



**A STUDY TO ASSESS KNOWLEDGE OF DANGER SIGNS DURING PREGNANCY AMONG PREGNANT FEMALES ATTENDING GYNAECOLOGY O.P.D. IN MEDICAL COLLEGE, BILASPUR (C.G.)**

**Community Medicine**

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**ABSTRACT**

**BACKGROUND-** Knowledge of obstetric danger signs and birth preparedness are strategies aimed at enhancing the utilisation of skilled care. The current MMR in M.P. Chhattisgarh is 173 per lakh live births (2014). However it still remains a notch above the national average of 130 per lakh live births.

**MATERIAL AND METHODS-** our study is Institution based descriptive Cross-sectional study, conducted in Gynaecology OPD of CIMS, Bilaspur over a period of 6 months i.e. 1 July- 31 December 2016. Face to face interviews with predesigned pretested questionnaire is used. SPSS 21.0 version software was used to analyze the data.

**RESULTS-** 23.15% of 18-35 yrs aged pregnant female had knowledge of >6 danger signs, 64.28% of graduate or higher education participants, 30.63% urban residents were in grade A whereas only 15.78% rural residents in grade A knowledge. 42% female in >36 weeks had knowledge of >6 danger signs. We find significant association between literacy, socioeconomic status and knowledge of danger sign. Knowledge is also higher in joint family members, urban participants, those who were in jobs.

**CONCLUSION-** The study reveals about knowledge of danger sign was higher among participants of age group 18-35 yrs., improved with increasing education level, maximum in professionals, Urban residents were having better knowledge, Participants from joint family and people of higher socioeconomic status were having better having better knowledge.

**KEYWORDS**

danger signs, pregnancy, pregnant females, Gynaecology OPD

**INTRODUCTION**

Maternal mortality refers to deaths due to complications from pregnancy or childbirth. The number of women and girls who died each year from complications of pregnancy and childbirth declined from 532,000 in 1990 to 303,000 in 2015. These improvements are particularly remarkable in light of rapid population growth in many of the countries where maternal deaths are highest. Still, over 800 women are dying each day from complications in pregnancy and childbirth. And for every woman who dies, approximately 20 others suffer serious injuries, infections or disabilities. Almost all maternal deaths (99 per cent) occur in developing regions.[1] Maternal Mortality Ratio (MMR) (per 100000 live births) in Indian is 130 while in Madhya Pradesh/ Chhattisgarh it is 173 which is below the national average.[2]

Knowledge of obstetric danger signs and birth preparedness are strategies aimed at enhancing the utilization of skilled care during low risk births and emergency obstetric cases.[3] With assumption that 'every pregnancy faces risk women should be made aware of danger signs of obstetric complications during pregnancy, delivery and the post-partum.[4,5] The knowledge will ultimately empower them and their families to make prompt decision to seek care from skilled birth attendants.[6] Moreover in order for women to reach the place where appropriate care is provided, certain preparations prior to birth are required. Birth preparedness for a woman entails identifying a skilled attendant/health facility with delivery services, making transportation plans, saving money and identifying a blood donor.[4]

**MATERIAL AND METHODS**

The study design for our study was Institution based descriptive Cross-sectional study conducted in Gynecology OPD of CIMS, Bilaspur over a period of 6 months i.e. 1 July- 31 December 2016. Study population was 100 ANC females attending gynecology OPD of CIMS, Bilaspur during the period of study. Data was collected through face to face interviews with predesigned questionnaire. The nature and purpose of study was explained to the participants and an informed consent was taken before conducting the interviews. Semi-structured interview schedule which comprises of socioeconomic, personal information

and knowledge of danger signs of pregnancy was used for data collection.

If pregnant female have any of these complain then it comes under danger sign during pregnancy

- Chills and a fever of 101 degrees Fahrenheit or higher
- Sudden very bad or continuous pain in the lower abdomen.
- Continuous vomiting, nausea or diarrhea
- Heavy bleeding from vagina.
- Convulsion
- See spots, blurry vision,
- bad headaches, sudden swelling in your face and hands and sudden weight gain.
- Strong, regular contractions (4 or more in one hour) before your due date.
- Sudden flow of water from your vagina.
- Baby does not move for more than 1 day after the 20th week of pregnancy, or baby moves less than 10 times in 2 hour after 28 weeks of pregnancy.[7]

According to knowledge of danger signs participants were divided into three grades for the study-

- 1) Grade A-Knowledge of >6 danger signs
- 2) Grade B-Knowledge of 3-6 danger signs
- 3) Grade C-Knowledge of <3 danger signs

**RESULTS**

Out of 100 participants 95 belongs to age group 18-35 years. 14 participants were educated graduate and above while 16 were illiterate. 4 participants were having professional job while 68 participants were housewife. At the time of study 24 participants were having >34 weeks pregnancy duration while 20 participants were having ANC period of 12 weeks. 38 participants belonged to rural area, 44 participants were having nuclear family and 30 participants came from low socioeconomic background. 25 participants were having good knowledge (i.e Grade A-Knowledge of >6 danger signs) of danger

signs during pregnancy while remaining 75 participants were having Grade B-Knowledge of 3-6 danger signs and Grade C-Knowledge of <3 danger signs.

