

Birth preparedness and the role of the private sector: a community survey

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Abstract

Objectives: To assess the birth preparedness and utilisation of services in an urban union council where only the private sector provided any healthcare.

Methods: Descriptive study design was adopted which had two components: 1) a cross-sectional community survey on birth preparedness and utilisation of services and 2) a provider survey with census of all eligible healthcare facilities. Door to door survey was conducted by visiting every tenth household. All allopathic healthcare facilities in the selected union council were visited for collecting information about the available services and amenities.

Results: Knowledge regarding danger signs during pregnancy and delivery was low. Sixty four percent women received some ante natal care while 45% deliveries were conducted at home. Among those having to seek emergency care during pregnancy, delivery or postpartum, 39% approached a health facility. Lack of preparation in terms of transport was reported in 83% cases. Two of the health facilities had a skilled birth attendant while four provided ante natal care services. Health education was provided by four; deliveries were conducted at one; while family planning services were provided by five facilities.

Conclusion: Women and their families are not sensitised to prepare for safe deliveries. There is a need to improve the essential maternal and newborn health care services at the health facilities. The role of private health sector towards improving MNH; especially birth preparedness in the country needs to be explored at a larger level (JPMA 59:302; 2009).

Introduction

Pakistan is a developing country with a double burden of disease. Peri-natal conditions underscored by an estimated maternal mortality ratio of 530/ 100,000 live births and neonatal mortality of 57/1000 live births¹ make a huge contribution to this double burden. Safdar,² Jafarey³ and Fikree⁴ have respectively attributed the dismal situation of maternal and newborn health (MNH) to low knowledge, poor health behaviours and under-prepared health facilities. This is reflective of the "three delays" model⁵ that describes the key contributing factors to maternal and neonatal deaths in developing countries.

Birth Preparedness; an approach to improve the use and effectiveness of key maternal and newborn health services, is based on the premise that preparing for birth and being ready for its potential complications reduces all three phases of delay in utilisation of these services. Although no universally agreed definition is available, different packages that advise birth preparedness usually recommend the following: (a) preparation for normal birth by prior selection of a skilled birth attendant (SBA) and place of delivery; (b) preparation of essential items of delivery e.g. clean delivery kit; (c) knowledge of danger signs for mother and newborn; (d) knowledge of where and to whom to go for help; (e)

arranging access to funds and means for emergency transportation and medical care; and (f) prior identification of blood donors.⁶ Research has shown that B.P can prove an important intervention towards safe motherhood in countries with very high maternal mortality.^{7,8}

A broad look at the healthcare system in Pakistan informs that it is organised into a public and a private sector with 70% of health services being contributed by the latter.⁹ Out-of-pocket expenditures contribute to over 98% of the amount spent on availing these private services.¹⁰ The unregulated, mostly for-profit, private health sector in Pakistan has a wide spectrum. On one hand there are well equipped, adequately staffed, tertiary care hospitals and on the other are traditional birth attendants (TBAs) who usually conduct home deliveries. The tertiary care level hospitals along with the public sector teaching hospitals serve the maternity needs of the urban population while majority living in the urban slums and rural areas has to avail services provided by the TBAs. Despite its magnitude, there is lack of information on up to what extent the private sector is able to serve problems that have public health implications such as poor maternal and neonatal health. This scarcity of information has also been reported¹¹ from other developing countries. It has been suggested that a first step in ensuring a realistic public health role for the private sector is to determine

the extent to which these services are currently provided by it. In Pakistan, assessment of the public sector maternal health facilities has been conducted at a few places^{4,12} but no published data are available about the services provided and utilisation of the private health sector.

Keeping in mind the above facts, this study was undertaken to assess the birth preparedness and utilisation of services at facility, community and household level in a union council that did not have any public sector health facility.

Methods

This study was conducted in Gujranwala- the 3rd most populous district of the province of Punjab having 192 union councils (UCs) with a total population of 3,400,940, comprised of an almost equal ratio of urban to rural distribution.¹³ A descriptive study design was adopted which had two components: 1) a cross-sectional community survey on birth preparedness and utilisation of services and 2) a provider survey with census of all eligible healthcare facilities. Every 10th household was visited in the UC 18 of the district.

