ATTITUDE OF WOMEN OF NWFP TOWARDS ANTENATAL CARE

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Background: A safe motherhood initiative is a global effort to reduce maternal mortality and morbidity. This aims to ensure improvement in the quality and safety of lives of women through adoption of health and non-health strategies. Antenatal care is a branch of preventive medicine dealing with prevention and early detection of pregnancy disorders. It is the key to modern obstetrics. **Methods:** It was a descriptive type of study to find out the attitude of the women towards utilization of antenatal care facility at a newly commissioned hospital, Hayatabad Medical Complex, Peshawar, Pakistan in the first year of its working. **Results:** We recorded 980 patients. All of them were married. Monthly attendance showed increasing trend. In this study 72.44% of the women were of 25–35 year of age while 11.42% were teenager. Multiparity was recorded in 38.97% and 12.14% had more then nine pregnancies. Six hundred and fifty patients were living near the hospital. 2.24% patients visited more than six times and 63.26% had one visit only, with the rest visiting for 2–5 times. Thirty patients had medical disorders. Obstetrical diseases were detected in 194 patients. Pregnancy losses contributed to 146 women and 3 women had more then 6 losses. 254 women selected hospital delivery. Out of then 160 women were booked in the 3rd trimester. Caesarean section rate among those women was 16.4%. **Conclusions:** The conclusion drawn was that the women living near the hospital used the facility. Antenatal care should be provided to the women at the doorstep of their house. There is a system of lady health workers that should be expanded to cover all areas. Basic health units must be fully equipped and staffed. Communication system should be improved. There is a need to include health education in the curricula of primary education.

INTRODUCTION

Antenatal care is a branch of preventive medicine dealing with pre-symptomatic diagnosis of general medical disorders, nutrition, immunology, health education and social medicine in addition to prevention and early detection of pregnancy disorders[1]. It is the key to modern obstetrics[1]. Antenatal care began in Paris in 1788. It was initially an in-patient care from 36 weeks till delivery[2]. In the UK concept of antenatal care began in Edinburgh in 1902 when first antenatal bed was allocated for that purpose. Ballantyne first introduced his concern and he enabled himself to study the physiology and pathology of pregnancy for the well being of foetus/child. It was soon recognized that outpatient antenatal care (ANC) could achieve the same result and fit is more than 50 years since ANC clinics are available. Later this has spread all over the world[2].

World congress launched the 'safe motherhood program' in 1988 in FIGO conference held in Rio (Brazil) and directed consultant national societies to orient the major part of their activity for safe motherhood initiatives[3]. A safe motherhood initiative is a global effort to reduce maternal mortality and morbidity. This aims to ensure improvement in the quality and safety of lives of women through adoption of health and non-health strategies[4].

This study was carried out in Hayatabad Medical Complex, which is situated at the western end of Peshawar city near the border with Afghanistan. This is a newly established town and the hospital was commissioned on 29th September 1996. This is an area of the country where people are '*Pathans*'. Pathans have their own taboos and culture. They are *pardah* observing and are less educated. However the awareness about the health matters is now increasing. Antenatal clinics are more widely available and the attendance at the clinics is increasing day by day. The population of Hayatabad is composed of people from all over NWFP and refuges from Afghanistan who are economically relatively stable and educated. It has Afghans camps across the road and the people living there are poor and illiterate.

The aim of this study was to assess the attitude and behaviour of patients towards the newly commissioned hospital and awareness of people regarding utilization of antenatal care facility of the tertiary care hospital.

MATERIALS AND METHODS

This study was carried out in Hayatabad Medical complex in the first year after its commissioning. The out patient department started working on 2-Nov-1996. Admissions in the ward and labour room were started on 1-Mar-1997.

Antenatal clinic is situated in the out patient department. This started working in November 1996. There were daily sessions of the clinic. On the first of March 1997 hospital started taking admissions. Labour suit also started working the same day. Due to that the number of clinics were reduced to three ANC clinics in a week.

The staff of the clinic included one lady health visitor, two doctors and a consultant. The lady health visitor registered the patients while the doctors confirmed the period of gestation, detailed history of present, past and family illness was taken and was followed by:

- Measurement of height, weight, BP, oedema feet, fingers and face. Abdomen was palpated by Leopold's Manoeuvre .
- Haemoglobin at booking, 28 and 36 weeks.
- Urine examination for proteins, sugar and bacterial at booking, 28 and 36 weeks.
- Blood group, Rh factor.
- Blood sugar and other investigation if indicated.

