



A STUDY OF KNOWLEDGE, ATTITUDE AND PRACTICES OF PREGNANCY BEHAVIOUR AND OBSTETRIC DANGER SIGNS IN PREGNANT WOMEN ATTENDING ANTENATAL CARE

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ABSTRACT

Introduction: Antenatal care is the systematic supervision given to a pregnant woman in order to achieve a healthy mother and baby. An antenatal woman can encounter danger signs such as vaginal bleeding, convulsions, fever, abdominal pain, leaking per vaginam etc. Regular antenatal visits lead to their early detection and management with a reduction in morbidity and mortality. **Aims & Objectives:** To identify knowledge, attitude and practice of pregnant women regarding pregnancy behavior and also to assess their knowledge regarding danger signs of pregnancy. To assess prevalence of antenatal care amongst them. **Methods:** A cross sectional observational study was carried out on 300 pregnant women attending antenatal care at survey sites, under Department of Obstetrics and Gynaecology, N.S.C.B.M.C.H., Jabalpur (M.P.) from 1 March 2021 to 31 August 2022. Pregnant females visiting these sites were asked to fill a well-structured questionnaire and data was analysed thereafter. **Results:** The prevalence of antenatal care was found to be 98%, but WHO recommended minimum 4 ANC visits were only 26.99%. The score for positive attitude, good practice and knowledge were found to be 75.9%, 84.46% and 67.55% respectively. On evaluating the knowledge score for danger signs, it was 40.58% which is reflection of poor awareness among pregnant women. **Conclusion:** Early identification of danger signs, timely referrals and management of complications is needed. A collective approach by healthcare providers, pregnant women and their families will lead to a healthy nation. Awareness regarding antenatal care and danger signs is pivotal in reducing obstetric complications and there is an urgent need to reinforce these practices as an integral part of rural India.

KEYWORDS : danger sign, antenatal care, knowledge, attitude and practices

INTRODUCTION

Antenatal care is the systematic supervision given to a woman during pregnancy in order to achieve healthy obstetrics outcome and baby. WHO recommends ideal 8 and minimum 4 antenatal contacts during period of gestation. The main objective of antenatal care is to assure a healthy mother and a baby.[1]

However, normal pregnancy may be accompanied by some complications which are potentially life threatening to the mother and fetus.[2] Between 2000 and 2020, the maternal mortality ratio declined by around 34% worldwide. The maximum 95% of all maternal deaths occurred in low and lower middle-income countries. The global maternal mortality is still unacceptably high. Almost 800 maternal deaths has been recorded due to preventable pregnancy related causes globally in 2020.[3]

Danger signs of pregnancy are warning signs that women experience during pregnancy, such as: bleeding per vaginam, high grade fever, abdominal pain, headache, blurring of vision, decreased perception of fetal movements, gush of fluid from vagina, burning micturition, edema, etc.

Women need to be educated regarding danger signs leading to obstetric complications during pregnancy.[4] Pre conceptional counselling is a must. For enhancing the utilization of skilled birth care during low-risk births and emergency obstetric care in complicated cases in low income countries, knowledge of obstetric danger signs is a major strategy.[5,6] Maternal deaths due to obstetric complications can be reduced with the presence of skilled attendants at births and availability of emergency obstetric care. [7-9] This is possible only when there is a functional system to educate pregnant women, screen them and pick them early for optimal management.[10]

AIMS & OBJECTIVES

- To identify the knowledge, attitude & practices of pregnant women regarding pregnancy behavior and also to assess their knowledge regarding danger signs of pregnancy.
- To assess the prevalence of antenatal care amongst them.

MATERIALS & METHODS

A Cross Sectional Observational study was conducted on 300 pregnant females attending antenatal care at survey sites like PHC, CHC, district

hospital and tertiary care hospital under Department of Obstetrics and Gynecology, N.S.C.B. MCH Jabalpur (MP) from 1 March 2021 to 31 August 2022. Pregnant females visiting these sites were asked to fill a well-structured questionnaire, wherever needed trained health professionals assisted in filling the questionnaire and data analysed thereafter. The study was conducted after institutional ethical committee approval and written informed consent.

INCLUSION CRITERIA:

- Pregnant women attending antenatal care at survey sites who were willing to participate in this study.
- Women of sound mind who could understand and fill out the form, if need be with assistance.

EXCLUSION CRITERIA:

- Pregnant women not willing to participate were excluded.
- Mentally disabled females were excluded.

STATISTICAL ANALYSIS

Data collected was analysed by using IBM-SPSS trial version 23.0. The appropriate statistical methods were used and observations evaluated.

OBSERVATION & RESULTS

A total of 300 pregnant women completed the study and demographic profile is depicted in Table 1.

