

Challenges Faced by Pregnant Women in Utilizing Antenatal Care Services

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Abstract

Background: Utilization of antenatal care services is very important for the health of mother as well as the child. However, most of pregnant women in Pakistan fail to utilize those services due to various challenges.

Objectives : To identify barriers faced by pregnant females in seeking antenatal care services in Lahore, Pakistan.

Methods: This cross-sectional study was conducted in Public hospitals of Lahore, over a period of 1 month from June 1 to June 30. A sample size of 99 pregnant females in their third trimester from all social backgrounds was taken. A chi-square test was used for analysis.

Results: The mean age of women was 29 ± 5 years with 66% from urban side. Most of them women had completed higher secondary education i.e. 35%, and their spouse income was under 50k rupees i.e. 87%. The non-utilization of care was observed in 20% women, partial utilization of antenatal care was observed in 50% women and complete utilization of antenatal care was observed in 30% women. The most important variables found to be challenges for utilization of antenatal care services were prenatal care awareness ($p=0.001$), nearby ($p=0.000$), transportation issues ($p=0.013$), availability of skilled workers ($p=0.023$), adequate info about pregnancy ($p=0.044$), awareness of regular checkups ($p=0.001$), community support groups ($p=0.002$), and referral to specialist ($p=0.013$)

Conclusion: In our study, it was observed that a large percentage of women don't avail antenatal care services completely, i.e. 20 % of them don't utilize antenatal services at all and 50 % only utilize them partially. The most significant challenges faced by pregnant women in utilization of antenatal care services were prenatal care awareness, nearby facilities for antenatal care, transportation issues, availability of skilled workers, adequate awareness about importance of regular checkups, and lack of community support groups, and referral to specialists.

Keywords: Antenatal care services, pregnant women, challenges, utilization, Lahore.

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Introduction

Antenatal services must be used if women are to maintain their health and the health of their unborn child. However, pregnant women in Pakistan have a difficult time getting this necessary care. Socioeconomic barriers, including poverty and low literacy levels, greatly impede their access to care. Family and cultural factors, which include a strict division of labor between men and women, perpetuate the inaccessibility of health care for this population. Geographic challenges further worsen the status of pregnant women,

especially those from far-flung and remote areas. For instance, it was determined that nulliparous women aware of ANC and who were also residing in a well-structured home with electricity received ANC services. Moreover, limited transportation infrastructure and long distances to healthcare facilities discourage timely access to antenatal care. The lack of skilled healthcare workers in rural areas also exacerbates the problem, forcing women to rely on unqualified providers. In addition, societal norms often discourage women from making independent healthcare decisions, leaving them dependent on male family members to seek care. These barriers collectively contribute to poor maternal health outcomes, which remain a significant public health challenge.¹

The EPMM set the target for lowering the global maternal mortality ratio (MMR) by the year 2030 as SDG target 3.1: Reduce global MMR to less than 70 maternal deaths per



Production and Hosting by KEMU

<https://doi.org/10.21649/jspark.v3i3.735>

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100 000 live births by 2030.² Between 2015 and 2020, MMR in Pakistan has decreased from 187 to 154 but it still falls short of the SDGs.¹ According to a survey done by National Institute of Population Studies in 2006-07, 68% of pregnant women in urban areas of Sindh were assisted by a skilled birth attendant (23% in rural areas) and 72% sought professional antenatal care (29% in rural areas).³ Pakistan Demographic and Health Survey (PDHS) 2006–07 conducted by the same institute revealed that only 65% women seek professional health care during pregnancy.⁴

While antenatal care is essential, the specific challenges pregnant women face in utilizing these services are not well understood, particularly in diverse cultural and socioeconomic contexts. Understanding the obstacles faced by pregnant women can help healthcare providers improve the quality and accessibility of antenatal care services, leading to better health outcomes for pregnant women and their babies. The research aims to identify barriers that hinder pregnant women from seeking antenatal care services in Lahore.

