

Original Research Article

## Awareness of Antenatal Care Services and Danger Signals during Pregnancy

Anju Ade<sup>1</sup>, Sujatha N<sup>2</sup>

<sup>1</sup>Professor, Department of Community Medicine, SVIMS, Shri Padamavati Medical College for Women, Tirupati, Andhra Pradesh.

<sup>2</sup>Post-Graduate Student, Department of Community Medicine, Navodaya Medical College, Raichur, Karnataka-584103.

Corresponding Author: Anju Ade

Received: 07/05/2016

Revised: 27/05/2016

Accepted: 03/06/2016

### ABSTRACT

**Background:** It is estimated that globally, nearly 5 lakhs maternal deaths occur every year. About 99 percent of this occurs in developing countries and hardly 1 percent in developed countries.

**Objectives:** 1.To assesses the level of knowledge of pregnant women about antenatal care services and danger signals during pregnancy.

**Materials and Methods:** This cross-sectional study was conducted in a field practice area of UHTC (urban slum) of Raichur among antenatal women attendees from May-June 2015. A pre-tested, pre-structured interview schedule was prepared to collect the data. Data were analyzed in SPSS software. Descriptive statistics were used to describe the distribution of all variables.

**Results:** 56 % of the respondents were not aware about minimum ANC visits. Regarding Inj. TT, Iron and folic acid tablets, awareness was good, 88% and 77% respectively but they were not aware that when and how many times. Regarding diet women's knowledge was poor. 83% women said hospital is the ideal place to deliver the baby. Only 31% women were aware about Janani Suraksha Yojana but all the women were aware that smoking and alcohol are harmful for the foetus. Most of the respondents were not aware about danger signals during pregnancy.

**Conclusion:** Emphasis has to be laid on education on danger signals during pregnancy and antenatal care services so that complications can be detected at early stage to avoid mortality among mothers.

**Keywords:** Antenatal care, danger signals, urban slum, Janani Suraksha Yojana.

### INTRODUCTION

It is estimated that globally, nearly 5 lakhs maternal deaths occur every year. About 99 percent of this occurs in developing countries and hardly 1 percent in developed countries. It is shockingly high in India, nearly 150 maternal deaths per day, one every 10 minutes. For every maternal death, there are 14 perinatal deaths and many women experience serious complications. [1] Most maternal deaths and pregnancy complications can be prevented if pregnant women have access to good

quality antenatal, natal and postnatal care, and if certain harmful birth practices are avoided. [2] Antenatal care is the care of the woman during pregnancy. The primary aim of antenatal care is to achieve at the end of a pregnancy a healthy mother and a healthy baby. [2] Reduction in maternal mortality rate can be achieved by efficient antenatal care such as early recognition and registration of expectant mothers, regular antenatal check-ups, antenatal investigations, detection and referral of high risk mothers, antenatal advice including

warning signals, antenatal services like immunization and nutritional supplementation, distribution of iron folic acid tablets. [1] The low status of woman in the society coupled with their low literacy levels prevents the women from taking antenatal care even if services are available. [2] Understanding maternal knowledge and practices of the community regarding care during pregnancy and delivery are required for program implementation. [3] This study was carried out to evaluate the awareness of antenatal care services and danger signals during pregnancy among pregnant mothers. **Objectives:** 1. To assess knowledge of pregnant women regarding antenatal care services and danger signals during pregnancy.

## MATERIALS AND METHODS

This cross-sectional study was conducted in a field practice area of UHTC (urban slum) of Raichur among antenatal women attendees from May-June 2015. This urban health centre covers a has a population of 20,000 and provides health care services like antenatal care, immunization, family planning and treatment of minor ailments to the community. In this clinic, every Thursday is antenatal clinic, all the pregnant mothers who attended the antenatal clinic for the first time during the study period were included and therefore no sampling was done. A pre-tested, pre-structured interview schedule was prepared. The schedule included questions regarding socio-demographic profile, details about antenatal care services and knowledge of danger signals during pregnancy. Data were entered and analyzed in SPSS version 16. Descriptive statistics were used to describe the distribution of all variables.

## RESULTS

As shown in Table No 1, Most of the women in 23- 26 age group followed by 19-22 years age group. 44% of the participants were illiterate. 24% were educated up to primary section and 16% were educated up

to secondary section and were graduates respectively. 55% belonged to joint family and 45% belonged to nuclear family. 59% women married at 16-19 years age group followed by 40% of women in age group 20-23 years. Most of the women (40%) were primigravida followed by 35% of women in second gravida.

