

Utilization Patterns of Antenatal Services Among Pregnant Women: A Longitudinal Study in Rural Area of North Karnataka.

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Abstract: *Objectives:* 1.To study the profile of antenatal care received 2. To know the factors influencing the utilization *Study Design:* Longitudinal study.*Setting:* Shindolli village of Belgaum District *Participants:* All women (n =130) in this village who were pregnant at the start of the study and who became pregnant during the study. *Statistical Analysis:* Proportions and Chi-square Test *Results:* Most of the pregnant women (92.31%) were registered for antenatal care, but only 30.00% of them were registered in the 1st trimester of pregnancy. As regards to TT immunization, 70.77% of the pregnant women had received 2 doses or 1 booster dose. Iron and Folic Acid supplementation was taken by 59.68% of the pregnant women. Nearly 39.52 % of pregnant women were provided with full antenatal care. The main antenatal care provider for pregnant women was doctor (64.52%). The provision of full antenatal care package was found to be significantly higher among the pregnant women belonging to social classes I and II and in those who have studied above SSLC. *Conclusion:* The study shows early and wide spread use of antenatal care, but it also reveals that the antenatal visits occur late in the pregnancy. The literacy of women has significant bearing on utilization of antenatal care by the pregnant women.

Key words: Utilization, antenatal services, pregnant women.

Introduction

Pregnancy and childbirth are special events in women's lives, and, indeed, in the lives of their families. This can be a time of great hope and joyful anticipation[1]. The primary aim of antenatal care is to achieve, at the end of pregnancy, a healthy mother and a healthy baby[2]. The quality of care is more important than the quantity. Pregnancy requires specialized care, generally agreed to be a preventive activity. Where visits do occur, they appear to occur infrequently, late in the pregnancy and their content is unclear. Moreover, it appears that antenatal services are likely to be sought by women who experience difficulty or signals of a complicated delivery than other women[3]. Poor utilization of services reflects cultural and socio-economic constraints as well as perceptions regarding accessibility of facilities and quality of care. Nearly 64.00% of women who did not utilize antenatal services consider it unnecessary, reflecting both the traditional notion that child bearing is not an event worthy of medical attention[4].

Materials and Methods

This longitudinal study was conducted in Shindolli village which is a rural field practice area of the Department of Community Medicine, J.N.Medical College, Belgaum. Shindolli, having population of 6335 comes under the Mutaga Primary Health Centre. The present study was conducted for a period of one year. All women in this village who were pregnant at the start of the study and who became pregnant during the study period were enrolled. Case identification was carried out with the help of anganwadi workers and the case load was cross- checked with female health worker record to identify any missed cases. A total of 130 pregnant women were

enrolled in the study. During the initial visit, using a pre-designed and pre-tested questionnaire, information was collected by interviewing the pregnant women on socio-demographic variables. Each pregnant woman was then followed- up by fortnightly home visit. The details about the antenatal care received were noted down in a pre-designed and pre-tested follow- up proforma.

Results:

In the present study, out of 130 pregnant women, 69 (53.08%) were between 20-24 years of age, 32(24.62%) between 25-29 years, 5(3.84%) between 30-34 years and only 1(0.77%) was between 35-39 years. At the same time, it was observed that 23 (17.69%) women were teenage pregnancies aged between 15-19 years. Out of 130 pregnant women studied, 42 (32.31%) were primigravida, 37 (28.46%) 2nd gravida, 30 (23.08%) 3rd gravida, 12 (9.23%) 4th gravida and grandmultiparity was noted in 9 (6.92%) women. Out of the total pregnant women studied, majority 118(90.77%) were Hindus and only 12(9.23%) were Muslims. In our study, 69(53.08%) were housewives, 45(34.61%) were agricultural labourers, 11(8.46%) were weavers, 2(1.54%) each were service persons and coolies and only 1(0.77%) was tailor. Our study revealed that 86(66.15%) pregnant women were literates. Among them majority of the pregnant women, 40(30.77%) were educated upto primary level, 30(23.08%) upto high school and only 16(12.30%) women were educated after SSLC. It is was noted that 44(33.85%) women were illiterates. As regards to socio-economic status, 2(1.54%) belonged to class I, 7(5.38%) to class II, 31(32.85%) to class III, 52(40.00%) to class IV and 38(29.23%) belonged to class V according to revised B.G. Prasad's classification.

Out of 130 pregnant women, only 39 (30.00%) women had done registration in first trimester and 74 (56.93%) in 2nd trimester. Late registration in 3rd trimester was noted in 7 (5.38%) pregnant women and inspite of having a goal of 100% antenatal registration 10 (7.69%) had not done registration. Further, when antenatal visits were analyzed according to trimesters, it was noted that during 1st trimester 86 (69.36%) had made no visits, 27 (21.77%) 1 visit, 11 (8.87%) 2 visits and none ≥ 3 visits. In 2nd trimester, 20 (16.13%), 23 (18.55%), 40 (32.26%) and 41 (33.06%) pregnant women had made nil, 1, 2 and ≥ 3 visits respectively. In 3rd trimester 64 (51.61%) of pregnant women had made ≥ 3 antenatal visits, but still 10 (8.06%) had no visits even in later stages of pregnancy (Table 1).

Table 1: Distribution of pregnant women according to number of antenatal visits.

n=124*

Number of visits	Number	Percentage
Nil	10	8.06
1 – 2	17	13.71
≥ 3	97	78.23
Total	124	100.00

* 5 lost for follow up.

