

**ORIGINAL RESEARCH**

# Knowledge, Attitude and Practices among pregnant women about antenatal care, danger signs during pregnancy and adopting family planning method

<sup>1</sup>Saima Sadiq, <sup>2</sup>Shagufta<sup>1</sup>Lecturer, <sup>2</sup>Senior Resident, Department of Obstetrics and Gynaecology, SMGS Hospital, GMC, Jammu, Jammu and Kashmir, India**Corresponding Author**

Dr. Shagufta

Senior Resident, Department of Obstetrics and Gynaecology, SMGS Hospital, GMC, Jammu, Jammu and Kashmir, India

Received: 27 September, 2023

Accepted: 31 October, 2023

**ABSTRACT**

**Background:** Pregnancy is accepted as a normal aspect of a woman's life. Antenatal Care is the care given to Pregnant women. The Primary aim of antenatal care is to achieve healthy mother and healthy baby. The present study was conducted to assess knowledge, attitude and practices for antenatal care, and family planning among pregnant women. **Aims and objectives:** The aim of the study was to assess the knowledge, attitude and practice towards antenatal care, danger signs of pregnancy and family planning among pregnant women. **Materials & Methods:** This cross-sectional study was conducted between December 2022 to March 2023 at SMGS Hospital, GMC Jammu, J&K. Institution ethical clearance (IEC/GMC/2022/1248) has been taken before the commencement of study. 480 pregnant women attending antenatal OPD were studied. A predesigned, pretested questionnaire was used to assess the knowledge attitude and practice for antenatal care, danger sign during pregnancy and method of adopting family planning method after marriage and present pregnancy. **Results:** The age group <20 years had 135, 20-25 years had 240 and >25 years had 105 subjects. 265 were housewives and 215 were others. Regarding Knowledge on minimum five antenatal check-ups throughout pregnancy, correct response was given by 84% and incorrect by 16%, regarding urine and blood test during pregnancy by 90% and 10%, regarding doses of injection TT should be given to pregnant mother by 73% and 27%, regarding intake of non-prescription medicines by 89% and 11%, regarding iron and folic acid tablets given to pregnant women by 85% and 15% and regarding contraceptive methods by 70 % and 30% respectively. The difference was significant (P< 0.05). Attitude Regarding blood pressure should be checked regularly, those who agreed, disagreed and can't say were 90%, 6% and 4% respectively, change dietary habit as advised by doctor were 90%, 8% and 2%, hospital delivery is better than home delivery by 86%, 21% and 3%, supplementation of iron and folic acid are good for the mother and foetus by 89%, 0% and 11%, necessary to know about which family planning method to adopt after marriage by 70%, 25% and 5% and screening of blood for infections should be carried out during antenatal check-up by 72%, 18% and 10% respectively. The difference was significant (P< 0.05). **Conclusion: Majority of Pregnant Women in our study had the average knowledge and good practices. Most of them had a positive attitude towards antenatal care. Women should be motivated to utilise maternal care services which are freely available in all government set ups.**

**Key words:** Pregnancy, family planning, antenatal check-ups

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution- Non Commercial- Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**INTRODUCTION**

Pregnancy is accepted as a normal aspect of a woman's life. It causes series of both physiological and psychological changes in the body of expecting mothers. Still, about 40% of pregnancies are considered high risk, meaning that there is a chance of negative outcomes for both the mother and the fetus.<sup>1</sup>Pregnancy may be accompanied by serious problems and complications which may be life

threatening to the mother and the fetus. Pregnancy complications are the major health problems in developing countries. Pregnant women should receive special care and attention from the health care system. The Health of the mother affects the overall health, growth and development of the baby. Antenatal care helps to reduce both maternal and infant morbidity and mortality rates. Kap study reveals what people know, how they feel and how they act. Appropriate

health care helps in early detection, treatment and prevention of complications. Risk approach, also referred to as screening for high-risk illnesses during pregnancy, is an essential managerial tool that forms part of prenatal primary health care. In order to prevent obstetric difficulties, this risk method entails early diagnosis of high-risk pregnancies<sup>2</sup>

The risk method also involves early detection of 'danger signs' such as vaginal bleeding, premature membrane rupture, convulsions, leg swelling, pregnancy headaches, decreased fetal movement and fever.

