

Kap Analysis of Antenatal Care among the Antenatal Women Visiting a Tertiary Care Centre in South Karnataka

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Abstract: Antenatal care (ANC) among pregnant women is one of the important factors in reducing maternal morbidity and mortality. Unfortunately, many women in developing countries do not receive such care. A cross sectional study was conducted between January 2017 to March 2017. We selected women attending Antenatal clinic of our Obstetrics and Gynaecology OPD. A questionnaire was designed and all the women were interviewed regarding their knowledge and awareness about antenatal care. The knowledge and the practice were found to be satisfactory. However the basic knowledge was present but the importance of the medication and the complications associated with conditions like diabetes and hypertension was insufficient. There is a need for enhancing awareness about the importance of ante-natal care and for motivating women to utilize maternal care services.

Keywords: knowledge, antenatal care, ANC

1. Introduction

Antenatal care (ANC) is the care a woman receives throughout her pregnancy in order to ensure that both the mother and child remain healthy. A healthy diet and lifestyle during pregnancy is important for the development of a healthy baby and may have long-term beneficial effects on the health of the child. Almost 90% of maternal deaths occur in developing countries and over half a million women die each year due to pregnancy and childbirth related causes. Proper ANC is one of the important ways in reducing maternal and child morbidity and mortality. Unfortunately, many women in developing countries do not receive such care. Understanding maternal knowledge and practices of the community regarding care during pregnancy and delivery are required for program implementation. Data on this very important issue are scarce in our state. Therefore, the present study was carried out to evaluate the knowledge and practice of ANC among women visiting a tertiary care centre in South Karnataka district

2. Materials and Methods

A cross-sectional study was conducted during January 2017 to March 2017 among 332 antenatal women residing in an urban area of Mangalore. All the members were interviewed using structured questionnaire which included their age, parity, educational status and occupation and also few questions pertaining to knowledge and practice regarding ANC. Informed verbal consent was taken from each participant. In case the respondent had more than one delivery in the last 5 years, interview was taken about the most recent delivery. Those women who refused to participate and could not be contacted till the last day of data collection were excluded from the study. At the end of each day, data collected were checked for completeness and consistency. Scoring of knowledge was also calculated.

3. Results

Majority of the respondents, that is around 67% were in the age group of 18 to 29 years and studied upto 10 to 12

standard. Most of them (98%) were housewives and belonged to the Muslim community and majority of the women got married at <20 years of age. Around 217 women out of 332 were multigravida or grandmultigravida.

Age (yrs) of the respondents	Number	Percentage
<20	122	37%
21-30	101	30%
31-40	98	29%
>40	11	4%

Educational status	Number	Percentage
Uneducated	93	28%
Primary school	74	22%
Lower secondary	102	31%
Upper secondary	60	18%
Graduates	3	1%

Occupation	Number	Percentage
Housewife	328	98.6%
Government employee	1	0.4%
Self-employee	2	0.6%
Private sector	1	0.4%

Parity	Number	Percentage
Primigravida	115	35%
Multigravida	120	36%
Grandmultigravida	97	29%

Out of the 332 women who visited the antenatal clinic, there were 122 women who were less than 20 years and the least number of women were above 40 years that constituted only 4%. Upto 53% of the women had education upto lower secondary and 28% women were uneducated. Majority of the women were housewives and there was very limited number of women that had a government or a private job or were self-employed. One-third of the population were primigravida, another one-third were multigravida and around 29% women were grandmultigravida.

Knowledge and attitude		
Minimal number of visits	Number	Percentages
Correct	144	43%
Incorrect	158	48%
Don't know	30	9%
Folic acid necessary ?		
Correct	153	46%
Incorrect	156	47%
Don't know	23	7%
Importance of FA		
Correct	36	11%
Incorrect	77	23%
Don't know	219	66%
Inj.TT necessary ?		
Correct	263	79%
Incorrect	53	16%
don't know	16	5%
Importance of iron and calcium tablet intake during pregnancy		
Correct	126	38%
Incorrect	172	52%
Don't know	34	10%
Importance of diabetes screening		
Correct	176	53%
Incorrect	113	34%
Don't know	43	13%
Importance of BP checking		
Correct	86	26%
Incorrect	123	37%
Don't know	123	37%
Awareness of important Complications of GDM / GHTN / Preeclampsia		
Correct	130	39%
Incorrect	46	14%
Don't know	156	47%
Ideal place of delivery		
Home	23	7%
Hospital	302	91%
Don't know	7	2%
Knowledge of LSCS		
Correct	33	10%
Incorrect	269	81%
Don't know	30	9%
Source of knowledge		
Media	123	37%
Friends/ family members	163	49%
Health personnels	46	14%

Only 9% of women did not know the minimum number of antenatal visits, however 48% of the women were incorrect and 44% women (144 women) knew the correct number.

