

ORIGINAL ARTICLE

Quality and Utilization of Antenatal Care Services by Pregnant Women in Pakistan

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ABSTRACT

Antenatal care refers to the care and health protection provided to women during pregnancy to ensure a successful pregnancy. It includes routine follow up provided to all pregnant women at primary care level, from screening to intensive life support from the time of pregnancy to the time of delivery. Inadequate antenatal care, especially in rural areas of Pakistan, is a leading cause of high maternal and fetal mortality. The objective of the present study was to assess the process of examination, screening, treatment, and counseling during antenatal care. The results revealed that the antenatal care provided at the obstetric outpatient department (OPD) of Jinnah Hospital, Lahore was substandard. Obstetric OPD lacked basic quality elements like performance of examination procedures and provision of health education to clients. Poor quality was due to lack of proper infrastructure for providing antenatal care.

Keywords: *Antenatal care, fetal mortality, maternal mortality, obstetric outpatient department, health education*

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INTRODUCTION

The care and health control provided to women during pregnancy is referred to as antenatal care. The primary aim of antenatal care is to ensure a successful pregnancy, with a healthy mother and baby at the end. Ideally, this care should be provided soon after conception and continue throughout the pregnancy [1]. Antenatal care includes routine follow up offered to all pregnant women at primary care level, from screening to intensive life support during pregnancy and continuing till the time of delivery. Lack of antenatal care, especially in rural areas of Pakistan, is a leading cause of maternal and fetal mortality. Even if antenatal services are available, they are not fully utilized in the country. Women usually are not present or are very late for antenatal care [2]. Moreover, the complaints that surface encompass a minor fraction of pregnancy related or birth related complications [3]. Therefore, women need to be encouraged to avail the antenatal services and to motivate them to utilize them to the full potential. The state of women health in Pakistan is not satisfactory with majority of them suffering from preventable and treatable diseases and complications associated with childbearing. There are many reasons identified for poor maternal health, including low socioeconomic status, poor nutrition, high-risk pregnancies, and poor access to health care facilities [4].

Health care services in general are inadequate in Pakistan and are specifically lacking for maternal health resulting in adverse outcomes for women and newborns. Antenatal care comes under the umbrella of safe motherhood initiative as one of its four pillars. Even though its contribution towards maternal health is debatable, its significance cannot be denied [5]. It is a great challenge for Pakistan to promote and practice high quality antenatal care. Quality of care is a challenging concept to bring into practice. Measuring quality of care conceptualized in such a broad manner represents a true challenge [6]. Recent efforts have been made in the field of antenatal care to sort out various issues regarding service provision. Previous studies have shown that late antenatal attendance, maternal malnutrition and high rates of

tobacco and alcohol use are associated with poor obstetric outcome [7-10]. Considering this, the aim of the study was to assess the quality of antenatal care provided to pregnant women visiting obstetric OPD of Jinnah Hospital, Lahore as increasing load on tertiary care hospitals due to overcrowding and population spurt compromises the quality of antenatal care.

MATERIAL AND METHODS

Study setting and sample size

The research carried out was a descriptive cross-sectional study conducted at Obstetric Outpatient Department (OPD) of Jinnah Hospital Lahore (JHL). Simple random sampling was used (probability sampling) as every participant had an equal chance of getting selected. The survey was filled anonymously by the participants and only willing individuals were approached. 128 women fulfilling the inclusion criteria were included in our study. After an informed consent, antenatal women were interviewed for quality assessment of antenatal care. All responses were collected in a structured questionnaire.

Inclusion and exclusion criteria

All pregnant women attending JHL obstetric OPD were included whereas women with complications were not considered for the study.

Data variables, statistical analysis, and ethical consideration

Dependent variables like utilization of antenatal care, clinical quality and interpersonal quality of care and independent variables like gender and age were assessed according to operational definition. Data was analyzed by using SPSS 22.0 (Statistical Package for Social Sciences Inc., Chicago, IL, USA). Numerical variables were presented as mean and standard deviation like age, parity etc. Quality of care was measured on nominal scale, calculated and scoring was done to assess quality as good, satisfactory, or poor and presented as frequency and percentage. Mean and standard deviations (SD) were calculated for the descriptive statistics. The results obtained were recorded as percentages, frequencies, means, and SD. Ethical approval was not required since written consent from the participants was taken before filling out the questionnaire. All participants were assured confidentiality and anonymity and were also given an option of quitting without giving justification.