Table No. 1: Socio-demographic profile of pregnant females attending antenatal care services

Socio-demographic parameters	Numbers (Percentage)
Age (years)	
18-20 years	80(26.67%)
21-30 years	208(69.33%)
31-40 years	12(4.00%)
Educational status	
Illiterate	12(4.0%)
Primary School	46(15.3%)
Middle School	88(29.3%)
Higher Secondary	72(24.0%)

Senior Secondary	78(26.0%)
Graduate	04(1.3%)
Religion	
Hindu	278(92.7%)
Muslim	21(7.0%)
Christian	1(0.3%)
Socio-Economic Status	
Upper	63(21.0%)
Lower	132(44.0%)
Middle	105(35.0%)
Marital Life	
1 year	163(54.3%)
2-5 years	117(39.0%)
5-10 years	17(5.7%)
> 10 years	3(1.0%)
Gravida	
Primi	176(58.6%)
2nd	95(31.7%)
3rd	25(8.3%)
Grand multipara	4(1.3%)
No. of ANC visit	
1	114(38.0%)
2 to 3	99(33.0%)
4	47(15.66%)
>4	34(11.33%)
None	6(2.0%)

The knowledge regarding danger signs in pregnancy is depicted in Figure1. Most of them knew about signs of anemia whereas decreased perception of fetal movements was known to least.

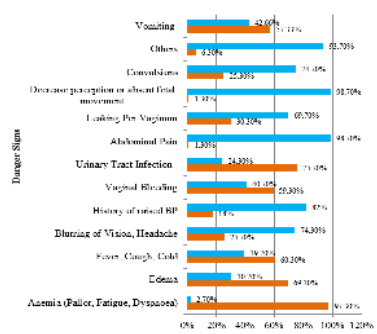


Figure 1: Knowledge of danger signs of pregnancy among the study participants

The study also determined knowledge, attitude and practices about pregnancy behavior as depicted in Table 2.

Table 2: Knowledge, Attitude and Practices about pregnancy behavior

S.No.	Particular	Responds	
	Knowledge of pregnant women	Correct	Incorrect
1.	Preconception Counselling	161	139
2.	Importance of pregnancy	230	69
3.	Knowledge regarding physical and mental changes during pregnancy	217	83
	Total score	608	291
	Attitude of pregnant women	Agree	Disagree
1.	Referral	187	113
2.	Questionnaire is how much useful to understand pregnancy related problems	231	60
3.	Regular ANC visit during current pregnancy	226	74
4.	Nutrition	267	33
	Total score	911	280

	Practice of pregnant women	Yes	No	Can't say
1.	TT vaccination	275	25	0
2.	Timely treatment saved the baby	250	50	0
3.	Contraceptive method	300	0	0
4.	Satisfaction with health care services	212	84	4
5.	Iron folic acid	260	40	0
	Total score	1297	199	4

$$\text{Score of knowledge} = \frac{\text{Sum of correct responses given by all respondents}}{\text{Total number of response}} \times 100$$

Score of knowledge about pregnancy behavior was 67.55%.

Attitude score: this will be measured by asking the respondents to whether they are positively inclined towards routine check-up, early help seeking and diet.

Score of positive attitude

$$= \frac{\text{Sum of positive responds given by all respondents}}{\text{Total number of responses}} \times 100$$

Score of positive attitude about pregnancy behavior was 75.91%.

$$\text{Score of good practice} = \frac{\text{Sum of responses given by all respondents}}{\text{Total number of responses}} \times 100$$

Score of good practice about pregnancy behavior was 86.46%.

Prevalence of antenatal care-

Prevalence was determined by, atleast, 1 antenatal visit taken by the participant i.e. 98% in current study, though unsatisfactory. According to WHO, minimum recommended antenatal contacts are 4. So prevalence of optimal antenatal care is 26.99%.

DISCUSSION

The study showed knowledge, positive attitude and good practices score for pregnancy behavior to be 67.55%, 75.91% and 86.46% respectively, whereas, knowledge score for danger signs to be 40.58%. In a similar study by John NN et al.^[11] the percentage for knowledge for danger signs was found to be 80%, good practice score was 77% and positive attitude score was 91%. A similar study by Laishram J et al.^[12] found that the mean score of the knowledge on antenatal care was 55.56. But as per the study conducted by Patel et al.^[13] 100% of pregnant women were having a positive attitude. The, above data shows practices and attitudes are better in percentage than knowledge component. A 100% score is yet to be achieved. A low level of knowledge score implicates more interventions towards education, counselling and compliance for facilities available.

