

ORIGINAL ARTICLE

EMERGENCY OBSTETRICS CARE SERVICES IN DISTRICT NEELUM,
AZAD JAMMU AND KASHMIR

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Background: Globally 529,000 women die annually due to pregnancy related problems and in Pakistan alone this toll is about 35,000 deaths per annum. This situation is even more critical in the rural remote areas of Azad Jammu & Kashmir (AJK). The whole phenomenon needs a contextual assessment to ascertain the geographical, financial and socio cultural accessibility, and availability of EmOC services in order to generate fresh evidence for the decision makers and concerned stakeholders for improving these services. **Methods:** A cross-sectional study was conducted using a structured questionnaire with the women delivered in the last 15 days, whereas the geographical accessibility and availability of EmOC services were assessed by visiting EmOC facilities in the district Neelum of AJK. **Results:** Over a hundred women delivered in the last 15 days, participated in the study. Geographically, a central EmOC facility is far away and the terrain is hilly and dangerous. Women's social status, education, husband's employment and household income were found to have a significant association with the use of EmOC services. The health facilities audit showed that around 90% centres do not have a female medical officer appointed. Moreover, the state of the equipment, medicines and the basic utilities such as water, sanitation, and electricity are not satisfactory. **Conclusion:** Accessibility of EmOC services is poor in the district Neelum. Evidence on ground calls for organisational reforms at EmOC service delivery level as well as for long term planning in other sectors for improving socio-economic and education status of the women in Azad Jammu & Kashmir.

Keywords: Emergency obstetrics care, reproductive health, health care

J Ayub Med Coll Abbottabad 2013;25(1-2):194-7

INTRODUCTION

Access is a complex concept particularly in the context of health care, and therefore there is no exact single definition of this phenomenon. Access is the ability of timely use of health services at the time of need¹; some authors say that access is the possibility of entry into or use of a health care system; while an older school of thought characterised it based on the multitude of factors that influence entry or use of health care system.² By and large, accessibility has 5 dimensions, i.e., availability, geographical accessibility, adequacy, acceptability, and affordability. The first two components are spatial in nature; while last three are non-spatial related to cost, quality and socio-cultural factors. Acceptability and adequacy are subjective and judged from people's preferences, feelings and perception on the related issues.^{3,4} Every year, approximately half a million women die due to the pregnancy-related complications around the world. Almost all of these deaths occur in the developing countries out of which 55% deaths occur in Asia and 44% in Africa. Around 60% deliveries are attended by the non-skilled or traditional birth attendants. There are not enough trained birth attendants; there are issues with the supplies and essential drugs' availability and then the health centres have limited hours of operations.⁵ In Pakistan, over five million women become pregnant and about 700,000 (15% of pregnant women) are likely to experience obstetrical complications. Maternal mortality

ratio of Pakistan is 276 per 100,000 live births annually which translates into about 15,000 deaths each year or 40 deaths every day due to pregnancy and child birth related causes.⁶

Most (65%) of the population in the rural areas of Pakistan has to travel more than 5 Km to get to the basic preventive and curative services and the travel time on foot is often more than an hour. Lack of means of transportation and a limited ability to pay for rented transport impede the appropriate and timely healthcare seeking.⁷ Around 77% health expenditure in public sector and 98% in private sector is out of pocket.⁸ Cost has been a major barrier in seeking health care in Pakistan.⁹

The disadvantaged position of a woman in the society makes her even more vulnerable to the system related deficiencies.¹⁰ Restriction on the women's mobility and lack of female healthcare providers result in negative health outcomes. The decisions concerning women's health are taken by the husbands.¹¹ Even if she reaches the facility and the family support is there, the quality and standard of health facility is in dismal at the EmOC facilities.¹²

To reduce the maternal mortality improvement in access to the EmOC services is essential. Transportation to health facilities, equipped and staffed facilities, empowerment to make decision about care seeking, and education are some approaches to be considered to reduce the maternal mortality by 2015.¹³

Nonetheless, health services strengthening would only be helpful when women are allowed to use them.