RESULTS AND DISCUSSION

Antenatal care encompasses the regular medical and nursing support that is recommended for women during pregnancy [11-13]. Antenatal care is a type of preventative care that allows doctors or midwives to treat and prevent potential health problems throughout the course of pregnancy while prescribing healthy lifestyle that benefits both mother and child. In addition to reducing maternal death rates and miscarriages the availability of routine prenatal health services plays a part in lowering birth defects, decreasing incidence of low birth weight and other preventable health problem. The current study aimed at assessing the quality of antenatal care provided to women at Jinnah Hospital Lahore.

Table 1 shows that female antenatal health care providers (H.C.P) have a higher ratio than males having 96.9% and 3.1% percentage frequency, respectively. Majority of antenatal health care providers were women medical officers (W.M.O) having highest percentage frequency of 73.4% while postgraduate residents (PGR) and house officers (H.O) had 24.2% and 2.3% frequencies, respectively.

Table 2 shows the results of whether the H.C.P. ask certain question about various factors from the women under observation. Table 2 indicates that majority of H.C.P. greet their patients and almost 88.3% tend to listen to their clients carefully and therefore the general attitude of H.C.P. towards their patients is satisfactory. Table 2 also shows that about 75.8% ask about medications which clients used, 92.2% question about previous pregnancies and 73.4% and 62.5% inquire about previous still births and abortions respectively. In addition, Table 2 also shows the results pertaining to questions associated with menstrual cycle of the pregnant women and whether the H.C.P. inquire or check other aspects of physical health of the women such as headaches, swelling, tiredness, weight, blood pressure etc. Moreover, the results show that 75% of H.C.P. palpate the patient's abdomen and 53.9% examine fetal heartbeat. 54.7% of H.C.P. fill maternal health care register while 53.9% fill the antenatal care record card (ANC) (Table 3).

Table 4 lists the results of health care workers encouragement towards tetanus and anti-malarial injections in addition to prescribing supplements. Moreover, the table hints that majority of H.C.P. (54.7%) advice blood and urine tests.

About 39.1% of H.C.P. talk about the importance of nutrition and 21.1% talk about the importance of tetanus toxoid (TT) education with their clients (Table 5).

Table 6 notes the questions asked by H.C.P. associated with delivery. For example, 75% do not ask about clients' preferred place for delivery and 86.7% do not inquire who will accompany the woman during labor or delivery

According to the current study, majority of H.C.P. greet their clients, a satisfactory result whereas 88.3% H.C.P. listened to the clients carefully which was considered a good outcome (Table 1). This contrasted with a previous study in which poor attitude of health workers has been identified such as in Malawi where health care workers have been reported to treat women in an insensitive manner without paying attention to the women's concerns [14]. In our study however, a satisfactory ratio was obtained when majority of H.C.P were observed to inquire about medications and LMP as well as occurrence of previous still births and abortions (Table 2). As a higher percentage of H.C.P. (85.2%) checked the women's blood pressure it was a good ratio. The findings of a similar study conducted in seven health facilities to assess quality of antenatal care in rural southern Tanzania matched the findings of the current study. The results indicated that blood pressure measurements and abdominal examinations were common during the ANC visits [15]. However poor results were obtained as a large portion of H.C.P failed to inquire about bleeding frequency during previous pregnancies as well as experiencing fever during the current pregnancy. Similarly, poor percentage was obtained regarding questioning about physical parameters as majority of H.C.P. did not question the women about vision problems, swellings, tiredness, or headaches.

In context of physical checkup of the women under observation, about 79.7% of H.C.P examined the weight and 75% palpated client's abdomen, which were considered as satisfactory results. In contrast, poor results were obtained when majority of H.C.P did not examine fetal heartbeat, checked the patients for edema and failed to do a breast examination. This study revealed that 83.6% of H.C.P. did not educate the patients about family planning. This result was contrary to similar study findings that have revealed that health education on family planning was given to most of the women during first- and last-born pregnancies [9]. The current study also touched the aspects of delivery as H.C.P were observed to inquire about the women's knowledge on traveling time, transport facilities available to them and about the cost of delivery (Table 6). Poor results were obtained in context of transport facility, traveling time and cost of delivery as majority H.C.P. did not question the patients on these aspects.