Table 1: Socio-demographic information (n= 100)

Socio-demographic characteristic	No	Percent
<b>Age group</b>		
19-22	38	38 %
23-26	44	44 %
27-30	18	18 %
<b>Education</b>		
Illiterate	44	44 %
Primary	24	24 %
Secondary	16	16 %
Graduate	16	16 %
<b>Occupation</b>		
Housewife	63	63
Daily labourer	23	23
Govt. employee	14	14
<b>Type of family</b>		
Joint	55	55
Nuclear	45	45
<b>Age at marriage</b>		
16-19 years	59	59
20-23 years	41	41
<b>Gravida</b>		
Primi	40	40
Second	35	35
Third	19	19
Fourth	06	06

As shown in Table No 2, all the respondents were aware that every pregnant mother need to go for antenatal check - ups but only 50 % of them were aware that even if there is no complication during pregnancy is it required to go for antenatal check- ups and only 44 % women had knowledge of minimum ANC visits.

Regarding Inj. TT during pregnancy, 88% women knew that it is necessary to take Inj. TT during pregnancy but they had no knowledge when and how many times Inj. TT should be taken during pregnancy.

77% women said it is necessary to take Iron and folic acid tablets during pregnancy but only 34 women knew how many Iron and folic acid tablets should be taken during pregnancy. Regarding diet women's knowledge was poor. 51% women were not aware that, pregnant women need to take extra food as compared with non-pregnant state. Only 24 women had

knowledge of hours of sleep or rest, a pregnant woman should take during pregnancy. 83% women said hospital is the ideal place to deliver the baby and only 31% women were aware about the financial assistance provided in Janani Suraksha Yojana. But all women were aware that smoking and alcohol are harmful for the foetus.

As shown in Table No 3, in this study, all of the respondents were aware

about common danger signals during pregnancy like Pain abdomen, severe bleeding during pregnancy and reduced foetal movements followed by leakage per vagina (97%), Palpitations, easy fatigability and breathlessness at rest (63%), excessive vomiting (42%), fever >24 hours (38%), (11%) women were aware of headache. Only 3% women were aware of blurring of vision.

**Table 2: Awareness response of antenatal care services among pregnant mothers**

Antenatal Services	Yes / Correct	No / Incorrect	Don't Know
Need for ANC check up	100	-	0
ANC check up even if no complication	50	50	0
Minimum ANC visits	-	44	37
Need for Inj. TT	88	-	0
Schedule of Inj. TT	41	32	27
Need for Iron and folic acid tablets	77	08	15
No. of Iron and folic acid tablets	34	28	38
Smoking / alcohol are harmful to foetus	100	0	0
Extra food intake during pregnancy	49	46	05
Sleep during pregnancy	-	24	74
Hospital is ideal place for delivery	83	17	0
Financial assistance from JSY	31	0	69

**Table No.3: Awareness response regarding danger signs during pregnancy**

Danger signals during pregnancy	Yes	No
a) Severe bleeding during pregnancy	100	0
b) Pain abdomen	100	0
c) Swelling of face and hands	39	61
d) Reduced foetal movements	100	0
e) Leakage per vagina	97	03
f) Headache	11	89
g) Blurring of vision	03	97
h) Excessive vomiting	42	58
i) Fever > 24 hours	38	62
j) Palpitations, easy fatigability and breathlessness at rest	63	37

## DISCUSSION

Our study found that all the respondents were aware that every pregnant mother needs to go for antenatal check-ups but about 56 % were not aware about minimum ANC visits and 50% were not aware that even if there is no complication during pregnancy is it required to go for antenatal check- ups. Similarly in a study conducted by Rajiv et al, [4] the respondents had adequate knowledge about ANC services except for the minimum number of visits for ANC. Also in another study [5] knowledge of ANC was found to be adequate in the study area. However, practices of ANC were found to be unsatisfactory. But in a study conducted by

Adewoye KR et al, [6] there was high level of awareness of antenatal care services. Majority of the respondents had fair/good knowledge of the activities carried out during antenatal care. In a study conducted by Protiva Rani et al [7] it was found that most of the respondents (82.6%) had good awareness on antenatal check-up, good awareness on TT vaccination, diet during pregnancy, weight management and place of delivery was observed among respondents but half of the respondents practiced it.