Women who had undergone labour at least once during the last three years were included in the study. In case of more than one pregnancy during last three years, details about only the last delivery were collected. Primigravida and those who had not had a child during last three years were not included due to lack of a recent parturition experience. Data from all 14 identified allopathic healthcare facilities was collected. Dentist, homeopathic doctors, spiritual/ faith healer, traditional practitioners, and non-qualified birth attendants practicing at individual level were not included.

Two separate semi-structured questionnaires were used for collecting data from eligible mothers and at allopathic health care facilities. These were modified versions of questionnaires used in a similar survey conducted by a community based consumer group¹⁴ in another UC in the district of Rawalpindi. Questions tested the knowledge of mothers about nutrition, antenatal check-ups, danger signs during pregnancy, complications of delivery, and importance of postpartum examination. Questions on family practices regarding antenatal checkups, selection of birth attendant and place of birth, decision making in case of emergency, and type of transport used to address an emergency occurring at any time during pregnancy or at the time of delivery were also included for assessing birth preparedness at the domestic level.

A separate format was developed for data on the preparedness of allopathic healthcare facilities in terms of the qualification and experience of practicing physicians, maternal and child care staff, facility of antenatal checkups, availability of delivery services, basic maternal and neonatal amenities, equipment and supplies necessary for treatment and essential for specific maternal and child health care, and any

educational material advising visitors of appropriate healthcare practices.

Before proceeding with the survey, local contacts were established in the area. A support group was formed and meetings held to alleviate apprehensions about the research in addition to obtaining information regarding health facilities and providers working in the area, and in sketching an area map. Under the management of Field Supervisors, female interviewers with more than 12 years of an academic qualification interviewed eligible women. All the interviewers were formally trained in the data collection tools to ensure uniformity of the interviews. The first household was selected randomly by rotating a bottle at a place suggested by the support group and the direction of bottle neck suggested the route for moving into the community. Every tenth household was visited by following the right-hand rule to cover all households inside marked boundaries. In case the team found the house locked or there was no eligible woman, the next house was approached. This was continued till the team reached a house having an eligible woman.

Field Supervisors completed data collection forms by visiting all allopathic healthcare facilities in the selected UC. Completed forms received from the field were manually edited and coded for computerised data entry. Statistical software SPSS, version 10 was selected for complete data management i.e. from data entry to data cleaning and analysis. Correctness of entered data was ascertained by verifying entries of 10 percent of randomly selected forms. The study was completed in two months i.e. July-Aug 2004.

Results

Data collection team visited 14 health facilities and 235 households. Out of these sampled households, 115 had eligible women. Total number of these women was 124, out of which two had died due to maternity related causes. The available 122 eligible women were interviewed. The response rate both for health facilities and the women was 100%. The average age of the respondents was 28 years with a standard deviation of 4.844 (range 20-40 years) . Thirty seven percent of the female respondents and 27% of the husbands were illiterate. Twenty eight percent of women had completed primary and 25% availed secondary education while the respective figures for husbands were 30% and 32%.

Overall, majority (71%) of the respondents knew that appropriate changes were required to be made in their nutrition. They were aware that antenatal care was necessary but only about 35% had the knowledge that four antenatal checkups were required. Of all the respondents, 22% had a satisfactory knowledge on the danger signs during pregnancy, 31% knew the danger signs during delivery while 22% knew that a postpartum examination was also required. (Figure 1).

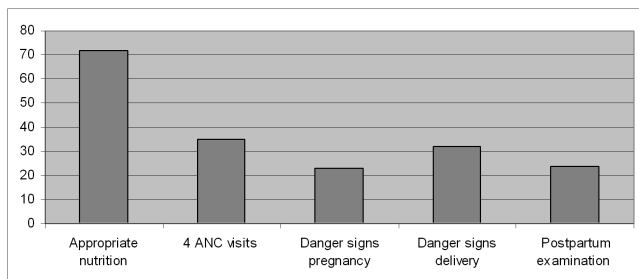


Figure 1: Percentage distribution of mothers' knowledge on various components of birth preparedness (n=122).