Maternal health services play an important role in the improvement of reproductive health. The main objective of ANC is to assure that every pregnancy ends in the delivery of a healthy baby without harming the health of the mother.<sup>3</sup> Antenatal care service is an important goal concerning in the health status of the pregnant women during their reproductive period and its health beneficial accounting for nearly one quarter of all pregnant worldwide. The three main elements that contribute to achieving family planning are knowledge, attitude, and practices and the disproportion between any of these elements affect family planning outcome.<sup>4</sup>

Barriers that limit access to quality maternal health services must be identified and addressed at all levels of the health system to improve the maternal health.<sup>5</sup> The present study was conducted to assess knowledge, attitude and practices for antenatal care, danger signs during pregnancy and family planning among pregnant women.

## MATERIALS & METHODS

The study was conducted between December 2022 to March 2023 at GMC Jammu, J&K. Institution ethical clearance (IEC/ GMC/2022/1248) has been taken before the commencement of study. The present study consisted of 480 pregnant women attending antenatal OPD. All gave their written consent to participate in the study.

Data such as name, age, etc. was recorded. A thorough physical examination was carried out. A predesigned, pretested questionnaire was used to assess the knowledge attitude and practice for antenatal care, danger signs during pregnancy and method of adopting family planning method after marriage and present pregnancy. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

## RESULTS

**Table I: Baseline characteristics**

Parameters	Variables	Number	P value
Age group (years)	<20	135	0.87
	20-25	240	
	>25	105	
Occupation	Housewife	265	0.91
	Others	215	
Residence	Rural	320	0.56
	Urban	160	
No. of Pregnancy	1 <sup>st</sup>	126	0.65
	2 <sup>nd</sup>	206	
	3 <sup>rd</sup>	104	
	4 <sup>th</sup> or more	44	

Table I shows that the age group <20 years had 135, 20-25 years had 240 and >25 years had 105 subjects. 265 were housewives and 215 were others. The difference was non-significant (P> 0.05). 320 women belongs to rural areas and 160 belongs to urban areas.

**Table II: A Knowledge about antenatal care and contraception**

Knowledge	Correct	Incorrect	P value
Registration of pregnancy	88%	12%	0.01
Minimum five antenatal check-ups throughout pregnancy	84%	16%	0.01
Urine and blood test before pregnancy	90%	10%	0.01
Doses of injection TT should be given to pregnant mother	95%	5%	0.001
Intake of non-prescription medicines	89%	11%	0.04
Iron and folic acid tablets given to pregnant women	85%	15%	0.05
Contraceptive methods	70%	30%	0.025

Table II – A- showed that regarding minimum five antenatal check-ups throughout pregnancy correct response was given by 84% and incorrect by 16%, urine and blood test before pregnancy by 90% and 10%, doses of

injection TT should be given to pregnant mother by 95% and 5%, intake of non- prescription medicines by 89% and 11%, iron and folic acid tablets given to pregnant women by 85% and 15% and contraceptive methods by 70% and 30% respectively. The difference was significant ( $P < 0.05$ ).

**Table II B: Knowledge about Danger Signs in Pregnancy**

Knowledge	Aware	Not aware	p Value
Swelling of Hands and Feet	302 (62.91%)	178(37.09%)	0.025
Giddiness and Weakness	350(72.91%)	130(27.09%)	0.045
Weak or absent Movements of Baby	454(94.58%)	26(5.42%)	0.01
Abdominal Pain	464(96.66%)	16(3.34%)	0.020
Excessive Vomiting	336(70.0%)	144(30%)	0.015
Vaginal Bleeding and Discharge	380(79.16%)	100(20.84%)	0.025
What is to be done in case of danger signs	271(56.46%)	109(46.46%)	0.045

Table II – B- showed 62.91% individuals were aware of swelling of hands and feet, 72.91% were aware of giddiness and weakness, 94.58% were aware of weak or absent movements of baby, 96.66% aware about abdominal pain, 70% about excessive vomiting, 79.16% about vaginal bleeding and discharge where 56.46% were aware of what is to be done in case of danger signs. The difference was significant ( $P < 0.05$ ).

