# Knowledge and utilization of antenatal care among women visiting Teaching Hospitals of Sahiwal, Pakistan

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**Objective:** To evaluate the knowledge and the utilization of ante natal care (ANC) services by women in child bearing age.

Methodology: This descriptive cross-sectional study used self-designed questionnaire consisting of closed ended questions which were read out to study participants and filled by the surveyor himself. Study included 380 pregnant women of reproductive age (19-45 years), visiting Gynecology & Obstetrics OPD of DHQ Teaching Hospital and Government Haji Abdul Qayyum Teaching Hospital, Sahiwal for their routine antenatal visits. Data were analyzed using SPSS version 17.0.

Results: There was least utilization of ANC

services by pregnant ladies due to lack of knowledge of its importance and physically inaccessibility. We found that 277(73%) women availed ANC services in previous pregnancy and 224(59%) women knew about the requirement of folic acid/iron.

**Conclusion:** Utilization of ANC services is increasing with time due to developmental progress, improving literacy rate and media development. However, more awareness, easy and economical access to ANC services needs be provided, especially in rural areas. (Rawal Med J 202;45:488-492).

**Keywords:** Antenatal care, women of childbearing age, pregnancy.

## INTRODUCTION

Antenatal care (ANC) is a branch of Preventive Medicine dealing with appropriate information and assistance to the pregnant ladies for a healthy pregnancy, safe childbirth, cleaned safe delivery and postnatal care. The health care facilities provided to the pregnant ladies during their visits to the hospitals and centers, include not only the symptomatic diagnosis of general medical conditions and assessment of their nutritional and immunity system but also early detection of pregnancy disorder such as gestational diabetes, anemia, pre-eclempsia, eclempsia, miscarriages, DVT, ectopic pregnancies, vertically transmitted infections, birth defects and congenital anomalies.<sup>1</sup> It focuses on the antenatal care among those women who are more prone to get the obstetrics complications.<sup>2</sup> This approach includes early detection and management of obstetrics complications such as eclempsia, pre-eclempsia,

tetanus toxoid immunization and prevention of STDs including HIV/AIDS.

In 20<sup>th</sup> century, countries where systemic ANC was introduced were Europe and North America, but now-a-days it has become universal in all over the developed and developing countries. WHO recommends that pregnant women should have at least 4 antenatal visits from first trimester to get sufficient prenatal care and to minimize pregnancy related complications. 4-6

ANC coverage in different WHO recommended regions is highly variable. In America, this service covers 94 percent and in Western Pacific Region coverage is about 90 percent. As compared to this, in developing countries like African region it is about 73 percent while moving to the South Asian region this coverage increases to 75 percent. Africa is the place with highest maternal death and lowest child health. In Pakistan, hilly areas like Chitral have most low birth weight deliverers. Pakistan is

included in those countries having high maternal mortality rate. 10

According to National Demographics Survey of Pakistan, 70% of women in Pakistan do not get ANC, 23% get care from doctor, 3% from Nurses, LHV and Family Social Workers and 4% from trained or untrained birth attendants. The aim of this study was to evaluate the knowledge and utilization of ANC services among pregnant women visiting DHQ Teaching Hospital of Sahiwal and GHAQ Teaching Hospital and to assess the factors influencing the utilization of optimal ANC services among these patients.

## **METHODOLOGY**

This descriptive cross-sectional study was conducted at Department of Gynecology and Obstetrics, DHQ Teaching Hospital and GHAQ Teaching Hospital, Sahiwal from February 1, to July 31, 2019. It included 380 pregnant women with age from 19-45 years. WE excluded all non-compliant pregnant women. An Informed consent was taken from all participants.

A self-designed questionnaire consisting of closed ended questions was filled by surveyors. The statement was read out before each of them individually and they were asked to express their views for each statement.

**Statistical Analysis:** Data were entered and analyzed by using SPSS version 17.0.

### **RESULTS**

The study included 380 pregnant women. Age range was 19-45 (Fig. 1). We found that 66% women availed ANC services whereas 34% did not. Most common reason of not availing the service was not having permission in 54%, while 23% did not know that it's required and 15% were too busy to visit the hospital, only 8% were having financial problem. Among the women availing this service in this pregnancy 74% visited the government hospital and 22% visited the Dai/midwife while 4% visited the private clinics.

Fig. 1. Age distribution (In years).

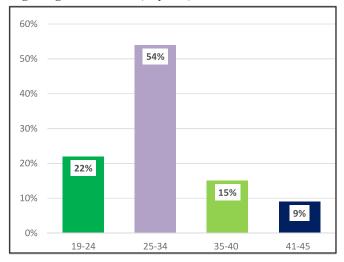


Fig. 2. Number of visits in previous pregnancy.

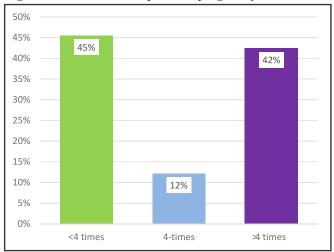


Fig. 3. Pattern of attendance of antenatal care.

