

A study on knowledge, attitude and practices regarding adherence to antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Jaipur, Rajasthan

¹Dr Ankita Jakhar, Department of Obstetrics and Gynaecology, SMS Medical College, Jaipur, Rajasthan, India.

²Dr Anita Simlot, Department of Obstetrics and Gynaecology, SMS Medical College, Jaipur, Rajasthan, India.

³Dr Ramesh Chandra, Department of Obstetrics and Gynaecology, SMS Medical College, Jaipur, Rajasthan, India.

Corresponding Author: Dr Ankita Jakhar, Department of Obstetrics and Gynaecology, SMS Medical College, Jaipur, Rajasthan, India.

Citation this Article: Dr Ankita Jakhar, Dr Anita Simlot, Dr Ramesh Chandra, “A study on knowledge, attitude and practices regarding adherence to antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Jaipur, Rajasthan”, IJMSIR- January - 2022, Vol – 7, Issue - 1, P. No. 385 – 390.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Background: Indian Medical health status was noted to be lower as compared to other developed countries. The Family Welfare Programme of the Government of India aims to promote maternal and child health. For sustainable development of the country, there is a need to improve the Maternal and Child Healthcare in the country. Safe motherhood by providing good antenatal care is very important to reduce adverse maternal and fetal outcomes.

Objective: To determine the knowledge, attitude and practice regarding adherence to antenatal care among pregnant women attending the antenatal clinic at a Tertiary Care Hospital in Jaipur and their association with various sociodemographic factors.

Materials and methods: A cross sectional study was carried out among 100 pregnant women attending the antenatal clinic in a Tertiary Care Hospital of Jaipur, Rajasthan. Pretested questionnaire was used to collect data by interview after obtaining informed consent. Statistical analysis was then performed.

Results: Study revealed that around 61% women had adequate knowledge regarding adherence to antenatal care. Socioeconomic factor and education had a major impact on awareness about the antenatal care and its adherence. Around 100% women had a positive attitude towards antenatal clinics and 68% women were practicing adequately.

Conclusion: The findings of this study can help us to introspect and find the lacunae existing in current maternal and child health policies and plan a Health Intervention Program aiming to improve the maternal health status and thereby reducing the maternal and infant morbidity and mortality.

Keywords: Antenatal care, maternal health, knowledge, attitude, practice.

Introduction

Safe Motherhood Initiatives is a world-wide effort. It was launched by the World Health Organization in 1987 which aimed to reduce the number of deaths associated with pregnancy and childbirth.[1] Appropriate antenatal care is one of the pillars of this initiative. It highlights the

care of antenatal mothers as an important element in maternal healthcare as appropriate healthcare will lead to successful pregnancy outcome and healthy babies. Improving maternal health is one of the eight-millennium development goals (MDGs).[2] Under MDG5, countries committed to reducing maternal mortality by three-quarters between 1990 and 2015. Since 1990, maternal deaths worldwide have dropped by 47%. [3] Improving the maternal and child health and their survival are central to the achievement of national health goals under the National Health Mission (NHM). Sustainable Development Goal 3 also includes the focus on reducing maternal, newborn and child mortality. The Ministry of Health & Family Welfare launched Reproductive, Maternal, Newborn Child plus Adolescent Health (RMNCH+A) in 2013. It essentially aims to address the major causes of mortality and morbidity among women and children. This framework also helps to understand the delays in accessing and utilizing health care services. The current status of Maternal Mortality Ratio (according to SRS 2015-2017) is 122. The National Health Policy target is to reduce this to 100 by 2020 and Sustainable Development Goal targets to reduce this to <70 by the year 2030.[4].

According to National Family Health Survey 4, the mothers who had antenatal check up in the first trimester accounts to only 58.6%, the pregnant women who had at least 4 antenatal visits were only 51.2% and the pregnant women who had full antenatal care were only 21%. [5] There are various factors determining the utilization of antenatal services among pregnant women. This study aimed to identify these factors so that they can be addressed accordingly to improve the utilization and accessibility of antenatal care services among pregnant women.

Materials and Methods

A cross-sectional hospital-based study was conducted to assess the knowledge, attitude, and practices regarding antenatal care among pregnant women attending the antenatal clinic in a Tertiary Hospital of Jaipur in November 2019. The study was carried out among 100 pregnant women at SMS Medical College, Jaipur. Data was collected by interviewing pregnant women after obtaining written and informed consent. Knowledge was assessed about antenatal care visits, tetanus immunization, investigations, and nutritional factors, knowledge about the danger signs of pregnancy, contraception and personal habits. Each parameter was awarded 1 mark for the correct answer and 0 mark if the answer was wrong. Thus, total marks for questions related to knowledge were 44. Those who scored 70% and above were considered as having adequate knowledge, and those who scored below 70% were considered as having inadequate knowledge.