Only participants of age group 18-35 years belonged to grade A. Participants of age group <18 years had least knowledge. So according to study, age group 18-35 had maximum knowledge of danger signs (i.e. 23.15%)

**Table no.1 Association of knowledge of danger signs with education level of participants**

S No	Educational level	Knowledge Grade A	Knowledge Grade B and C	Total	Remark
1	Graduate and above	09 (64.28%)	05(35.72%)	14	Chi square value is 13.39 P value <.001
2	12 <sup>th</sup> Below 12 <sup>th</sup> standard	16 (18.60%)	70(81.4%)	86	
		25	75		Total 100

We can see in above table that there is significant association between literacy and knowledge. Those who are Graduate and above were more aware of danger signs of pregnancy

**Table No.2 Distribution of participant according to their occupation and their knowledge**

Occupation	Grade C	Grade B	Grade A	Total
Housewife	18(26.47%)	38(55.88%)	12(17.65%)	68
Unskilled	12(60%)	4(200%)	4(20%)	20
Semiskilled	0(0%)	1(25%)	3(75%)	4
Skilled	1(50%)	0(50%)	3(75%)	4
Professional	0(0%)	1(25%)	3(75%)	4

Maximum participants in grade A were professionals. Maximum participants in grade C were unskilled workers. According to study knowledge of danger signs was maximum in professionals and minimum in unskilled workers.

**Table 3- Knowledge of danger signs according to duration of pregnancy**

Duration of pregnancy	Grade C	Grade B	Grade A	Total
Up to 12wks	11(55%)	8(40%)	1(5%)	20
14-26 wks	2(8.34%)	16(66.66%)	6(25%)	24
28-34 wks	14(43.75%)	10(31.25%)	8(25%)	32
>34 wks	4(16%)	10(42%)	10(42%)	24

According to study knowledge of danger signs was more in females with longer duration of pregnancy.

**Table 4: Association of knowledge of danger signs with residential area of participants**

Residence	Grade A	Grade B and C	Total	Remark
Rural	6(15.78%)	32(84.22%)	38	Chi square value is 2.73 P value is >.05
Urban	19(30.64%)	43(69.36%)	62	

Knowledge was found to be higher (ie.30.64%) among urban participants then rural participants (ie.15.78%) But this knowledge gap was not found significant.

**Table 5- Relation of knowledge of danger signs with type of family of participants**

Family type	Grade A	Grade B and C	Total(100)	Remark
Nuclear	9(20.45%)	35(79.55%)	44	Chi square value is 0.86 P value is >.05
Joint	16(28.57%)	40(71.43%)	56	

According to study knowledge of danger signs was more in females from joint families as compared to nuclear families. But this knowledge gap was not found significant

**Table 6-Relation Knowledge of danger signs according to socioeconomic status**

Socioeconomic class	Grade A	Grade B and C	Total	Remark
Lower class	02 (6.67%)	28(93.33%)	30	Chi square value is 7.68 P value is <0.05
Middle class(including upper middle and lower middle)	23(32.85%)	47(67.15)	70	

Maximum participants in Grade A were of middle class. Maximum participants of Grade C were of lower middle case. This indicates that knowledge of danger signs was more in people of higher socioeconomic class and this difference was found to be significant.

**DISCUSSION**

A number of studies conducted throughout the world have focussed on knowledge of danger signs of pregnancy and demand for healthcare when danger signs appear in pregnancy.

The current study concludes that educational qualification of antenatal women reporting at CIMS gynaecology OPD was significantly associated with level of knowledge regarding danger signs of pregnancy. 64.18% of graduate and above educated participants had grade A knowledge. This hypothesis has been proved by another study conducted by Sangal Renu et al. at BRD medical college Gorakhpur where highly significant increase in knowledge was seen in women educated for higher degrees in comparison to illiterate women. (81.6% women educated upto high school or more had knowledge about 3-5 danger signs while only 63.5% of illiterate women had similar knowledge.[8]

Pregnant women in the age group of >30 years, educational status and occupational status of pregnant women and their husbands and pregnant mothers who had regular antenatal checkups had significant associations with the awareness of obstetric danger signs of pregnancy, during labour and post natal period (p value <.05).[9] In our study we also found some similar findings related to occupation and literacy of pregnant women.

Monthly household income had a positive effect on increasing women's knowledge about pregnancy danger signs; it implies that mothers with higher socioeconomic status may be less deterred by cost barriers while making decisions to seek medical care than mothers with lower socioeconomic status. This may allow them to hear and learn more about danger signs in pregnancy when making visits to health facilities.[10]In our study we also found very similar finding.

In a study done in Ethiopia, it was found that maternal age, paternal occupation, place of residence were positively associated factors with knowledge of obstetric danger signs.[11] Similarly in our study we found that pregnant women residing in urban area had more knowledge then women residing in rural are however this difference was not found to be statistically significant.

**CONCLUSION**

The study was conducted to assess the knowledge of danger signs of pregnancy in pregnant females attending gynaecology OPD in CIMS, Bilaspur. The knowledge of danger signs was assessed on the basis of age, occupation, education, residence, etc, of the participants. Thus it was concluded that the maximum knowledge was with participants of age group 18-35 years, knowledge improved with increasing education level, knowledge was maximum in professionals and minimum in unskilled, Urban residents had better knowledge than rural residents, Participants from joint family had better knowledge. On the basis of socioeconomic status it was found that knowledge was more in people of higher socioeconomic status. Knowledge of danger signs increases with participants with large duration of pregnancy.

According to the study the knowledge was least in illiterates so measures should be taken to make the lower educational groups aware of the danger signs. Rural areas should be targeted for the emergency facilities and awareness of the danger signs and government schemes. Low socioeconomic groups should be targeted for health education and awareness of various government schemes and how to seek help during emergencies. Early registration of pregnancy should be encouraged so that pregnant female get aware of danger sings during pregnancy and prepare accordingly.

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