**Table III: Attitude about antenatal care**

Attitude	Agree	Disagree	Can't say	p value
Antenatal check up is necessary for mother and baby health	96%	0%	4%	0.02
Blood pressure should be checked regularly	90%	6%	4%	0.01
change dietary habit as advised by doctor	90%	8%	2%	0.01
Hospital delivery is better than home delivery	86%	11%	3%	0.02
Pregnant Women should know about danger signs of pregnancy	89%	9%	2%	0.046
Supplementation of iron and folic acid are good for the mother and foetus	89%	0%	11%	0.04
Necessary to know about which family planning method to adopt after marriage	70%	25%	5%	0.02
Screening of blood for infections should be carried out during antenatal check-up	72%	18%	10%	0.01

Table III shows that antenatal checkup is necessary for for mother and baby health those were agree,disagree and can't say we're 96%,0% and 4% respectively,regarding blood pressure should be checked regularly, those were agree, disagree and can't say were 90%, 6% and 4% respectively, change dietary habit as advised by doctorwere 90%, 8% and 2%, hospital delivery is better than home delivery by 86%, 11% and 3%,89% of women know about danger signs of pregnancy,supplementation of iron and folic acid are good for the mother and foetus by 89%, 0% and 11%, necessary to know about which family planning method to adopt after marriage by 70%, 25% and 5% and screening of blood for infections should be carried out during antenatal check-up by 72%, 18% and 10% respectively. The difference was significant ( $P < 0.05$ ).

**Table IV: Practice about antenatal care**

Practice	Yes	No	Can't say	P value
Registered during first trimester	88%	5%	7%	0.02
Regular in your antenatal visits for check-up	90%	6%	4%	0.04
Taken tetanus toxoid injection	98%	2%	0%	0.012
Taken iron folic acid supplements	72%	26%	2%	0.045
Faced danger signs in previous pregnancy	36%	64%	1%	0.022
Use of any contraceptive methods	65%	30%	5%	0.025

Table IV shows that 88% were registered during first trimester, 5% not and 7% can't say. 90% were regular in antenatal visits for check-up, 6% were not and 4% can't say. Tetanus toxoid injections were taken by 98%,iron and folic acid supplements we're taken by 72% of women,about 36% of women faced danger signs in previous pregnancy.65% used one of the contraceptive methods, 30% not and 5% can't say.

## DISCUSSION

Understanding knowledge and practices of the community regarding care during pregnancy and delivery are required for the program implementation. Danger signs of pregnancies are a warning signs that women encounter during pregnancy, child birth and postpartum.<sup>6</sup> Awareness of the danger signs of obstetric complications is the essential first step in accepting appropriate and timely referral to obstetric and newborn care.<sup>7</sup> Raising awareness of women on danger signs of pregnancy, childbirth and the postpartum period improve mother's attitude to seek medical care and is crucial for safe motherhood.<sup>8,9</sup>

We found that the age group <20 years had 135, 20-25 years had 240 and >25 years had 105 subjects. 265 were housewives and 215 were others. Regarding minimum five antenatal check-ups throughout pregnancy correct response was given by 84% and incorrect by 16%, urine and blood test during pregnancy by 90% and 10%, doses of injection TT should be given to pregnant mother by 95% and 5%, intake of non-prescription medicines by 89% and 11%, iron, and folic acid tablets given to pregnant women by 85% and 15% and contraceptive methods by 70% and 30% respectively. Haleema et al<sup>10</sup> in their study a total of 170 pregnant women were included. The mean age of the study participants was found to be 26.40 ± 4.14 years. Nearly 67.10% were aware of bleeding per vagina being a danger sign, 50.0% stated excessive vomiting as a danger sign, 23.50% knew that blurring of vision was a danger, while a mere 20.0% reported that convulsions were a danger sign. Overall, adequate knowledge (total knowledge score of 5 and above) was observed in 54.70% of the participants.