To assess attitude the following variables were used - an opinion on the place of delivery, the effect of smoking on mother and fetus and the effects of alcohol on health of mother and fetus, Antenatal care registration, visits, motivation, investigations, dietary changes, and iron and folic acid intake and its regularity in the intake, drug intake, medical problems and the use of contraception. Each attitude questionnaire was scaled using 5-point Likert scale. Total score for questions related to attitude were carrying 75 marks. Those who scored 70% and above were considered as having a good attitude toward antenatal care.

Questions were asked to assess the practices with regards to antenatal care visit, dietary changes made during pregnancy, Iron Folic Acid tablets taken. Questions related to smoking, alcohol, self-medication were noted.

Tetanus immunization during pregnancy and practice with regard to use of contraception was also noted. Each parameter was awarded 1 mark for good practice and 0 marks if the practice was not found appropriate. Thus, total marks for questions related to practices were 21. The marks were distributed as follows – for the number of visits to antenatal care – if <3 visits = 0, for 3-5 visits =1 and for >5 visits =2. For Iron and Folic Acid tablet consumption – if 0-49 =1, for 51-99=2, for 100-149=3, for 150-200=4, and for >200 =5. Those who scored 70% and above were considered as practicing adequately and those who scored below 70% were considered inadequate practices with regard to antenatal care.

Demographic characteristics namely parity, type of family, age, education and occupation, and socioeconomic status were selected for studying association with knowledge and practices regarding antenatal Care. For making the study easy, age is categorized into two categories – (i) age <20 years and (ii) age \geq 20 years. Family was also divided into two categories namely joint family and nuclear family. Education was categorized divided into those below 10th standard and those more than 10th standard. Occupation was divided as those who were unemployed and those who were employed. Study participants were also

divided on the basis of their socioeconomic status into two categories; 1st included the middle and upper class and 2nd category included the lower socioeconomic class of Kuppuswamy Scale.[6]

Results

In our study, 90 women were \geq 20 years and only 10 were <20 years. 42 women were primigravida and 58 women were multigravida. 41 women had high school education while 59 women were educated only upto 10th standard. Only 33 women were working while 67 were homemakers. 54 women belonged to lower socioeconomic class and 46 women belonged to upper and middle socioeconomic class. 64 women had joint families and 34 had nuclear families.

Out of 100 study participants 61% had adequate knowledge about overall antenatal care, 100% had adequate attitude towards antenatal care and 68% followed adequate practices.

Table 1

Score (%)	Knowledge	Attitude	Practice
Adequate (>70%)	61	100	68
Inadequate (<70%)	39	0	32
Total	100	100	100

Table 2: Association of overall knowledge regarding antenatal with sociodemographic factors

Sociodemographic variables			Knowledge		P value X ²
Factor	Category	N	Adequate	Inadequate	
Age(years)	>20	90	51(56.6%)	39	.839925(not significant) 0.0181
	<20	10	6(60%)	4	
Family	Joint	64	35(54.6%)	29	.822329(not significant) 0.0504
	Others	34	16(47%)	18	
Parity	Multi	58	32(55.1%)	26	.5921(not significant) 0.2871
	Primi	42	22(52.3%)	20	
Education	>10 th	41	34(82.9%)	7	.000179(significant) 12.5252
	<10 th	59	27(45.7%)	32	
Occupation	Working	33	19(57.5%)	14	.355918(not significant) 0.5048
	Non-working	67	32(47.7%)	35	
Socioeconomic status	Middle and Upper	46	36(78.2%)	10	.00109(significant) 9.367
	Lower	54	25(46.2%)	29	

There was a significant association found between education (p value <0.05) and socioeconomic status (p value < 0.05) with overall knowledge about antenatal care. There was no significant relation found between type of family, age, parity and occupation. 56.6% who were above 20 years of age had adequate knowledge, 54.6% who belonged to a joint family had good knowledge, and working women (57.7%) had more knowledge as compared to non-working (47.7%) women. Table 3: Association between knowledge and practice about Antenatal care.

Knowledge	Practice		Total
	Adequate	Inadequate	
Adequate	50	11	61
Inadequate	18	21	39
Total	68	32	Grand total =100

Table 3 shows that 50 of those subjects who had adequate knowledge about antenatal care also practiced it adequately, while 11 among them did not practice antenatal care adequately. The association between adequate knowledge and practice also comes out to be significant (p value <0.05, chi square =12.425)

Discussion

Our study showed that statistically significant association (p value <0.05) was found between education and knowledge about antenatal care. 82.9% of women who were educated upto 10th grade or more had adequate knowledge (p value = 0.000179). Similar result was also seen in a study conducted by Agarwal et al. in 2007 in which they found that Antenatal care received was significantly lower among illiterate women.^[7] A study conducted by Patel et al. in 2016 also showed significant association between education and knowledge about antenatal care.^[2]

Statistically significant association was also found between socioeconomic status and knowledge regarding antenatal care. 78.2% of the women belonging to the middle and upper socioeconomic status had adequate knowledge regarding antenatal care (p value = 0.00109). Similar result was found in a study by Patel et al.^[2]

Our study found no significant association between age and parity. 56.5% of women who belonged to the age group of > 20 years had adequate knowledge regarding antenatal care (p value = 0.839925) and 60% of those women who were < 20 years of age had adequate knowledge regarding antenatal care (p value = 0.0181). But a study conducted by Sanjel et al. in 2011 in Tamang showed a significant association between age and parity with knowledge regarding antenatal care.^[8] The study conducted by Patel et al.^[2] also showed significant association between age and knowledge about antenatal care.