Maternal tetanus can occur during pregnancy or within 6 weeks after termination of pregnancy. Women are prone to tetanus while giving birth under unhygienic delivery conditions and low TT (tetanus toxoid) immunization. These conditions put their newborn babies at risk for neonatal tetanus (NNT), which is defined as tetanus occurring in the newborn within 28 days after birth. [8] In this study, 88% women knew that it is necessary to take Inj. TT during pregnancy but they had no knowledge when and how many times Inj. TT should be taken during pregnancy. Similarly in a study conducted by Rajiv et al [4] 61.6% had adequate knowledge about the

importance of TT injection during pregnancy. If the mother is not immunized with the correct number of doses of tetanus toxoid vaccine, neither she nor her newborn infant is protected against tetanus at delivery. [9]

In this study, 77% women said it is necessary to take Iron and folic acid tablets during pregnancy but only 34 women knew how many Iron and folic acid tablets should be taken during pregnancy. Similarly in a study conducted by Jalina Laishram et al [5] 96.2% of women reckoned that Iron folic acid necessary during pregnancy but only 34.2% knew correct doses needed. In a study conducted by Aliya Hisam et al [10] Knowledge regarding the need for folic acid in pregnancy was 172 (43%). Practice was also poor as only 172 (43%) were regularly having folic acid rich foods while 205 (51.25%) had received folic acid supplementation during pregnancy.

Regarding diet women's knowledge was poor. 51% women were not aware that, pregnant women need to take extra food as compared with non-pregnant state. Similarly Rajiv et al [4] found that 61.6% had adequate knowledge about the increase in food intake during pregnancy. In this study, only 24 women had knowledge of hours of sleep or rest, a pregnant woman should take during pregnancy. 83% women said hospital is the ideal place to deliver the baby.

In this study, only 31% women were aware about the financial assistance provided in Janani Suraksha Yojana. In a study conducted by Vikram K et al [11] the awareness regarding JSY scheme was 62.3 per cent (292), Similarly in a study conducted by Singh VS [12] more than half of women 58 (52.7%) knew that there exists a programme for pregnant women which aim at safe institutional delivery. In another study [13] most of the respondents in rural area knew the scheme as it gives monetary gain if they opt for institutional delivery (84%). Similarly in a study by Sadhu D et al [14] among 865 beneficiaries, JSY knowledge was seen in 48.2% and utilized by 37.1%.

In this study, All women were aware that smoking and alcohol are harmful for the foetus. Raising awareness of women on danger sign of pregnancy, child birth and the postpartum period is crucial for safe motherhood. Any women can develop life threatening complication at any stage of pregnancy, delivery and postpartum period as can the new born, especially in the first few days post delivery. [15]

Present study revealed that all of the respondents were aware about common danger signals during pregnancy like pain abdomen, severe bleeding during pregnancy and reduced fetal movements followed by leakage per vagina (97%), Palpitations, easy fatigability and breathlessness at rest (63%), excessive vomiting (42%), fever >24 hours (38%), (11%) women were aware of headache. Only 3 % women were aware of blurring of vision. In a study conducted by Elayarani et al [16] among the danger signals in pregnancy, pain in abdomen was most commonly perceived (27.8%) followed by bleeding (21%), pedal edema(13.6%), convulsions (10.5%) and fever (8.6%). Only 2.5% women were aware of rupture of membranes and no one perceived pallor as a danger signal. Sixteen percent were not aware of any single danger sign.

Darj E et al [17] reported that half of women knew at least one obstetric danger sign. The percentage of women who knew at least one danger sign during pregnancy was 26%, during delivery 23% and after delivery 40%. Few women knew three or more danger signs. so the study concluded that women had low awareness of danger signs of obstetric complications. Result of the study done by Gomati et al [18] revealed that antenatal mothers had average knowledge about warning signs of pregnancy, labour and puerperium. Similar results were also observed by other researchers. [19-21]

## CONCLUSION

The results revealed that the respondents had adequate knowledge regarding antenatal services, but they had no

knowledge of details of it. Emphasis has to be laid on increasing awareness among mothers about the danger signals during pregnancy and antenatal care services so that complications can be detected at early stage to avoid mortality among mothers. There is a need to improve the awareness about the utilization of JSY scheme also. Health staff, Anganwadi workers and ASHA should be encouraged as they are the main persons in creating awareness among mothers.

#### ACKNOWLEDGEMENT

We acknowledge the services provided by ANMs, Anganwadi workers for their assistance and help during the study. We would also like to thank the mothers who participated in the study.