METHODOLOGY

It was a cross-sectional study having community based arm and health facility based component. For the community-based component, women who delivered in last fifteen days were identified and mapped out with the help of the lady health workers who are based in the communities of the district Neelum in AJK. Women who were sick and those facing some delivery related complication, were excluded from the study. In whole district, 103 women were found eligible to be included in the study and therefore we decided to do universal sampling. The data was collected by the trained female data collectors at the houses of women, using a semi-structured questionnaire. Keeping in view the study objectives, the questionnaire was designed with the help of literature published on the similar topic in Pakistan or in the region. Socio-cultural, demographic, economic and the geographic factors were taken as the independent variables. Accessibility to and utilisation of EmOC services were the dependent/outcome variables. The data collection tool was translated in Urdu, the commonly spoken and understood language in the area. The translated questionnaire was then pre-tested and checked for phrasing, sequence, language and comprehensibility of the questions for the local women. However, no major issues were found in the pre-testing. Inter-rater reliability and concordance between the data collectors was checked by Principal Investigator during the pre-testing and was found to be more than 95%. Informed consent was taken from each participant. Data were analysed using SPSS-16 and Chi-square test and $p < 0.05$ was taken as significant.

For the health facilities component of the study, all health facilities in the districts which offer and are equipped for EmOC services were audited. The instrument used for this purpose was translated from the UNFPA standard check list used for EmOC services planning.¹⁴ The study sought approval from the Institutional Review Board of the Health Services Academy.

RESULTS

The results are presented in Table-1 and 2. Majority of respondents belonged to 20–35 year age group. Most of them had never got any formal education, and only 6% of them reported to be formally employed. Among the husbands, 65% were educated and 32% were employed. Most of the families belonged to low socioeconomic quintile, i.e., earning around Rs. 7,000 per month.

Geographically, 49.5% of respondent were living within 5 Km of an EmOC facility and the rest of the population lived as distant as 10 Km. The road access toward many health facilities was poor; only 8% could reach on a metalled road and there were many

where there was not even a track visible. Around 73% respondents shared that it takes approximately 1 hour to reach the nearest health facility even by a vehicle. Majority (91%) of the respondents would rent a jeep or a minibus. The transport availability was intermittent due to the land sliding and snowfall and therefore, in case of any emergency, a patient had to be transported to the hospital on a stretcher.

Many women (>94%) were dependent on their husbands for money and expenditure related to health, and most of them (87%) could not spend money on their health without the husbands' permission. Women (>90%) lack decision making power and most of the decisions were made by the husbands; for instance 82% did not have the permission to go to the health facility alone. Majority of the respondents (71%) shared that their average monthly income is less than Rs. 7,000 (the national poverty line). The expenditure incurred on the delivery ranged from Rs. 500 to 2,000. Most (63%) of the respondents said that these expenditures are high and are not affordable. Some (18%) of the respondents said that they did not have money and therefore they gave something in-kind such as clothes or sweetmeat to the birth attendant.

In 75% of EmOC facilities, no delivery was conducted in the preceding 15 days. Around 82% of the EmOC facilities provide services for only 6–8 hours daily and remained closed after 2 PM and on Sundays. Only 12% health facilities functioned 24/7. Ninety percent EmOC facilities did not have a female medical officer appointed and none of the health facilities had a gynaecologist. Lady Health Visitors were present in 90% of the health facilities.

Table-1: Barriers to access EmOC facilities in District Neelum, AJK (n=103)

Causes	Percentage
Money Problem	45.2
Distance to the facility	20.0
Quality of care issue	13.0
Gender of provider	12.1
Non availability of medicine	7.2
Non availability of vehicle	1.5
Others	1.0

Table-2: Association of place of delivery and socio-demographic characteristics of respondents

		Delivery place		p
		Hospital	Home	
Distance	<5 Km	9	42	0.02*
	>5 Km	8	44	
Education	Yes	8	25	0.01*
	No	9	61	
Job status of woman	Doing job	5	1	0.02*
	Not doing job	16	81	
Decision making power	Self	2	32	0.09
	Husband	15	54	
Husband's education	Educated	10	54	0.06
	Non educated	7	31	
Average household income (Rupees)	<7000	10	63	0.04*
	7000–15000	6	19	
	>15000	1	4	
Husband's job	Doing job	7	25	0.01*
	Not doing job	61	10	