The patients were immunized against tetanus. They were counselled for breast feeding and regular antenatal care every 4 weeks. If any risk to the mother or child was detected, the patient was seen by the consultant who provided appropriate management plan.

RESULTS

The data was collected from the Antenatal Clinic. We calculated total number of patients in monthly order, age at booking parity, gestational age at booking in weeks, number of visits, the number of patients delivered in the hospital, type of deliveries, disorders of pregnancy and address of the patient.

Total number of patients recorded in this period was 980. Monthly record of antenatal patients is shown in the Table-1 below.

Table-1: No. of patients booked versus No. delivered in the hospital

Year	Month	No. of Patients	Delivered in HMC
1996	Nov	5	5
	Dec	8	1
1997	Jan	29	8
	Feb	13	9
	Mar	27	13
	Apr	39	29
	May	64	35
	Jun	75	25
	Jul	115	18
	Aug	136	30
	Sep	117	5
	Oct	83	14
	Nov	124	29
	Dec	145	52

The table also shows number of deliveries carried out at HMC. Maximum number of patients booked was in December 1997 followed by August 1997. The least number of patients was in the month of November 1996. The maximum number of deliveries in the HMC took place in December 1997 followed by May 1997. The least number of deliveries at HMC was in December 1996 followed by November 1996 and September 1997.

Number of patients grouped according to age is shown in Table 2.

Table 2: Age distribution

Age (Years)	13–20	20–35	36–40	>40
No. of Patients	112	710	96	62
% of Total	11.42	72.44	9.79	6.32

Most of the patients were between age 20 to 35 years. Sixty-two patients were of more than 40 year age. The youngest patient was only 13 years old.

Table 3 shows number of patients according to parity. Maximum patients (382) were having 2^{nd} to 4^{th} gestation. One hundred and nineteen patients were having 9^{th} or more gestation. There were three patients with G13, G15, and G18 respectively.

Table 3: Distribution of the recorded patients according to parity

Parity	G1	G2– G4	G5–G8	≥G9
No. of Patients	186	382	263	119
% of Total	18.97	38.97	26.83	12.14

Table 4 shows period of gestation on the first visit to the ANC. With exception of 3 patients who reported after 40th week of gestation, minimum number of patients (93) paid a visit to ANC before 12th week of gestation. Maximum number of patients (313) visited the ANC between 31st and 35th week of gestation.

Table-4: Gestational age in weeks

GA (Weeks)	0–12	13–20	21–30	31–35	36–40	>40
No of patient	93	127	291	313	153	3
% of Total	9.48	12.95	29.69	31.93	15.61	0.30

Distribution of patients attending the ANC of HMC from Peshawar and suburbs is presented in Table 5.

Table-5: Catchment area

Area	No. of Patients	Percentage of Total
Hayatabad	334	34.8
Afghan Refugees	316	32.24
Hayatabad Suburbs	128	13.06
Peshawar City	56	5.71
Peshawar Cantt.	21	2.14
Miscellaneous	125	12.75

Some patients attending the ANC were from other districts and areas. The distribution of patients from other than Peshawar and surrounding areas is shown in Table 6 below. Patients came from nearby districts like Nowshera, Mardan, Charsadda and Kohat to far-flung areas of Swat, DI Khan and FATA.

Table 6: Patient attending ANC from other districts of the province

District	No. of Patients
Nowshera	14
Charsadda	18
Swat	7
Bajuar	5
Kohat	4
Madran	9
DI Khan	3
FATA	13

Majority of the patients (63.26%) paid a single visit to ANC. Only 20 and 22 patients paid 5 and 6 antenatal visits respectively. The patients listed according to number of visits to antenatal clinic are shown in Table 7.

Table 7: Hospital visits

No. of Visits	No. of Patients	Percentage of Total
1	620	63.26
2	190	19.38
3	74	7.55
4	54	5.51
5	20	2.04
6	22	2.24

As a general check-up, the diseases present in the patient were recorded. The data is presented in Table 8. Among the patients having any medical disease, diabetes was most common (11 cases) followed by Hypertension (9 cases), Hyperemesis (5 cases) Pyrexia of Uncertain Origin (3 cases) and Schizophrenia (1 case). One other case was found to be Thallassaemia carrier.