Methods

The research was planned as a cross-sectional study that was carried out in public hospitals of Lahore over a six-month period after the summary was approved. Sample size was calculated using raosoft software, based on 95% confidence interval, 5% absolute precision, and an expected percentage of 62.8 from a reference article,⁵ a sample size of 99 patients was projected. The patients were selected through consecutive non-probability sampling. Pregnant ladies in the third trimester, residents of Lahore who were either currently getting antenatal care or had delivered in the recent past, and belonging to all socioeconomic classes, were selected for the inclusion criteria. Pregnant ladies in the first or second trimester of pregnancy, null-pregnancy-status females, and those who had completed antenatal care were excluded. The pre-tested self-administered questionnaire was used for data collection which was done through visits to wards and OPDs of the selected hospitals. Approval for consent was taken well before sample collection. A total of two parts comprised the self-administered questionnaire: one regarding sociodemographic status and another comprised of closed- ended questions related to the difficulties faced by women.

The main objective of this study was to explore key variables, level of education, social level, religion, occupation, access to healthcare, and barriers faced. The quantity of prenatal visits, the quality of life throughout pregnancy, and the level of social support were all considered dependent variables. Software for statistical analysis, SPSS version 23, was used. For quantitative factors like the number of social and health barriers, the frequency of visits, the number of hours spent on domestic tasks, and the distance to the closest healthcare

facility, descriptive statistics, such as means and standard deviations, were computed. For qualitative factors such marital status, household income, cultural views, perceived social support, and healthcare representatives' attitudes, frequencies and percentages were calculated. Chi-square test was used and a p-value of less than or equal to 0.05 was deemed statistically significant.

Results

The mean age of women was 29±5 years with 66% from urban side. Most of the women in education had completed higher secondary education i.e. 35%. Also, their spouse income was under 50k rupees i.e. 87% and 13% had above 50k. The non-utilization of antenatal care was observed in 30% women, partial utilization of antenatal care was observed in 50% women and complete utilization of antenatal care was observed in 20% women. Significant percentage of husband's occupation was labor (47%), rest had occupations like, farmer (12%), govt. employee (18%), private employee (20%), and 3% were business owners.

Table 2- analyses the significant variables involved in the

Table 1: Sociodemographic characteristics of study

Study Variable	Categories	Frequency (percentages)
Residence	Urban	66 (66%)
	Rural	34 (34%)
Qualification of pregnant female	Illiterate	23 (23%)
	Primary	2 (2%)
	Secondary	12 (12%)
	Higher secondary	35 (35%)
	FA	24 (24%)
	BA	4 (4%)
Age	29 ± 5 yrs	
Husband's occupation	Laborer	47 (47%)
	Farmer	12 (12%)
	Govt. employee	18 (18%)
	Private employee	20 (20%)
	Business	3 (3%)
Husband's income	Less than 50k	87 (87%)
	More than 50k	13 (13%)

study in more detail. The variables with p value less than 0.05 are considered significant. Statistical analysis shows that prenatal care awareness (0.001), nearby (0.000), transportation issues (0.013), availability of skilled workers (0.023), adequate info about pregnancy (0.044), awareness of regular checkups (0.001), community support groups (0.002), referral to specialist (0.013) are all the variables that were found significant on statistical analysis after collection and observation of data.

Table 2:

Variables		Antenatal care utilization			Total	Chi square value	P value
		Incomplete	Partial	Complete			
Prenatal care awareness	Yes	10(50%)	36(72%)	29(96.7%)	75(75%)	14.418	0.001
	No	10(50%)	14(28%)	1(3.3%)	25(25%)		
Access to transportation	Yes	19(95%)	37(74%)	25(83.3%)	81(81%)	4.245	0.120
	No	1(5%)	13(26%)	5(16.7%)	19(19%)		
Antenatal services availability	Yes	12(60%)	42(84%)	23(76.7%)	23(23%)	4.649	0.098
	No	8(40%)	8(16%)	7(23.3%)	77(77%)		
Facility nearby	Yes	7(35%)	37(74%)	28(93.3%)	72(72%)	20.453	0.000
	No	13(65%)	13(26%)	2(6.7%)	28(28%)		
Visit to facility in pregnancy	Yes	20(100%)	49(98%)	27(97%)	96(96%)	4.167	0.125
	No	3(10%)	1(2%)	0(0%)	4(4%)		
Satisfaction with services provided	Yes	13(65%)	35(70%)	22(73.3%)	70(70%)	0.397	0.820
	No	7(35%)	15(30%)	8(26.7%)	30(30%)		
Affordability of services	Yes	7(35%)	21(42%)	17(56.7%)	45(45%)	2.640	0.267
	No	13(65%)	29(58%)	13(43.3%)	55(55%)		
Transportation issues	Yes	16(80%)	32(64%)	12(40%)	60(60%)	8.667	0.013
	No	4(20%)	18(36%)	18(60%)	40(40%)		
Availability of skilled workers	Yes	15(75%)	36(72%)	29(96.7%)	80(80%)	7.521	0.023
	No	5(25%)	14(28%)	1(3.3%)	20(20%)		
Safety and comfort at facility	Yes	14(70%)	31(62%)	26(86.7%)	71(71%)	5.553	0.062
	No	6(30%)	19(38%)	4(13.3%)	29(29%)		
Appropriate waiting time	Yes	16(80%)	31(62%)	22(73.3%)	69(69%)	2.540	0.281
	No	4(20%)	19(38%)	8(26.7%)	31(31%)		
Adequate info about pregnancy	Yes	9(45%)	36(72%)	23(76.7%)	68(68%)	6.265	0.044
	No	11(55%)	14(28%)	7(23.3%)	32(32%)		
Awareness of regular checkups	Yes	5(25%)	34(68%)	22(73.3%)	61(61%)	13.843	0.001
	No	15(75%)	16(32%)	8(26.7%)	39(39%)		
Social barriers	Yes	7(35%)	20(40%)	12(40%)	39(39%)	0.168	0.919
	No	13(65%)	30(60%)	18(60%)	61(61%)		
Family support	Yes	13(65%)	33(66%)	25(83.3%)	71(71%)	3.173	0.205
	No	7(35%)	17(34%)	5(16.7%)	29(29%)		
Family responsibilities	Yes	10(50%)	19(38%)	12(40%)	41(41%)	0.868	0.648
	No	10(50%)	31(62%)	18(60%)	59(59%)		
Financial constrains	Yes	16(80%)	32(64%)	15(50%)	63(63%)	5.841	0.211
	No	4(20%)	17(34%)	15(50%)	36(36%)		
Vaccinations	Yes	15(75%)	46(92%)	28(93.3%)	89(89%)	5.039	0.080
	No	5(25%)	4(8%)	2(6.7%)	11(11%)		
Pregnancy related tests	Yes	20(100%)	49(98%)	27(90%)	96(96%)	4.167	0.125
	No	0(0%)	1(2%)	3(10%)	4(4%)		
Language barriers at facility	Yes	7(35%)	10(20%)	5(16.7%)	22(22%)	2.584	0.275
	No	13(65%)	40(80%)	25(83.3%)	78(78%)		
Community support groups	Yes	4(20%)	1(2%)	0(0%)	4(4%)	12.000	0.002
	No	16(80%)	49(98%)	30(100%)	96(96%)		
Discrimination at facility	Yes	0(0%)	5(10%)	5(16.7%)	10(10%)	3.704	0.157
	No	20(100%)	45(90%)	25(83.3%)	90(90%)		
Access to emergency services	Yes	13(65%)	27(54%)	19(63.3%)	59(59%)	1.047	0.592
	No	7(35%)	23(46%)	11(36.7%)	41(41%)		

Adequate medical equipment	Yes	17(85%)	39(78%)	27(90%)	83(83%)	1.984	0.371
	No	3(15%)	11(22%)	3(10%)	17(17%)		
Confidentiality in workers	Yes	17(85%)	41(82%)	27(90%)	85(85%)	0.941	0.625
	No	3(15%)	9(18%)	3(10%)	15(15%)		
Referral to specialist	Yes	6(30%)	26(52%)	21(72.4%)	53(53%)	8.656	0.013
	No	14(70%)	24(48%)	8(27.6%)	46(46%)		