*significant

DISCUSSION

In our study, the distance from the health facility emerged to be the most significant and decisive factor in deciding whether to deliver at home or at the facility, which is in concordance with other studies from the developing world.^{15,16} This has been a longstanding issue in the health care system of Pakistan, leading to gross under-utilisation of the government facilities^{12,17} Geographically, the whole district has a hilly terrain and the population is scattered over mountains and only 50% of population is living in 5–10 Km from the nearest health facility. There is no road access to most of the villages and people have to travel by foot to reach the main road, and then to the hospital. The condition of roads is also poor due to the frequent land sliding during rains. Majority of the people do not have their own vehicles and main source of transportation are the jeeps and buses which are available intermittently and charge heavy amounts for fare. Such constraints are quite often quoted as typical of the developing countries.¹⁸ A similar study conducted in two other provinces of Pakistan showed that geographical remoteness, staff absenteeism, shortage of ambulances and cultural norms that a woman should be examined by a woman doctor, make the EmOC services inaccessible.¹⁹

As evident from the results of this study, woman's education, employment status of husband and wife both, and the household income have significant affect on the maternal health seeking behaviour, particularly when it is a matter of utilising the EmOC services. These findings corroborate with many other studies which observe the determinants of access to maternal care among disadvantages groups of population in the developing countries.^{8,20} Our study shows that most of women are uneducated and the state of household economics is affecting the appropriate health seeking behaviours and thus rendering the health services inaccessible. Most importantly, women are dependent, lack decision making power and cannot go to health facility without permission of husband. Not having enough female health care providers further aggravates the situation and restricts the women to freely avail the services. Investing in girls' education and interventions focusing on the women's empowerment are bound to changes the state of women's health and degree of access to health care services.^{21,22} Not only health department, but all relevant sectors and institutions will have to contribute towards this process of empowerment of women by providing an enabling environment and conducive conditions so that they can eventually manage their own health.^{23,24}

The complicated cases have to be referred to Muzaffarabad which is about 200 Km away from one end of district Neelum and it takes about 10 hours by a sturdy vehicle to reach there. Availability of staff,

equipments, and drugs is limited in most of the health facilities which results in poor performance and their under utilisation. Those health facilities which are well equipped and staffed and have all the basic utilities are performing optimally. Majority of the health facilities provide services for six hours only and only 2 secondary care hospitals provide 24/7 services. These health facilities are also deficient in human resource; no gynaecologist is available and therefore, the paramedics and staff nurses would conduct the normal deliveries. There is no water, electricity and heating system at many health centres. Given this picture, community women have very rightly developed their perceptions about the quality of care they will get from the government facilities and therefore, preference is given to deliver at home in the presence of a traditional birth attendant.²⁵ This is the case in most parts of Pakistan, especially with remote pockets of population, and thus calls for improving the quality of care by ensuring availability of supplies, equipment and human resource at the EmOC facilities.²⁶

Findings of our study indicate that women are illiterate and have restricted social mobility, and these are the well known facts for most of the parts in the country, therefore, it is needless to reiterate the urgent need to launch a national health promotion campaign to give out messages about safe motherhood entailing advice about antenatal care, place of delivery, recognition of danger signs of pregnancy and importance of post natal visits. Improved governance of the public facilities, involvement of private sector and training community based birth attendants are some of the solutions oft-cited and recommended for such scenarios in developing countries.^{27,28}

CONCLUSION

A robust and culturally tuned health promotion campaign is imperative, focusing on sensitisation of community and demand creation for quality EmOC services. Government's initiative of introducing the community based midwives is commendable; however their use is still limited. Nevertheless, a regular audit of the EmOC by the district health authorities, incentives offered to the staff working in such hard areas, and compensation to the traditional birth attendant for referrals would be indispensable. Though all these recommendations are *déjà vu*, yet only such reforms will make the EmOC services of AJK responsive enough.

ACKNOWLEDGEMENT

Authors are grateful to the Health Services Academy, Islamabad, Pakistan for extending financial and administrative support for this study. We thank the district health administration for allowing us to conduct this research work. We are indebted to all women who participated in this study.

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