In conclusion, the current study revealed that the antenatal care provided at the obstetric OPD of JHL was not up to the mark. Obstetric OPD lacks in basic quality elements, like in examination procedures and provision of health education to clients. Poor quality of care was due to inadequate and lack of proper infrastructure for providing antenatal care. Antenatal health care providers were not performing the examination procedures properly and they were not providing the necessary health education to their clients. Therefore, health services should be improved to achieve better quality of antenatal care to improve maternal and fetal mortality.

Table 1: Distribution of Designation and Behaviors of Antenatal Health Care providers

Characteristics	Frequency	Percentage
Designation		
W.M.O	94	73.4
P.G.R	31	24.2
H.O	3	2.3
Sex of H.C.P		
Male	4	3.1
Female	124	96.9
Greetings		
Yes	95	74.2
No	33	25.8
Total	128	100
Careful listening		
Yes	113	88.3
No	15	11.7

Table 2: Distribution of symptoms recorded by Antenatal Health Care providers

Characteristics	Frequency (n=128)	Percentage
Medication		
Yes	97	75.8
No	31	24.2
Previous pregnancies		
Yes	118	92.2
No	10	7.8
Previous stillbirths		
Yes	94	73.4
No	34	26.6
Heavy bleeding		
Yes	56	43.8
No	72	56.2
Previous abortion		
Yes	80	62.5
No	48	37.5
Date of last menstrual period (LMP)		
Yes	125	97.7
No	3	2.3
Bleeding		
Yes	91	71.1
No	37	28.9
Fever		
Yes	61	47.7
No	67	52.3
Headache or Blurred vision		
Yes	40	31.3
No	88	68.8
Swelling on face or hands		
Yes	33	25.8
No	95	74.2
Tiredness or Breathlessness		
Yes	51	39.8
No	77	60.2
Blood pressure		
Yes	109	85.2
No	19	14.8
Weight		
Yes	102	79.7
No	26	20.3
Palpation		
Yes	96	75
No	32	25

Fetal heartbeat		
Yes	69	53.9
No	59	46.1
Edema		
Yes	45	35.2
No	83	64.8
Breast examination		
Yes	12	9.4
No	116	90.6
Other examinations		
Yes	40	31.2
No	88	68.8
Next checkup date		
Yes	116	90.6
No	12	9.4

Table 3: Distribution of information recorded by Antenatal Health Care providers

Characteristics	Frequency	Percentage
Mother health care register		
Yes	70	54.7
No	58	45.3
ANC Card		
Yes	69	53.9
No	59	46.1

Table 4: Distribution of responses recorded by Antenatal Health Care providers

Characteristics	Frequency	Percentage
Tetanus toxoid		
Yes	31	24.2
No	97	75.8
Anti-malarial		
Yes	5	3.9
No	123	96.1
Iron pills		
Yes	110	85.9
No	18	14.1
Folic acid pills		
Yes	108	84.4
No	20	15.6
Total	128	100
Blood and Urine tests		
Yes	70	54.7
No	58	45.3
Family planning		
Yes	21	16.4
No	107	83.6

Table 5: Distribution of awareness given to participants by Antenatal Health Care providers

Characteristics	Frequency (n=128)	Percentage
Nutrition		
Yes	50	39.1
No	78	60.9
Importance of TT injection		
Yes	27	21.1
No	101	78.9

Table 6: Distribution of guidance tips given to participants by Antenatal Health Care providers

Characteristics	Frequency	Percentage
Preferred place for delivery		
Yes	32	25
No	96	75
Transport arrangements		
Yes	13	10.2
No	115	89.8
Person accompanying her during delivery		
Yes	17	13.3
No	111	86.7
Travel time		
Yes	11	8.6
No	117	91.4
Cost of delivery		
Yes	20	15.6
No	108	84.4

COMPETING INTERESTS

The authors have declared that no competing interest exists.

DECLARATION

This manuscript is neither published nor submitted for publication, in whole or in part, either in a serial, professional journal or as a part in a book which is formally published and made available to the public.

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