Majority of women are aware that medications like folic acid, iron ,calcium and inj.TT were necessary but around half the women were not aware about the importance of the

same. These women are also aware that BP checking and screening for GDM is important . However around 50% of the population is not aware of the complications associated with hypertension and diabetes (basic complications like big baby, IUD, difficult delivery for diabetes and eclampsia for hypertension). Although the percentage of multis and grandmultis are more than 60%, they were aware that antenatal visits were important but they lacked further knowledge regarding the basic complications which is essential in the modern times. However 91% women believe that delivery should be conducted in the hospital.

Another disappointing fact regarding the knowledge of women is their knowledge regarding caesarean sections. The women consider it as a major surgical procedure and do not prefer it as they believe that the family cannot be extended (beyond 2 or 3 children). Even the spouses of these women have the least preference for caesarean sections. They are not aware of the fact that emergency LSCS is done for indications like fetal distress, cord prolapse, primi breech in labour and many other conditions that are fatal to the baby, mother or both.

The source of knowledge of these women are mainly from the family members and friends and the least from the health personnel.

Practice		
Number of ANC s	Number	Percentage
≤ 3	13	4%
>3	319	96%
Regular ANC s		
Yes	292	88%
No	40	12%
Compliance with FA / iron / calcium		
Yes	308	93%
No	24	7%

The number of women who visited the antenatal clinic less than 3 times were only 4% whereas 96% women came for >3 ANC s out of which only 88% women were regular with their ANCs. Financial reasons, unavailability of transport facility and thinking 'it is not necessary' were the main reasons for not accessing antenatal care. Majority of the women were compliant with their medication. The 7% of women who weren't compliant with their medication were mostly intolerant to iron.

With increase in the educational status, the adequacy of knowledge also increased correspondingly (p value for Chi-square trend <0.001). However, respondents' age, occupational status and parity was not found to be statistically associated with knowledge of ANC.

4. Discussion

Knowledge not only transforms, but also empowers women and improves their self-esteem. It is expected that educated women are more likely to be aware about their health status and seek health knowledge. Improving knowledge about the benefits of ANC for pregnant women is an important element in enabling them to enrich their experiences as well as supporting their effort to better appreciate ways to protect

their health and that of their children. Moreover, once they become knowledgeable about ANC, they will take better care of their own health. Healthy mothers who regularly visit ANC during pregnancy will greatly enhance their family's health. A diminishing rate of maternal and child mortality will also reduce a family's expenses and ensure their children's good health.

A study conducted in Bangladesh revealed maternal age as one of the important predictors for ANC. Another study revealed that the primipara had more knowledge than the multipara although it was not statistically significant. However, the multiparas were found to have poorer knowledge on ANC in a study done by Zhao Q *et al.* On the contrary our study found that multigravidas had better knowledge about the antenatal care. This could be probably due to the early marriage because of which the experience of pregnancy and delivery were more and the source of their knowledge were from the friends and family who have already gone through pregnancy and delivery.

In the current study, any antenatal care (ANC) visits were made by 96% of women which was higher compared with the study conducted in other parts of India. It may be due to close proximity and therefore easier accessibility of health facilities as stated by Magadi *et al* that the frequency of antenatal care is also influenced by the accessibility of antenatal care service.

In our study, majority of women replied the purpose of ANC visits were to know the health condition of the mother and foetus. Among 322 participants, 96% completed minimum three ANC visits which is very high compared with the study done by Khatib *et al* (33.6%)¹⁴. In our current study, the folic acid, iron and calcium tablets were taken by 93% of women. Almost all of the ANC attendees received tetanus toxoid (TT) vaccine which is higher compared with another study done in Karnataka. 4% of women had less than 3 ANC.

Poor antenatal care is an important risk factor for adverse pregnancy outcomes. The reasons for not attending antenatal check-up were that it is not necessary, financial reasons and unaware about ANC. This finding is consistent with the findings of Sanjel S *et al.* Also the poor women usually have poor access to education, including health education due to lack of financial resources, early marriage and pregnancy, household responsibilities and unwillingness to invest in the hidden costs of education (fees, transport, etc).

The limitation of our study is that there might be chances of recall bias among some of the respondents. Since this study was done in an urban area, the study cannot be representative of the whole state.

Relationship between knowledge, attitude and practice

Pearson correlation test was performed to look at the relationship between the mean knowledge score and the mean attitude score of the respondents. Results showed a significant positive and moderate relationship between the knowledge and attitude score ($p=0.01$ with correlation coefficient, $r=0.469$).

5. Conclusions

Knowledge of ANC was found to be satisfactory in the study area but a further knowledge would improve the standards of the antenatal visits. The practices of ANC were also found to be satisfactory. To improve community awareness on ANC, information, education and communication activities should be increased on ANC through community campaign and mass media like local television channel, radio and local newspapers. There is a need to motivate women to utilize maternal care services which are freely available in all the government health setups.

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