E:/Biomedica Vol.24, Jul. – Dec. 2008/Bio-6.Doc (WC) P. 85-88

PSYCHOSOCIAL DETERMINANTS OF PREFERRING HOME BIRTHS

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ABSTRACT

Despite the tremendous advancement in Reproductive Health Services in Pakistan, Child birth at home is still preferred by a part of Pakistani population. This study was planned to find out the psychosocial determinants associated with preferring home deliveries. It is a case controlled study. The study was conducted in Gawalmandi, an urban community of central Lahore from August- December 2007. Our study population consisted of 100 mothers. The criteria for selection of cases were that they were married females between the age of 15 and 49 years and a mother of at least one child and preferred home birth. Fifty controls were also selected in the same socioeconomic class that did not prefer home births. After informed consent a pre tested questionnaire was distributed among the study population. They were interrogated. Information was compiled and analysed on the basis of SPSS version 13 and Epi info 2000. Chi-square test was applied. In a study population of 100 females we found that cheaper and trained midwives, privacy and comfort at home, fear of surgery, babies being kidnapped in hospitals, transport problem, negligence of doctors and family influence are significantly associated with the trend of preferring home deliveries ($p<0.05$). It was ***concluded*** *that factors leading to preference of home births in our community so that adequate measurements should be taken by the inter-sectoral collaboration, participation of civil society, private sector, government and non-government organizations to decrease MMR and IMR due to home births.*

INTRODUCTION

In recent years in Pakistan a much improved Mother and Child Health (MCH) services have been introduced by inducting lady health workers to provide the community both promotive and preventive health education and awareness.[1] However the progress has been slow due to low emphasis on community participation and inadequate human resource development. According to WHO 500,000 women die every year due to pregnancy related causes and most of them belong to the underdeveloped countries.[2] Maternal Mortality Rate (MMR) in Pakistan is very high. i.e., 350-400 deaths per 100,000 live births.[3] It is alarming that every 20 min a mother dies in Pakistan due to pregnancy related complications.[4] In a national study it was observed that 77% women in Pakistan preferred home deliveries in the last 3 years and only 23% preferred hospital deliveries in rural and urban areas.[5] Infant Mortality Rate (IMR) in Pakistan is also high i.e., 77 per 1000 live births.[6] IMR in Pakistan is even higher than other underdeveloped countries. In Bangladesh IMR is 52 per 1000 live births.[7] In Singapore, it is 16 per 1000.[8] Our community still prefers home births with traditional birth attendants with out considering the fact that MMR and IMR are very high in home births. Thus in Pakistan the situation is in a rather bad shape due to the inadequate maternal and child health services. In other words unavailability of trained birth attendants and poor emergency obstetrics are responsible for high maternal and child mortality. Maternal mortality has both primary and secondary determinants. It is well known that most deaths can be prevented if adequate and timely emergency obstetric care is provided. The WHO safe motherhood program in 1987, has emphasized the importance of access to emergency obstetric care (EmOC) to manage the common causes of obstetric deaths: haemorrhage, obstructed labour, complications due to unsafe abortion, eclampsia, and infection.[9] These life-threatening complications of pregnancy are mostly unpredictable, but if nothing is done to avert maternal death, mortality is around 1000 to 1500 per 100,000 births, no doubt it was mostly associated with preferring home births and avoidable by creating awareness.[10]

We had conducted the study to know the psychosocial determinants in preferring home births in our community. To find out whether the conclusions drawn from previous studies still hold true and to check whether the advancements in reproductive health services in Pakistan has any change in preferring home births. The study has also shown the factors leading to preference of home births so that adequate measures should be taken by the inter-sectoral collaboration, participation of civil

society, private sector government and non-government organizations to decrease MMR and IMR.

MATERIAL AND METHODS

This study was conducted in Gawalmandi which is an urban population of central Lahore having equal access to hospital as well as Skilled Birth Attendants(SBA). The study duration was from August to December 2007. The dependent variable was home births; the independent variables were trained SBA, poverty, more comfort and privacy at home, fear of surgical procedures, fear of infections at hospitals, babies being kidnapped, transport problems, negligence of overworked doctors, family trend etc. The study design was case control study. The study population was the married females living in Gawalmandi, Lahore. The inclusion criteria for the subjects was the married females 15-49 years of age and a mother of at least one child having monthly income less than 5,000 per capita. All those females who met inclusion criteria but did not give the consent were excluded from the study. Those mothers who had preferred home birth during their child delivery were considered as cases for this study. The mothers of same age group, had not preferred home births during their delivery were considered as control. Fifty cases and 50 controls were selected. It was non probability, convenient sampling. A questionnaire was prepared; pre tested and was distributed among the study population. After taking informed consent the subjects were interviewed. The data was compiled and analyzed using Epi info 2000 version 8. Table has been used to present the data. The categorical data was analysed by using Chi-square test. Odds ratio (OR), confidence interval at 95% (CI), and p value was calculated. P value less than 0.05 was considered as significant.

RESULTS

Complete record of all the subjects was maintained on the pretested proforma and kept confidential. Among the cases forty eight preferred home births with SBA who also give them prenatal and post natal care and two preferred with untrained birth attendant due to unavailability of SBA. Among control group thirty nine preferred SBA to accompany them in the hospital and attend them in prenatal and postnatal period while eleven females did not prefer SBA. Thus SBA was statistically significant in preferring home births. (OR = 6.7, CI = 1.27-8.59, Chi-square = 7.16, p = 0.007).

