03	3.5
Abortion/ Still Birth	28	32.6
Other	07	8.1
*Multiple responses		

Women were asked about complications in the previous pregnancies. Out of 211 (eligible multiparous) women, about 86 (27.2%) women reported that they had some complication during earlier pregnancies. Multiple responses were obtained. Most common cited complications were anaemia (16.3%), excessive nausea and vomiting (12.8%), bleeding per vagina (11.6%) and leaking per vagina (8.1%) etc. 28 (32.6%) women reported that they had experienced foetal loss (either abortion or still birth) during previous pregnancies (Table 1).

Table 2: Complications during Index Pregnancies (N=136)

Complication*	Frequency (No.)	Percentage (%)
Anaemia	80	58.8
Pre-Eclampsia/ Eclampsia	22	16.2
Pain Abdomen	11	8.1
Excessive Nausea and Vomiting	10	7.4
Oedema/ Swelling	09	6.6
Bleeding per Vagina	05	3.7
Leaking per Vagina	05	3.7
Malpresentation	04	2.9
Other	10	7.4
*Multiple responses		

Among the study population, 136 women reported that they had some complication during their index pregnancy. Multiple responses were obtained. Most common cited complications were anaemia (58.8%), Pre-eclampsia/eclampsia (16.2%), pain abdomen (8.1%), excessive nausea and vomiting (7.4%), swelling or oedema (6.6%) etc. In spite of wide prevalence of anaemia in

pregnancy, it was noticed and reported by very few women, indicating lack of concern of women regarding their own health (Table 2).

Table 3: Complications during Previous pregnancies and Utilization of Maternal Health Services (N=211 based on multiple responses)

Complication	Full Antenatal Care		Full Intranatal Care		Full Postnatal Care		Total No.(%)
	No.	%	No.	%	No.	%	
Yes	50	58.1	68	79.1	25	29.1	86 (40.8)
No	41	32.8	76	60.8	32	25.6	125(59.2)
Total	91	43.1	144	68.2	57	27	211(100)
Significance	P<0.05, Significant		P<0.05, Significant		P>0.05, Not Significant		

Table 3 describes that utilization of all maternal health services was found to be better and significant (p<0.05) (except PNC) in women who had experienced any complication during earlier pregnancy, 58.1% women who had experienced any complication during earlier pregnancy availed full ANC, as compared to 32.8% women who did not have any complication in previous pregnancy. Similarly 79.1% and 29.1% women availed full INC and PNC services, as compared to 60.8% and 25.6% women respectively, who did not experience any complication.

Table 4: Complications during Index pregnancy and Utilization of Maternal Health Services (N=310 based on multiple responses)

Complication	Full Antenatal Care		Full Intranatal Care		Full Postnatal Care		Total No. (%)
	No.	%	No.	%	No.	%	
Yes	47	34.6	93	68.4	21	15.4	136 (43.9)
No	111	63.8	135	77.6	71	40.8	174 (56.1)
Total	158	51.0	228	73.5	92	29.7	310 (100.0)
Significance	P<0.05, Significant		P<0.05, Significant		P<0.05, Significant		

As evident from Table 4, present study observed statistically significant association of full utilization various maternal health services with complications during index pregnancy.

DISCUSSION

The present study findings are similar with the findings of a study done by Erlindawati et al., 2008, among 160 pregnant women from 5 health centres in Aceh Besar, Indonesia, which reported that pregnant women having no health problems during previous pregnancy had higher percentage of inadequate utilization of maternal health as compared to those having health problems. If a woman had an experience of any complication during pregnancy, then use of maternal health services is likely to be higher, as she understands the higher risk associated with the current pregnancy and therefore likely to take more care and seek maternal health care services.¹¹ Gupta et al., 2010, reported that nearly 78% of the deceased women experienced at least one medical

problem during pregnancy.

The most common medical problem during pregnancy was severe anaemia (34.4%). Twenty-five percent of women experienced at least one of the following symptoms during pregnancy: ante-partum haemorrhage, oedema, and high fever. The other medical problems reported during the pregnancy were severe abdominal pain, convulsions, and high blood pressure.¹² McDougall et al, 2016 describes main complications during pregnancy that lead to maternal death are haemorrhage, unsafe abortions, hypertensive disorders, sepsis and infection, Obstructed Labour, Indirect Causes and other Maternal Disorders.¹³

CONCLUSION

Significant number of women in our study recognised the need of utilizing MCH care only after experiencing complications. There are a wide variety of complications occurring during pregnancy and some like anaemia go unnoticed, though they may lead to serious consequences at a later time. Utilization of maternal health services can be improved by better IEC and BCC about the complications that can occur during pregnancy and thereafter.

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