Discussion

This present study has investigated in detail issues regarding access to ANC services among pregnant women living in Lahore, Pakistan, through factors that influence utilization. The methodology adopted in this study has made sure that rigorous sampling techniques and data collection procedures test the hypotheses of reliability and validity of the results. SPSS statistical analysis has resulted in significant associations between ANC service utilization and the barriers identified, for which targeted interventions are required to address such challenges. These findings emphasize some of the important barriers that prevent pregnant women from receiving adequate prenatal health care. While there was a marked urban representation as high as 66%, meaning that a fair number have access to healthcare facilities, a disproportionately large chunk of women did not use ANC services on a full-time basis. A study found that 20% did not use ANC at all, another 50% used the ANC services only on a partial basis, whereas only 30% fully utilized the services of ANC—a disparity in healthcare access. Socioeconomic factors also seemed to be a major player in defining ANC utilization.

A majority of the women reported that their husbands earned less than 50,000 rupees, which naturally constrains finances and often prevents them from getting proper prenatal care. Further, husbands of a large percentage worked in labor-oriented jobs, 47% of them, which might add to financial instability and lower levels of resources to afford health expenses. The educational level significantly contributed to 35% of the women completing higher secondary education. Education was also one of the important contributing factors. The educational level was positively related to ANC utilization, which aligns with the available literature stating that educated women are more likely to use ANC services since they have better awareness and decision-making abilities. According to a study by Narayana et al., a significant proportion of mothers (93%) received comprehensive antenatal care (ANC) services. Similarly, a study conducted in rural Mysore by Vasuki et al. reported a high utilization rate of 94.95% for full antenatal services during pregnancy.

Since only 37% of pregnant women in Pakistan attend ANC services four times during their pregnancy, Nisar et al. undertook a study to investigate the barriers to ANC service utilization among pregnant women in rural and urban settings.

According to their study's findings, the most important enabling elements were the availability of skilled medical professionals and staff, people's trust in them, referrals from friends, family, or LHW, and the provision of high-quality services, such as lab space and medical equipment, that were also easily accessible and low-cost. The main obstacles were lack of money, a long commute to a medical centre, lack of family support, and knowledge.

MCHs provide a comprehensive range of prenatal care services in Hargeisa, Somaliland. However, national figures indicate that just 20% of pregnant women use prenatal care services, indicating a low use of these services. Some hypotheses suggest that patients' lack of trust in both their healthcare providers in MCH and typical home birth attendants is the reason for the low rates. Previous studies have demonstrated that lengthy wait times for prenatal treatment deter pregnant women from visiting medical institutions for antenatal care.

A study conducted in Uttarakhand by Chimankar et al. found that the use of complete ANC is positively correlated with the mother's degree of education. Compared to women without even one year of school, highly educated women are five times more likely to receive prenatal care. The low educational attainment of the mother in our study has an effect on the use of MCH services. ANC was more likely to be taken by those with a primary education than by those who couldn't read or write. It is well recognized that education lowers fertility and gives women more decision-making authority.

The outcomes of our study align with those reported in earlier research, including references⁸ and⁹, which highlighted the critical role of maternal education, urbanization and financial stability in utilization of antenatal services during pregnancy. In conclusion, while efforts have been made to improve maternal healthcare services in urban Lahore, considerable barriers persist that prevent many pregnant women from accessing timely and adequate ANC. Addressing these barriers—such as financial constraints, educational disparities, and occupational factors—is crucial for enhancing maternal health outcomes and ensuring equitable access to ANC services for all women in Pakistan.

Conclusion

The study reveals that 20% of women don't fully utilize

antenatal care services, and 50% only use them partially. Challenges faced include lack of awareness, transportation issues, availability of skilled workers, awareness of regular checkups, lack of community support groups, and referral to specialists. The study suggests that the government should make services cheaper, more accessible, and raise awareness about their importance among the general population.

Conflict of Interest: All the authors declare that there is no conflict of interest.

Funding Disclosure: Did not receive funds from any public, commercial or not-for-profit organization.

Ethical approval: was obtained from IRB of King Edward Medical University, Lahore

Author's Contributions: MS involved in conceptualization of the study AJ, A and AK involved in manuscript writing and data collection AI and AM involved in data analysis.

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