Regarding practices, majority of women (65%) had antenatal check-ups, but most of them did not remember the exact number. Among those availing this checkup, 23% went to a doctor while 32% availed this from a nurse, Lady Health Visitor (LHV) or a midwife. Majority of these visits for ANC occurred in private clinics situated outside the UC. No significant prior decision making was undertaken for choosing the health facility and transport in case of emergency, as people thought that availability would not be an issue. Overall, 63% of deliveries were conducted by a SBA including qualified Doctor, Nurse, Lady Health Visitor or a Midwife. Unskilled birth attendants including TBA, a relative or a friend conducted 37% deliveries. It was revealed that 45% of deliveries were conducted at home, 37% in private hospitals, 7% in clinics, 1% at TBA's home, while 10% women were taken to government hospitals (Figure 2).

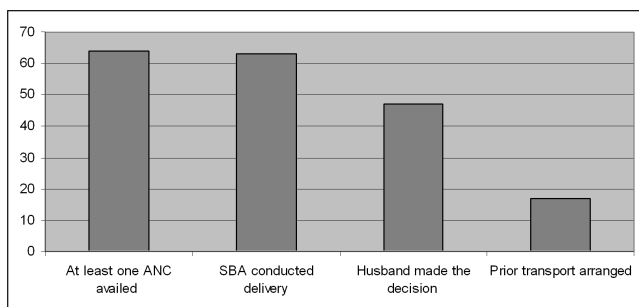


Figure 2: Percentage distribution where birth preparedness was practiced (n=122).

Rickshaw (76.5%) was the usual mode of transportation, while 6% also used Quingqi (a kind of motor cycle rickshaw commonly seen across the country) as a means of reaching the health facility for undergoing labour and delivery. None of the women were transported in a private ambulance while 1% reported that they used public ambulance brought on payment from district headquarter hospital for reaching the the same hospital.

Out of the 14 health facilities (all private) in this Union Council, 9 had unqualified practitioners (Figure 3). There was no female doctor working in the area, while two facilities had

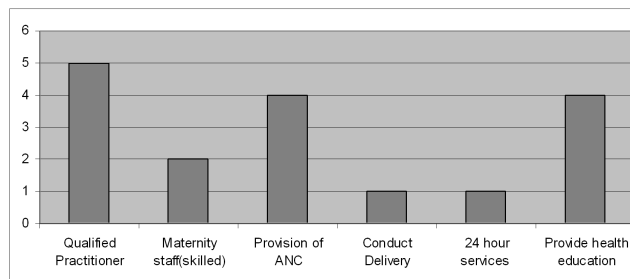


Figure 3: Number of health care facilities showing preparedness in terms of services (Total=14).

a Lady Health Visitor. Overall, 21% of health providers thought maternal morbidities were very common in the area while 7% thought that maternal mortalities were also very common.

In this backdrop, 67% of the mothers attended private sector facilities for delivery outside their union council and spent between Pak Rupees 1000-25,000 (\$ 17-415). Though it was affordable to only 50% of the respondents, a majority did not wish to go to the for-free public sector health facility. Among those not attending the government facility, 97% thought no immediate attention would be given and that they would be subjected to waiting for treatment for too long a period.

Discussion

To the best of our knowledge, this is the first study in which the role of the private for-profit healthcare sector was examined in the context of safe motherhood. In a country where adult literacy rate is 44%,¹⁵ access to media ranges from 23%-84% (average 59%)^{16,17} and the majority of the population relies on doctors, paramedics and family members for advice on health,¹⁸ the health providers' role in preparing families for important events like the safe birth of a child becomes significant. Low level of the birth preparedness knowledge of mothers in this UC suggested that a better performance of the healthcare providers was required in the area. While Alam et al¹⁹ have established that women who do not attend antenatal care have less birth preparedness; our study suggested that this could possibly result from a weak performance of the private sector. Similar patterns of low knowledge and preparedness have been reported by other studies^{3,4} from the country but they did not take the role of the private sector into account.

Low awareness of the required steps towards a safe delivery can lead to unhealthy behaviours. Not making prior transport arrangements and therefore having to use uncomfortable transport like a rickshaw or quingqi are reflective of poor preparedness and have been reported by others.²⁰ The utilisation of traditional birth attendants by a significant portion of urban population found in our study

supported an interesting suggestion made by Midhet and Towghei²¹ that birthing practices are not based on only knowledge or perception, they are also influenced by the availability of appropriate health services and economic and social factors.