Table 8: Medical diseases detected in ANC

Diseases	No. of patients	Percentage of Total
Diabetic	11	1.12
Hypertension	9	0.91
Hyper emesis	5	0.51
PUO	3	0.30

Schizophrenia	1	0.10
Thalasaemia carrier	1	0.10

The number of pregnancy losses before attending the ANC is tabulated in Table 9. Majority of the patients (63) had 2 pregnancy losses before the current pregnancy while 3 patients had 7, 8 and 9 pregnancy losses respectively.

Table 9: Pregnancy losses in patients

No of Losses	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
No of Patients	36	63	18	18	12	6	1	1	1

The obstetric disorders found in the patients are listed in Table 10.

Table 10: Obstetric disorders detected in ANC

Obstetrical disorders	**No. of patients**
Previous Caesarian Section	14
Spontaneous Rapture of membranes	8
Twins	5
Triplets	2
Quadruplets	1
Placenta Praevia	4
Post date pregnancy	3
Poly hydramnios	2
Malpresentations	3

Number of booked cases during 1st, 2nd or 3rd trimester and delivered in the HMC is given in Table 11. Most of the cases were booked in the 3rd trimester, followed by 2nd trimester and least were booked as early as 1st trimester.

Table 11: No. of patients booked in 3 trimesters and delivered in the hospital

Trimesters	**Number of patients**
First Trimester	14
Second Trimester	80
Third Trimester	160

Most of the cases (156) were delivered per vaginum, but 57 cases needed assistance and 41 required Caesarean section (Table 12).

Table 12: Mode of delivery of the booked patient

Mode of delivery	**Number of patient**	**Percentage of Total**
Spontaneous Vaginal delivery	156	61.241
Caesarean Sections	41	16.14
Assisted deliveries	57	22.44

DISCUSSION

There is an increasing trend in attendance as can be seen in Table 1. There are two other tertiary care hospitals in the city therefore the patients also used those hospitals. In Pakistan 27% women are utilizing this facility whereas in South Asia 52% and for the rest of the World the figure is 68%. This is showing increased awareness and self-esteem of women in this area were the pregnancy and childbirth was considered to be a natural process not requiring any sort of care[4].

In this study there were 112 patients who had teenage pregnancies, the youngest was 13 years of age. All of them were married. Early marriage is common in this area. On the occasion of Pakistan's Golden Jubilee a report suggested to the government of Pakistan to strictly enforce the minimum age of 16 years for the marriage[5]. However in Afghans and tribal area it would not be implacable. Seven hundred and ten women were in age group 20–35 years. The attendance is more in this age group because there was a history of previous bad pregnancy experience and they were aware of the facility, they were less shy and more confident. There were 96 women in age group 36–40. Sixty-two women were above 40 years of age. The women in those age groups attend the hospital usually because they are worried about the place of confinement because they live in combined family system and feel shy delivering in the presence of grandchildren. Advance maternal age is a risk indicator rather then risk factor. It is associated with a number of pregnancy complication[5].

Parity is closely associated with maternal age and social class[7].

There were 38.7% multigravidae in the study. Multigravidae have relatively safer pregnancies compared to premigravida. Grand multigravidae were 382. They suffer from the effects of recurrent pregnancies and medical disorders. They are scared of the complications of labour and want to deliver in the hospital.

Three hundred and thirty four women were residing in Hayatabad Town while 128 women came from the villages near the town. As has been mentioned before these areas have a mixed population of Afghans and people from all over the NWFP. Three hundred and sixteen women came from Afghan refugee camps making one third of all the registered cases. If the Afghans living in the town were counted with them, they would constitute one half.

One Third of the women were registered at gestational age 31–35 weeks while 291 women were registered at 21–30 weeks of gestation. This shows that most of those women were late bookers. This is the usual trend of the women as has been seen in other hospitals and private clinics in this province though not reported. This trend is seen even in those women who had a high-risk pregnancy. They are only worried about the delivery and they only attend ANC early when they are symptomatic. Ninety-Three of the women attended the clinic before 12 weeks of gestation, for confirmation of pregnancy and minor ailments, however when they were counselled most of them followed the advice and had follow-up visits. One hundred and twenty seven women came for registration at 13–20 weeks. Most of them were educated and were aware of the importance of the timely booking while some of them had history of abortion and was scarred of the same happening again. There were 173 women who requested booking after 36 weeks of gestation. Their request was hospital confinement due to fear of complication and social problems.