Poverty, comfort and privacy at home, fear of surgery and operation at hospital, babies being kidnapped at hospitals, transport problem, negligence of the doctors in hospitals are statistically

Table: *Determinants of preferring home births.*

Factors	Case	Control	OR	CI	Chi-Square	p value
• Skilled birth attendant • Untrained traditional • Birth attendants	48 2	39 11	6.7	1.27-8.59	7.16	0.007
• Poverty • Affordability	45 5	36 14	3.5	1.04-12.41	5.26	0.02
Privacy and comfort • At home • At hospital	 34 16	 19 31	3.4	1.41-8.64	9.03	0.002
• Fear of Surgery • No fear	30 20	6 44	1.3	0.58-3.31	25	0.0000006
• Fear of infection at hospital • No fear	31 19	34 16	0.72	0.53-3.22	0.4	0.52
• Fear of babies being kidnapped • No fear	12 38	23 27	1.3	0.14-0.94	5.32	0.02
• Transport problem • No transport problem	40 10	24 26	0.37	1.64-11.6	11.11	0.00085
• Negligence of the doctors • No negligence	16 34	5 45	4.2	1.28-14.8	7.29	0.006
• Family influence • Independent decision	40 10	24 26	4.3	1.64-11.6	11.11	0.0008

significant in preferring home births ($p<0.05$) (table).

DISCUSSION

In this study an urban community in Lahore was selected that has equal chances of access to home health facilities as well as to the hospitals. Inspite of high maternal and child mortality rates and inadequate health facilities at the door step, most of the mothers in our study (96%) have preferred home births by the SBAs. Similar trend was found in most of the studies from the west. A study in Netherland involved 22301 low risk pregnant women for their opinion about child birth in mid wife care. Among them 61.9% preferred home births in their first pregnancies, 92% preferred home birth in subsequent pregnancies, among them 10.3% were transferred to the hospital in obstetric emergency units.[11] Another study in the Department of Primary Health Care, Whittington Hospital London followed 277 women who preferred home births with SBAs. In that study 215 (77.6%) women had normal home births attended by SBAs and 22.4% were transferred to the hospital due to obstetric complications.[12] Similarly a study in Toronto included 361 first time mothers and 640 multiparas who had planned home births with trained midwives, 92% had normal deliveries at home performed by trained midwives and 8% were transferred to hospitals.[13] In England, 89% of the women preferred home births with trained midwives for their next child while only 11% preferred hospital delivery.[14]

The role of trained traditional birth attendants is crucial in home birth. In Malaysia MMR and IMR are decreased by improving health facility delivery system and training traditional birth attendants. They have improved tremendously so much so that in 2006, 90% of home deliveries were done by the SBAs instead of 30% in year 1999.[15]

In the present study another important factor was poverty that compelled to prefer home births ($p=0.02$) and similar result was found in a study from Newzealand that showed that home births were more economical and cost effective than hospital births. There was 68% less expenditure on the home births than the hospital.[16] In our study more comfort and privacy was found in preferring home births. Same trend was observed in another study that reported that there was more comfort and privacy at home in all labour stages as the women were much relaxed and secure at their homes and were not triggered to a fight and flight response (sympathetic stimulation) from being in a strange unpredictable environment of the hospital.[17] In a national newspaper it was documented that more than one patient was accommodated on one bed in government hospitals which disturb the privacy and comfort of the patients.[18]

The situation in our hospitals was made even worse by the babies being kidnapped particularly from government hospitals that created fears and the issue was brought in to public awareness by national newspapers, to create awareness among the public.[19] Another significant factor in preferring home births was fear of surgery and complications due to forceps delivery and Cesarean sections.[20] A national study showed that maternal mortality and morbidity was 4-6 times greater in Cesarean sections than in vaginal deliveries in emergency settings and 2 times greater in elective Cesarean sections.[21] Another study showed that maternal complications like perineal tears, urinary tract infections and even secondary infertility may follow after vaginal mode of delivery by forceps in the hospitals. It has been reported that women who planned home births were less likely to have Cesarean sections.[22] Similarly fear of infections in hospitals and negligence of the doctors also contribute to uncomfortable and uneasy environment of the hospitals. Improper sterilisation and heavy burden of population on the hospitals had led to nosocomial infections that had increased maternal and child mortality, morbidity and longer hospital stays.[23]

The deliveries at the hospital could not be avoided because unpredictable complications during labour at home always demand urgent transfer to the hospital.[24] It was reported that there was more pressure on maternity services and lack of systemic approach to safety was creating risk during child birth at home.[25]

Thus in our study many mothers preferred home births. The home births should only be encouraged if trained TBA, is available, and Emergency Obstetric Care (EmOC) Facilities found on every door step.[26] Female empowerment, education and financial independence will help our mothers in better decision making about their health as well as of their family.[27] In a national study done in periurban area in Lahore showed that illiteracy among the couples and decision-making by the husbands and mother-in-laws were the main factors responsible for not accessing the EmOC within half an hour.[28] The male centered decisions and family traditions should overcome by health education, health promotion and creating awareness about maternal health. The NGOs and government organizations should do their best in reducing IMR and MMR by increasing awareness in our community. The government should provide resources, security, staff and ambulance services that

could be called in any emergency anywhere in the country in order to decrease maternal mortality.

It is **concluded** from this study that in preferring home births needs adequate measurements to be taken by the community, needs inter-sectoral collaboration, participation of government and non-government organizations to improve maternal and child health facilities. Thus home births should only be encouraged in the presence of trained TBA, good EmOC and transport facilities available on every door step. Female empowerment, education and financial independence will also help our mothers in better decision making about their health their families.

ACKNOWLEDGEMENT

The authors thank the Professor of Community Medicine of K.E.M.U.

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