Approximately 50% of the households had women who delivered during 3 years prior to our study. Since women currently pregnant at the time of this study were excluded from the population, it is difficult to comment on the fertility trends in this area. Two women died during the immediate post-natal period out of which one was reported to have severe infection while cause of death of the second woman was not known. Maternal mortality trends cannot be described from this small number but the low degree of importance given to maternal health at the household level in this U.C is reflective of situations reported from other parts of the country.³

The small study sample belonging to an urban area only was a weakness of this study. The UN process indicators use a population of 500,000 as the planning unit for basic and comprehensive obstetric care facilities. A union council was chosen for this study to look at an administrative unit and how facilities were organised in it. More valid conclusions about the availability and quality could be drawn from a study conducted on a much larger scale.

Lack of proper maternal and neonatal healthcare facilities at available health posts was another important finding of our study. Despite this, there was a much higher tendency for families to use private as compared to government-run facilities. Facility from outside the UC was being availed by women as negligible birthing facilities were being provided within their UC. This use of private facility was consistent with findings from other countries like Uganda and Nigeria.²² Private providers are perceived as expensive yet they are preferred by women as they consider these providers to be better and more caring and think that the pregnancy-delivery-postpartum continuum of care will be better provided by these private providers.

Low level of knowledge and poor practices regarding birth preparedness in our study area suggest that while, on one hand, the attitudes of public sector professionals need to be improved, the potential role of the for-profit private sector also needs to be realised. It has been argued that established private providers have the potential to contribute to safe motherhood if they are involved in the care continuum. However, they have largely been overlooked by policy makers in Pakistan and other low-income settings.²³ In order to achieve Millennium Development Goals (MDGs), of which three out of eight are aimed at improving health of mothers and their children,

countries need to take significant measures. Pakistan, being a signatory to achieving these MDGs, and having committed for a three-quarters reduction in the maternal mortality ratio by 2015,²⁴ needs to move quickly to fulfill its commitments.

Nine out of 14 clinics in the area were being run by unqualified practitioners, which underpins the fact that private healthcare sector is not a well defined area and is largely unregulated. In this situation, an important question arises: how to reign in a sector that has all the inherent weaknesses of commercialism? Not looking into this question was a limitation of our study. However, a cluster randomised controlled trial by Jokhio²⁵ from the Sind province in which maternal morbidity and peri-natal mortality were significantly reduced has suggested a way in which the traditional birth attendants and for-profit private sector could be honed-in to safe motherhood programmes through effective referral mechanisms. There is a need to explore this along with mapping the public-private mix of healthcare systems at a larger level.

Lady Health Worker (LHW) of the National Programme for Family Planning & Primary Health Care is one important component of the health system in our country. Providing health education to women and their families to improve birth preparedness in rural areas is a prime responsibility of this LHW. Lady Health Worker is expected to refer the mother to a health facility for routine ANC, Tetanus immunization, and other pregnancy and delivery care requirements. As a public sector employee, LHW should refer these cases to public sector facilities but emergency obstetric and newborn care (EmONC) services are not available on these facilities in most of the rural areas. Can LHW's refer the mother to a private facility in case the public sector facility is not available, is a policy issue that needs to be addressed in order to resolve confusions and improve maternity care in the country.

Improving maternal, newborn and child health (MNCH) indicators has received a lot of emphasis from Government of Pakistan in the recent past. PC-1 worth rupees 19995 million has been approved²⁶ for the period 2007-12 to establish a national maternal, newborn and child health programme (National MNCH Programme). Ministry of Health is also working in partnership with various donor-funded projects working to improve MNCH situation in the country. National MNCH Programme and these projects need to realize the limited number of public sector facilities providing birth preparedness and EmONC services. It would be better if they consider taking the available wider net of private practitioners and health facilities into their loop, helping these facilities improve the quality of birth preparedness and EmONC services and enabling them to contribute

towards the collective agenda of achieving the MDGs.

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Conflict of Interest

None declared.

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