#### REFERENCES

1. Suryakanta AH. Community Medicine with recent advances. 3<sup>rd</sup> edition. Jaypee brothers medical publishers (p) Ltd. 2014.
2. Park K. Textbook of preventive and social medicine. 23<sup>rd</sup> ed. Jabalpur: Banarasidas Bhanot Publishers; 2015.
3. Manna P K, De D, Ghosh D. Knowledge, attitude and practices for antenatal care and delivery of the mothers of tea gardens in Jalpaiguri and Darjeeling districts, West Bengal. National journal of Community Medicine, 2011; 2(1):4-8, 2011.
4. Gupta RK, Shora TN, Verma AK, Jan R. Knowledge regarding antenatal care services, its utilization, and delivery practices in mothers (aged 15-49 years) in a rural area of North India. Trop J Med Res 2015; 18:89-94.
5. Jalina Laishram, Usha Devi Thounaojam, Jina Panmei, Salona Mukhia, H. Sanayaima Devi, Knowledge and Practice of Ante-natal Care in an Urban Area. Indian Medical Gazette. March 2013; p 101-106.
6. Adewoye KR, Musa IO, Atoyebi O A, Babatunde OA. Knowledge and utilization of Antenatal care services by women of child bearing age in Ilorin-East local government area, North central Nigeria. International journal of science and technology. March 2013; vol 3 (3):188-193.
7. Sarker P R, Haque Md M. Awareness and Practices on Diet, Weight Management and Antenatal Care among Rural Pregnant Women. Nutrition and food science Int. Jour August 2015. Vol 1(1): 555551.
8. Zeb A; Zaidi SA; Jehan I. Knowledge, attitude and practices of reproductive age females about tetanus toxoid vaccine: a pilot study. Journal of the college of physicians and surgeons, Pakistan. 2006 DEC; 16(12):791-793.
9. [http://www.who.int/reproductivehealth/publications/maternal\\_perinatal\\_health/immunization\\_tetanus.pdf](http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/immunization_tetanus.pdf) on 9/02/16 at 12.35pm
10. Aliya Hisam, Mahmood Ur Rahman, and Syed Fawad Mashhadi. Knowledge, attitude and practice regarding folic acid deficiency; A hidden hunger. Pak J Med Sci. May-June 2014; 30(3): 583-588.
11. Vikram K., A.K. Sharma & A.T. Kannan. Beneficiary level factors influencing Janani Suraksha Yojana utilization in urban slum population of trans-Yamuna area of Delhi. Indian J Med Res. September 2013; vol 138 (3): 340-346.
12. Singh VS, Chavan SS, Giri PA, Suryavanshi SR. Study on awareness and knowledge regarding Janani Suraksha Yojana (JSY) among ANC registered women in a primary health centre of tribal area of Thane District of Maharashtra. Int. J Res Med Sci. 2014; 2(1):122-126.
13. Singh Prattyush; Khobragade Megha; Kumar Anil. A study on awareness about Janani Suraksha Yojana (JSY) among rural married females. MRIMS Journal of Health Sciences, January-June 2014. Vol 2(1):40-41.
14. Sadhu D; Gandhi NK; Soni GP. Knowledge and utilization of Janani Suraksha Yojana: an epidemiological study. Indian Journal of Maternal and Child Health. January-March 2012; 14(1):7.
15. Amad A. Knowledge and Attitudes of Married Women on Maternal and Newborn Health. Journal of American science. October 2006; 84(10):15-7.

16. Elayarani Elavarasan, Manasi S.Padhyegurjar, Shekhar B. Padhyegurjar. Cross sectional study of knowledge and awareness among MCH beneficiaries about antenatal and infant care in rural TamilNadu, India. Asian Journal of Medical Sciences. Jan-Feb 2016, Vol 7(1):59-64.
17. Darj E, Nystrom L. Women's awareness of danger signs of obstetric complication in rural Tanzania. Journal of Biomed Central Pregnancy and Childbirth. March 2009; 9(1): p.12-4.
18. Mahalingam G, Mahalingam V. Mothers knowledge of warning signs of pregnancy, labour and puerperium. International Journal Medical Sciences Public Health. 2014; 3(6):720-722.
19. AA, Royis DA, Abaker A, Adam. Awareness of danger signs and nutritional education among pregnant women. Sudanese Journal of Public Health. October 2010; 5(4): 179-81.
20. Kuo CY. Community awareness of maternal and prenatal danger signs. Journal of American Science. 2006 January 6; 4(2): 81-6.
21. Hasan J, Nisar N. Women's perceptions regarding obstetric complication and Care. Journal of Pakistan Medical Association. April 2002; 52(4):148-52.

How to cite this article: Ade A, Sujatha N. Awareness of antenatal care services and danger signals during pregnancy. Int J Health Sci Res. 2016; 6(7):1-6.

\*\*\*\*\*

**International Journal of Health Sciences & Research (IJHSR)**

**Publish your work in this journal**

The International Journal of Health Sciences & Research is a multidisciplinary indexed open access double-blind peer-reviewed international journal that publishes original research articles from all areas of health sciences and allied branches. This monthly journal is characterised by rapid publication of reviews, original research and case reports across all the fields of health sciences. The details of journal are available on its official website ([www.ijhsr.org](http://www.ijhsr.org)).

Submit your manuscript by email: [editor.ijhsr@gmail.com](mailto:editor.ijhsr@gmail.com) OR [editor.ijhsr@yahoo.com](mailto:editor.ijhsr@yahoo.com)