In the study, most common age group was found to be reproductive (21-30 years). Maximum participants were literate (96%) but only 27.1% completed schooling, belonged to lower socio-economic strata (44%) and conceived within 1 year of marriage (54.3%). Educated women were found to be more compliant and exhibited appropriate participation in antenatal care.

The study showed primigravida to be 58.6%. In multigravidas, history of abortion in previous pregnancy were found in 39.3%. But only 17.79% underwent therapeutic intervention at a proper medical setup, despite of humongous efforts put in by Government of India for promoting safe abortion care. Majority (75%) of those had some history suggesting they were negligent in previous pregnancy. However, only 25.8% of them had adequate number of antenatal visits i.e. 4 or >4. However, they showed better compliance in current pregnancy with 37.9% women having adequate visits. Timely treatment was taken by 82.26% (102 out of 124) women. The compliance led to early identification and timely management of complications resulting in decreased morbidity and mortality.

In the study, when asked about knowledge regarding pregnancy as a special state, pre conceptional counselling, physical and mental changes during pregnancy 77%, 53% and 77.3% responded positively. 60.3% took antenatal visits to nearby Aanganwadi. Study by Zaki et al.^[14] showed 33.9% government hospital visits, 12% private hospital visits and 54% mixed visits, suggesting government institutes are more preferred by lower strata people due to affordability and easy access.

Healthcare workers at Aanganwadi should be trained well enough to educate women visiting them as they are their first contacts. They do primary screening and acts like first referral unit.

On evaluating healthy practices, balanced diet was diet taken by 89% and 91.7% were immunized with 2 doses of TT during pregnancy. But looking at current scenario where COVID 19 and influenza like diseases are prevalent, Tdap vaccine maybe the future. Routine iron and folic acid supplementation was taken by 86.3% during second and third trimesters of pregnancy.

In the study, different questions were asked to evaluate reasons for lack of antenatal visits. When asked about the source of information regarding physical and mental changes of pregnancy, majority stated family followed by ASHA. In a study by Oguntunde O et al.^[15] majority of the women admitted that they need permission from their husband before going to hospital. High dependency on ASHA for antenatal visits, lack of family support and transportation facility led to low prevalence of adequate antenatal care i.e. 26.99% only. Hence, community education should be the new agenda on horizon.

Most common danger sign known by most were anemia (fatigue, pallor, dyspnoea) (97.30%) followed by urinary symptoms (75.70%), edema (69.30%), fever (60.30%), vaginal bleeding (59.30%) and vomiting (57.33%). The data suggests a good knowledge for features of anemia, although, its prevalence is still very high indicating a possible lack in compliance with iron supplements. Knowledge for urinary symptoms, fever and vaginal bleeding is a good sign, as it can help in management of a great chunk of complications such as abortions, antepartum hemorrhage, preterm labor, PROM etc. Knowledge of edema can lead to early detection and treatment of preeclampsia, anemia, heart disease etc. but poor knowledge of blurring of vision, headache, convulsions, history of raised blood pressure is responsible for high prevalence of eclampsia in M.P. state. Lack of knowledge for decreased perception of fetal movements and leaking per vagina can result in fetal morbidity and mortality.

In our study, 68% women faced danger signs of pregnancy, but only 73.5% took treatment, out of which, 62.3% were referred to higher centers. Reasons for not seeking treatment were noncooperative family 37.04%, 22.22% were unaware of the services, 14.81% had no conveyance and remote facility, 7.41% thought they were apparently alright and 3.7% had stigmas and beliefs. Hence, awareness about danger signs, early treatment seeking and timely referral is a need of the hour for a better fetomaternal outcome. Also, benefits of various government schemes and facilities should be made available to the masses.

LIMITATIONS OF THE STUDY

- Study was time consuming, cumbersome and of limited duration.
- Study was based on subjective findings.

CONCLUSION

We reap what we sow! This is the dictum to be followed.

It is the effort that we put in during the nine months that we get back in the form of a healthy baby and healthy mother at the end. The more care, vigilance and enthusiasm we put in, the more fruitful outcome we get. Hence, prevalence of optimal antenatal care should be increased from 26.99% to 100%.

The score for knowledge of danger signs of pregnancy is 40.58% which is to be increased. A target of 100% scores of KAP seems like a myth. But it is only through a vision, that a dream could be realized. We must strengthen our peripheral facilities as they are the roots of our healthcare system. The smallest makes the biggest impact!

Role of healthcare workers in sensitizing and educating women is of mighty importance as they act like first referral unit. Early identification of danger signs, timely referrals and management of complications need to be emphasized. Also, role of families of pregnant women is of equal importance. A collective approach by healthcare providers, pregnant women and their families will lead to a healthy nation.

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