
Students' Corner
Short Communication

Factors affecting the utilization of antenatal care among women of reproductive age in Nurpur Shahan

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Abstract

Antenatal care is important for the prevention of maternal and foetal mortality and morbidity. The purpose of this study was to determine the frequency of utilization of antenatal care and to identify the factors that affect it. A cross sectional survey was conducted in the community of Nurpur Shahan, Islamabad, Pakistan in January 2010 using a structured questionnaire. Included were 390 women of reproductive age who were questioned about their knowledge of antenatal care and its utilization. The frequency of utilization of antenatal care was (84.4%). Among those who never used the antenatal care, permission to use the facility and ignorance were the main reasons. Education of both the wife and husband with this regard must be worked upon.

Keywords: Antenatal care, Education, Permission, Pregnancy, Antenatal care facilities.

Introduction

WHO defines antenatal care as a dichotomous variable, having had one or more visits to a trained person during the pregnancy.¹ It includes routine follow up provided to all pregnant women at primary care level from screening to intensive life support during pregnancy and up to delivery.

Lack of antenatal care, especially in rural areas of Pakistan, is a leading cause of maternal and foetal mortality in pregnant women.^{2,3} The number of women using antenatal care is low in most areas and needs to be improved for the betterment of the people.

Many variables can influence the use of antenatal care facilities including literacy levels, level of awareness regarding the importance of antenatal care, number of facilities in the area, distance from facility, socioeconomic

status etc.

The purpose of this study was to determine the frequency of women of reproductive age (15-45years) who avail antenatal care facilities in Nurpur Shahan and identify the various factors that affect this.

Methods and Results

A cross sectional survey was carried out by the students of Shifa College of medicine in the rural settlements of Nurpur Shahan in Islamabad in January 2010. A pre-designed questionnaire was used which was originally designed in English but later translated to Urdu. All questions were asked in the local language.

The independent variables in the study were number

Table-1: Variables related to the use of antenatal care.

Variables	Frequency	Percentage
No. of facilities in the area		
0	62	15.9
1	322	82.6
2	4	1.0
3	2	0.5
Visits by lhw* in a year		
0	282	72.9
1	36	9.3
2	14	3.6
>2	55	14.2
Permission to use facility		
Yes	330	91.2
No	32	8.8
Decision maker		
Husband	195	50.3
Self	88	22.7
Mother/father-in-law	54	13.9
Joint	51	13.1
Reason for not using ANC+		
Permission	36	60
Ignorance	15	25
Distance	3	5
Cost	3	5
Other	3	5
Where they used ANC		
Govt.	178	53.3
Local Dispensary	90	26.9
Private	62	18.6
Home	4	1.2
Where was last delivery		
Govt.	154	40.5
Home	122	32.1
Private	61	16.1
Local Dispensary	43	11.3
Who delivered the last baby		
Doctor	218	57.1
Dai	109	28.5
Nurse	29	7.6
Midwife	24	6.3
LHW	2	.5

*lhw: lady health worker
+ANC: Antenatal Care.

Table-2: Association of various factors with use of antenatal care.

Variable	Used antenatal care	Did not use antenatal care	P-value
Husband's education			
Illiterate	59(18.2%)	20(33.9%)	0.001
Literate	265(81.8%)	30(66.1)	
Wife's education			
Illiterate	165(49.8%)	35(59.3%)	0.097
Literate	166(50.2%)	24(40.7%)	
Decision maker			
Husband	153(46.5%)	42(71.2%)	0.002
Mother/father-in-law	46(14.0%)	8(13.5%)	
Self	83(25.2%)	5(8.5%)	
Joint	47(14.3%)	4(6.8%)	

of pregnancies, abortions, stillbirths, number of children, number of rooms, total family income, occupation of wife, occupation of husband, education of wife, education of husband, number of facilities in the area, type of facility, distance from facility, frequency of visit by LHW, permission to visit the facility, decision maker regarding utilization.

The dependent variable was awareness about antenatal care and its utilization. Awareness was judged by asking if the participants knew what antenatal care was and about its importance. They were also asked if they were aware that women should be checked by a trained health professional atleast once during pregnancy.

Epi info 3.5 was used to calculate sample size for an estimated 35,000 population of women of child bearing age with 56% taken as factor (utilization of antenatal care) at 95% confidence interval. Sample size came to be 374. For contingencies sample size was inflated by 10%. Final sample size was calculated as 390.

Systematic random sampling was used in which the 1st house and then every 4th house (8,12etc) was chosen to be surveyed. Married women of reproductive age (15-45) who were currently pregnant or had been pregnant at least once, were interviewed.

The information and data collected was analyzed using SPSS version 10.0. Frequency tables were used for categorical variables. Cross-tabs and Chi- square tests were used for appropriate variables.

Ethical considerations included taking informed consent of all the participants in written. The confidentiality of the data was ensured and clearance was obtained from Shifa College of Medicine's ethics review committee.

The response rate for the study was high since previous studies had been carried out in the area and the residents were familiar with the concept of research programmes. Where the occupants were unavailable or did not consent we moved on to the next house in the series until the required sample was attained.

The mean age of the women was 33.3 ± 8.9 years. There were 380 (97.4%) housewives, 375 (96.2%) were currently married with the remainder either widowed or divorced. Of the total, 200 (51.3%) women were illiterate, 127 (32.6%) had received formal education below matric, 54 (13.8%) had passed their matriculation while only 8 (2.1%) had received postgraduate education. The mean income for a household was $Rs.7756.41 \pm 5519.73$.

In a sample size of 390 women, 343 (87.4%) were aware of antenatal care and its importance. In accordance the level of utilization was 330 (84.4%). Majority of people named a local dispensary as only facility in the area at an average distance of 10 to 15 min. The second facility was a government hospital over 20 min away.

The lady health worker does not frequent the area.

A total of 178 (53.3%) women went to government hospitals during pregnancy but the number of those delivering here decreased to 154 (40.5%). On the other hand, the number of deliveries at home, in the presence of a dai, sharply increased to 122 (32.1%).

Table-2 shows that the husband was the decision maker in 42 (71.2%) of non-utilizing cases ($p < 0.002$). In this group only 5 (8.5%) women made the decision themselves as compared to 83 (25.2%) in the group that did utilize antenatal care.

In our study the literacy level of the husband was higher amongst those who availed antenatal care facilities. The results associating the education of the wife with use of antenatal care were not statistically significant ($p < 0.097$).

Most women did not have the problem of permission. In half the cases the husband was the decision maker and nearly one fourth made the decision themselves. However, amongst those who did not use antenatal care, 36 (60%) cited permission as the reason. One fourth (15/25%) of these women did not use it due to ignorance. Cost was not a major factor.

Conclusion

Our study showed that although women visited the hospital during pregnancy many still preferred to have the delivery at home in the presence of an unqualified Dai.

Amongst the women who did not use antenatal care 60% did not have permission and 25% were ignorant about antenatal care facilities or their importance. This may be due to social differences in the areas with Nurpur Shahan being more conservative.

Our study also found a significant relation between the literacy of the husband and utilization of antenatal care. However, amongst those who did not use antenatal care the number of literate husbands was again higher. This may be due to the fact that the awareness level about the importance of antenatal care in Nurpur Shahan was high and even the illiterate knew about it.

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