We offer traditional Booking Plan for these women. However 620 women had just one visit. Those were the women who attended the clinic only for minor ailments or to find out the place for confinement. Only 44 women attended the clinic regularly. Second visit was paid by 190 women and this was to know about the results of the investigation and when assured they never returned. It also included the women who were admitted for minor or major problem.

Doubts were caused on the effectiveness of "Traditional booking Plan". Sikorski studied the new system of reduced visits and showed that in a group of women who were scheduled for the new system of visits the patients were significantly more worried and had more negative attitude and were unsatisfied then the women who had traditional care although the pregnancy out come was the same[8]. This study has been supported by Henshaw *et al* who showed that the women valued hospital care even in uncomplicated pregnancy[9].

Medical disorders were detected in 30 patients. They are the indirect causes of maternal death and are responsible for 20% of maternal deaths[10]. The disorders detected were diabetes, hypertension, fever, vomiting and certain other rare diseases like thalasaemia. Diabetes was detected in 11 women. All of them were asymptomatic. The disease was detected during investigations for pregnancy loss. Diabetes increases the malformation rate by two to four folds. However treatment with insulin has reduced the perinatal mortality from 65% to 2–5% presently. The IDM impact causes malformationns before 7 weeks[11]. Hypertension was detected in 9 women. This complicates 7–10% of pregnancies[12]. The disease is a symptomatic initially and if detected early one can prevent eclampsia, IUGR and other complications. Eclampsia is responsible for 12% of maternal deaths[10].

Obstetrical disorders were detected in 185 women. One hundred and fifty five women presented with history of one or more pregnancy loss. They include all types of pregnancy losses, i.e., abortions, stillbirths and perinatal deaths. In this area the people like having many children because the children starts earning in childhood rather than education.

Spontaneous rupture of membrane is quiet a common problem in daily obstetrics and can lead to chorioamnionitis in 30% cases and neonatal sepsis in 2–4% cases[13]. These patients were soon admitted and managed according to the situation.

We had eight cases of multiple pregnancies. Two of them were triplets and one of them was quadruplet. This might be due to high fertility rate in this part of Pakistan.

Fourteen women presented with history of previous caesarean section. Nine of then had caesarean section due to cephalopevlic disproportion. The other obstetric disorders were malpresentation, placenta praevia and polyhydramnios. These were detected in presymptomatic stage by routine ultrasound and therefore treated early.

Antepartum haemorrhage complicates 2–5% of the pregnancies[14]. However, maternal mortality due to this haemorrhage has fallen from 5% to less than 0.1% since the improvement and early management of this disorder[15].

Out of 980 patients, 254 patients delivered in the hospital. Fourteen of these were booked in the first trimester, while 80 women were booked in the second trimester. All of the rest were in third trimester at the time of booking.

According to the National health survey of Pakistan conducted in 1995, more than 89% deliveries took place at home[16]. Caesarean section was performed in 16.14% of women and instrumental delivery was performed in 22.44% of cases. International comparison had shown that obstetrical intervention rate was highest in Australia where 20% of the women had C. Section and 11% had instrumental deliveries[17]. Another study in U.K by showed that C. Section rate was higher in Wales (22.4%) and lowest (19.3%) in west of England[17].

CONCLUSION

This study showed that the ANC facility was availed mostly by the women living near the hospital. Most of them were self-referred. The system of orderly referral is non-existing. The concept of antenatal care is still not clear in the minds of consumers. The women seek antenatal care only when they are symptomatic and not as a preventive or screening purpose. The women feel it uneasy to attend the hospital. To decrease maternal mortality, morbidity and perinatal mortality there is need to make the people more aware about their health. There is a need to include health education in the curricula of primary education and mass media. There is need to provide antenatal care at the doorstep of the women. There is a system of lady health workers in some areas. There is a need to expand not only this system to other areas but also to improve mother child health care system at basic health units.

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