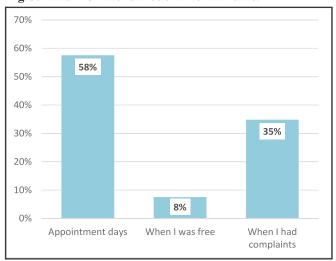
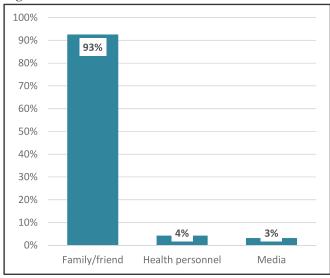


Fig. 4. Source of antenatal awareness.



Women visiting both hospitals were mostly (66%) had formal education while 34% had no formal education. Most of the women (50%) were housewife while 25% women were private employee or laborer and 25% women were doing government jobs.

63% women were anemic during pregnancy, 2% suffered from pre-eclempsia and 19% from vaginal bleeding. Most women had antenatal visits <4 during pregnancy (Fig. 2) and 58% visited on appointments days (Fig. 3). Main source of awareness was friends and family in 93% women (Fig. 4).

#### **DISCUSSION**

We found utilization of ANC services was increasing with time. Among 380 pregnant women, 84% availed ANC service in previous pregnancy. The worldwide coverage of antenatal coverage was 40.9% in 1990; it increased to 58.6% in 2013. The inequity was substantial in terms of the coverage both within regions and between income groups. A study by Arsenault et al also showed the global antenatal care by 72.9% of women. A study by Benova et al which included data from 10 low and middle income countries, showed that even among women with patterns of care according to WHO recommendations, the content of care was of poor quality.

The quality of ANC according to WHO guidelines

needs to be improved. A study by Rosario et al used community- based longitudinal data of 10,289 pregnancy outcomes showed that 82.5% had four or more antenatal visits. In our study, 67% were resident of urban area while 33% belonged to rural areas of Sahiwal. Women availing ANC service were mostly multipara (59%) while 21% were primipara and 20% grand-multipara1. Sarfraz et al reported antenatal coverage of 53% in Punjab Province of Pakistan.

A study of 19 Basic and Rural Health Centers of Punjab province showed that the antenatal coverage was 55.9%.9 The quality of ANC was extremely poor regarding assessment, treatment and counseling. Factors for low coverage were: distant location of health facilities, deficient facilities at healthcare units, non-availability of trained staff and lack of patient awareness. A cross-sectional study from Lahore on 1223 females showed that 73% had knowledge about the importance of ANC and majority were from low income strata, had low education background and preferred institutional deliveries instead of home deliveries. 10 A similar study from Bangladesh on 737 women showed that 71% attended ANC in the second trimester, while only 18% attended antenatal clinics in the first trimester.<sup>15</sup> A study from China also showed that 81.46% women used ANC at least 5 times during the first delivery. 13

A study from Swabi, KPK and PIMS, Islamabad reported that only 37% of women had four or more ANC visits during their last pregnancy. 14 Major factors for low ANC utilization were financial limitations, perception of absence of major health issues during pregnancy, no previous experience of ANC services and perception of unavailability of healthcare providers at healthcare facilities. In our study, 63% women belonged to low income families (<10,000 rupees) and 33% women belonged to middle income group (10000-50000 rupees) while only 4% women had family income above 50,000 rupees. A study from Sindh showed that 87% of women received an ANC check-up and timings of visits varied according to the education level, household income and parity status of the women.14

In our study, 13% did not know it is required. May be

because pregnancy is considered as a normal physiological happening not some pathology. Of all the facilities, Government hospital facilities were maximally availed. This is in contrast to the surveys carried out in Islamabad and Karachi, where private hospitals were preferred. 11,13

In this study, it was noticed that knowledge about iron tablets and their intake among pregnant ladies was 89%, which is higher as compared to other areas of Pakistan. In Pakistan, more than 40% women are anemic (NHSP 1996). We found that 47% were anemic. The aim is to elaborate the importance of iron and folic acid supplements during pregnancy and to achieve 100% coverage for prevention of anemia, as this is one of the main causes of maternal mortality.

Although the surveyors had collected as much information as possible in order to accumulate the accurate results that fulfill the goal of this research, the study still has some limitations. First, though this cross-sectional study was conducted in only two hospitals; our results might not be representative of the whole country. Secondly, because of sociocultural barriers and constraints, it was challenging at times to interview some respondents. Finally, time and budgetary limitations played a deterring role in extending this study beyond two teaching hospitals.

#### CONCLUSION

The awareness of optimal antenatal care, its practice, utilization of facilities and knowledge is increasing with time due to developmental progress, improving literacy rate and media development. But still more awareness, easy and economical access to ANC services be provided especially in rural areas.

#### **Author Contributions:**

Conception and design: Hina Ilyas

Collection and assembly of data: Hina Ilyas, Fiza Amin

Analysis and interpretation of the data: Muhammad Hassam Rehm Drafting of the article: Rana Aamir Diwan

Critical revision of the article for important intellectual content:

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