Patel et al. in 2016^[2] in their study also found a significant association between working women and ANC care knowledge. However, in our study the results were not statistically significant. 57.5% of women who had some occupation had adequate knowledge regarding antenatal care (p value = 0.355918) and 47.7% with some occupation had adequate knowledge (p value = 0.5048)

Limitations of the Study

There are a few limitations to the study as the findings of the study can only be extrapolated on urban women who are attending antenatal services, and there is also a possibility of a recall bias among the women. Different findings might be seen if the study is conducted among the other places due to different cultural practices, norms and belief. However, this study may act as a preliminary survey due to the scarcity of published data regarding the antenatal care.

Figure 1: Source of knowledge regarding antenatal care.

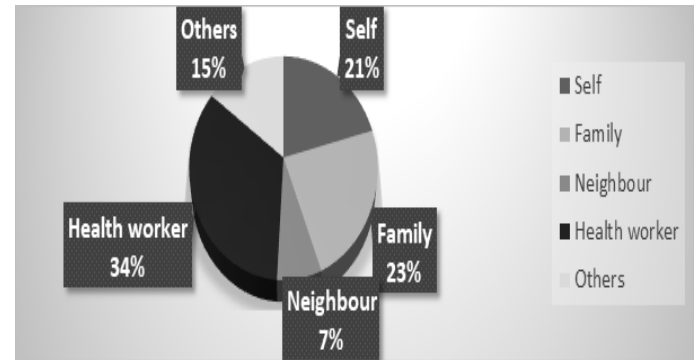
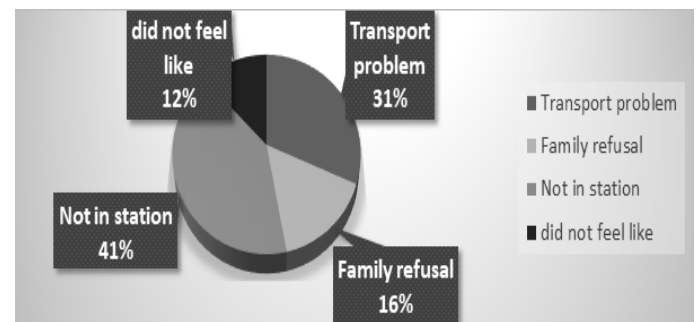


Figure 2: Reasons for not attending regular antenatal



Conclusion

There is still a higher proportion of women (39%) who has inadequate knowledge and almost one third of the participants had poor antenatal practices. The knowledge of antenatal care among study participants was still poor especially regarding the importance of early antenatal check-up, health screening, complications related to diabetes and hypertension in pregnancy and danger signs of pregnancy. Thereby, with the findings of this study the already existing lacunae can be eliminated by planning a health intervention programme or scheme to further increase the utilization of Antenatal care among pregnant women.

Recommendations

1. Extensive educational program for increasing awareness of women on the danger signs of pregnancy and the importance of early antenatal care utilization.
2. Mass media program to raise family acceptance to early antenatal care.

3. Accessibility of the health care services at each village will facilitate the early antenatal booking.

References

1. World Bank. Safe Motherhood – A Review. The Safe Motherhood Initiatives, 1987-2005 World Bank Report. New York: Family Care International; 2007.
2. 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.
3. United Nations. The Millennium Development Goals Report 2011. New York: United Nations; 2011.
4. RMNCH+A :: National Health Mission. Available from:
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=794&lid=168>
5. International Institute of Population Sciences, National Family Health Survey (NFHS -4) 2015-16 India.
Available from: <http://rchiips.org/hfhs/pdf/NFHS4/India.pdf>
6. Saleem SM, Jan SS.. Modified Kuppuswamy socioeconomic scale updated for the year 2021. *Indian J Forensic and Community Medicine* 2021;8(1): 1-3.
7. Agarwal P, Singh MM, Garg S. Maternal health-care utilization among women in an urban slum Delhi. *Indian J Community Med* 2007;32:203-5.
8. Sanjel S, Ghimire RH, Pun K. Antenatal care practices in Tamang community of hilly area in central Nepal. *Kathmandu Univ Med J(KUMJ)* 2011;9:57-61.