1 ended in abortion at 4th month, therefore 124 remained.

The present study revealed that 79 (63.71%) pregnant women received two doses of TT, 9 (7.26%) received 1 dose as booster, 26 (20.97%) received 3 doses of TT by private doctors and 10 (8.06%) did not receive even a single dose of TT. In our 124 study population, 74 (59.68%) pregnant women took IFA tablets and 50 (40.32%) did not take (Table 2).

Table 2: Reasons for non-intake of Iron and Folic Acid tablets.
n=50

Reasons for not taking	Number	Percentage
No Antenatal Care	10	20.00
Diarrhoea	10	20.00
Vomiting	9	18.00
Gastritis	5	10.00
Causes body heat	4	8.00
Headache	3	6.00
Constipation	3	6.00
Fetus will grow big	3	6.00
Bitter taste	3	6.00
Total	50	100.00

74 who received IFA tablets, 52 (70.27%) pregnant women took them regularly and remaining 22 (29.73%) took the tablets irregularly. It is unfortunate to note that inspite of presence of all facilities, majority 97 (78.23 %) of pregnant women having taken more than three antenatal visits still only 49 (39.52%) pregnant women received all the three components of antenatal care and 75 (60.48%) did not take full antenatal care package (Table 3).

Table 3: Distribution of pregnant women according to provision of full antenatal care package, n=124

Full ANC package (≥ 3 AN Visits, TT ₂ / TT ₁ as booster & regular IFA tablet intake)	Number	Percentage
Received	49	39.52
Not received	75	60.48
Total	124	100.00

The present study revealed that 18.18 % of illiterate pregnant women received full antenatal care and 87.50 % of post SSLC studied pregnant women took full antenatal care. As the literacy status increased, percentage of pregnant women taking full antenatal care package also increased which was statistically significant ($\chi^2 = 24.677$, $p = 0.000018$). About 88.89 % of pregnant women of classes I & II took full antenatal care, were as 14.29 % of women belonging to class V availed full antenatal care. So, as the socio –economic status increased, the percentage of pregnant women taking full antenatal care package also increased. This was also statistically significant ($\chi^2 = 20.368$, $p = 0.000142$). The present study showed that 80 (64.52%) pregnant women received antenatal care from doctor, 34 (27.42%) by nursing staff of sub-centre and primary health centre and remaining 10 (8.06%) did not receive antenatal care by any one. Out of 124 pregnant women, 60 (48.39%) went to private

hospitals, 22 (17.74%) to district hospital, 20 (16.30%) to sub-centre and only 12 (9.68%) pregnant women went to primary health centre for antenatal care. Out of 12 pregnant women who went to primary health centre for antenatal care, only 2 pregnant women were examined by medical officer and remaining 10 by nursing staff. None of the pregnant women had antenatal care by ANM at her home and remaining 10 (8.06%) did not go to any hospital.

Discussion

The present study revealed that, 92.31% of pregnant women had done antenatal registration and only 7.69% women had not done it. Among the registered pregnant women majority 56.93% had done registration during 2nd trimester, 30.00% women in 1st trimester and 5.38% in the last trimester. In a study conducted in urban slum of Delhi, only 67.1% of pregnant women had done antenatal registration and 32.9% women did not do it. Among the registered, 55.0% had done registration during 2nd trimester, 11.7% in 1st trimester and 33.3% in the 3rd trimester[5]. The present study revealed that 80.77% had taken TT₂ / booster, 20.97% had taken three doses of TT and 8.06% of pregnant women had not taken a single dose of TT. In a study conducted in 90 districts of various states of India, 77.9% of pregnant women had received TT₂ / booster and 13.6% had not taken a single dose of TT[6]. In this study 59.68% of pregnant women consumed IFA tablets and among them only 70.27% took them regularly. The main reasons for non-intake of IFA tablets were: no antenatal care (20.00%), diarrhoea (20.00%), vomiting (18.00%) and gastritis (10.00%). In a study conducted in villages surrounding Bangalore, 85.0% reported taking IFA tablets regularly and the main cause for non intake noted in that study was a belief that iron pills cause the child to be dark skinned[7]. In our study majority 64.52% had antenatal care by doctor, 27.42% by nursing staff of Sub Centre and Primary Health Centre and 8.06% women had no antenatal care by anyone. In a study conducted in villages around Hyderabad, 88.0% had antenatal care from doctor, 3.0% from ANM and 9.0% did not have antenatal care [8]. The present study revealed that 48.39% pregnant women went to private hospitals for antenatal care, 17.74% to district hospital, 16.13% to Sub Centre and only 9.68% women went to Primary Health Centre for antenatal care. In a study carried out in villages of Bathinda district of Punjab state, it was found that 30.8% went to Government hospital / Primary Health Centre, 47.2% went to private hospitals, 12.0% to sub centre and 10% did not take antenatal care at any place[9].

Conclusion

The study shows early and widespread use of antenatal care, but it also reveals that the antenatal visits occur late in the pregnancy. Few women did not take antenatal care, the main reason being that they believed that pregnancy being a natural phenomenon did not need any special care. The impression about antenatal care provider, from this study is that care from private sources is considered far superior to that from government services. The level of compliance with iron supplementation among the anemic pregnant women was low. The causes for low compliance were side effects to iron tablets. The literacy of women has significant bearing on antenatal

care of pregnant women. Thus, measures should be adopted for improving female literacy.

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