We observed that attitude regarding blood pressure should be checked regularly, those agreed, disagreed, and can't say were 90%, 6%, and 4% respectively, changing dietary habits as advised by the doctor were 90%, 8%, and 2%, hospital delivery is better than home delivery by 86%, 21%, and 3%, supplementation of iron and folic acid are good for the mother and fetus by 89%, 0%, and 11%, necessary to know about which family planning method to adopt after marriage by 70%, 20%, and 5% and screening of blood for infections should be carried out during antenatal check-up by 72%, 18%, and 10% respectively. John et al<sup>11</sup> in their study found that the knowledge and attitude of the participants towards antenatal care, danger signs of pregnancy and adopting family planning methods was adequate in the study population. The total score of knowledge was 80%, positive attitude was 91% and practice was 77%. The participants also had knowledge regarding pregnancy danger signs. Nearly 92% were aware of bleeding per vagina being a danger sign, 85% stated weak or no movement of baby as a danger sign, 75% knew that pain in abdomen was a danger, 68% knew excessive vomiting as a danger sign while a mere 41% reported that convulsions were a danger sign.

Patel et al<sup>12</sup> aimed to determine the level of knowledge, attitude, and practice on ANC among pregnant women. The study reveals that about 58% women had adequate knowledge regarding ANC. It was found that almost all the variables such as age, education, occupation, parity, type of family, and socioeconomic status (SES) had a significant association with awareness about ANC. 100% women were having a positive attitude toward ANC. Around 70%, women were practicing adequately, and variables such as education and SES had a significant association with practices about ANC.

The limitation of the study is the small sample size.

## CONCLUSION

Majority of Pregnant Women in our study had the average knowledge and good practices. Most of them had a positive attitude towards antenatal care. Women should be motivated to utilise maternal care services which are freely available in all government set ups.

## REFERENCES

1. Prachi R, Das GS, Ankur B, Shipra J, Binita K. A study of knowledge, attitude and practice of family planning among the women of reproductive age group in Sikkim. *J ObstetGynecol India*. 2008;58(1):63-7.
2. Eram U, Anees A, Tamanna Z. Knowledge regarding antenatal care services in mothers (15-49 years) in rural areas of Aligarh. *Int J Sci Stud*. 2016;4(9):67-70.
3. Akhtar S, Hussain M, Majeed I, Afzal M. Knowledge attitude and practice regarding antenatal care among pregnant women in rural area of Lahore. *Int J Soc Sci Manag*. 2018;5(3):155-62.
4. Sangal P, Srivastava R, Singh AK, Srivastava DK, Meera, Khan H. Knowledge and practices regarding obstetric danger signs in women attending ante-natal care clinic at BRD medical college, Gorakhpur. *Indian J Prev Soc Med*. 2012;43:11-8.
5. Teng S, Zuo T, Jummaat F, Keng S. Knowledge of pregnancy danger signs and associated factors among Malaysian mothers. *Br J Midwifery*. 2015;23:800-6.
6. Hailu D, Berhe H. Knowledge about obstetric danger signs and associated factors among mothers in Tsegedie District, Tigray Region, Ethiopia 2013: Community based cross-sectional study. *PLoS One*. 2014;9:e83459.
7. Abdurashid N, Ishaq N, Ayele K, Ashenafi N. Level of awareness on danger signs during pregnancy and associated factors, among pregnant mothers, Dire Dawa administrative public health facilities, Eastern Ethiopia. *Clinics in Mother and Child Health*. 2018;15:290.
8. Lilungulu AG, Matovelo D, Gesase A. Reported knowledge, attitude and practice of antenatal care services among women in Dodoma Municipal, Tanzania. *J PediatrNeonat Care*. 2016;4(1):00125.
9. Pruthi N, Bacchani S, Singh V. Knowledge, attitude and practice regarding antenatal care among husbands attending antenatal clinic in a tertiary care hospital. *Int J Community Med Public Health*. 2016;3:1741-4.
10. Haleema M, Raghuvveer P, Kiran R, Mohammed IM, Mohammed IS, Mohammed M. Assessment of knowledge of obstetric danger signs among pregnant

- women attending a teaching hospital. *Journal of family medicine and primary care*. 2019 Apr;8(4):1422.
11. John NN, George A. Knowledge, attitude and practices for antenatal care, danger signs of pregnancy and family planning among pregnant women in a rural area of Kerala, India. *Int J Community Med Public Health* 2021;8:201-6.
  12. Patel BB, Gurmeet P, Sinalkar DR, Pandya KH, Mahen A, Singh N. A study on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Pune, Maharashtra. *Med J DY Patil Univ*. 2016;9:354-62.