



## AWARENESS OF ANTENATAL CLINIC VISITING PATIENTS ABOUT DANGER SIGNS OF PREGNANCY PRE & POST ANTENATAL EDUCATION

<b>Aiswarya. C. S</b>	Final year MBBS student, Armed Forces Medical College, Pune 40
<b>Shakti Vardhan</b>	Prof & HOD , Armed Forces Medical College, Pune 40
<b>U A Kohli</b>	Assoc Prof, Armed Forces Medical College, Pune 40
<b>Rony Chakravarty*</b>	Asst Prof, Armed Forces Medical College, Pune 40 *Corresponding Author

**ABSTRACT** Patient education is often an neglected subject in ANC OPD. A study was conducted about awareness of danger signs of pregnancy pre & post antenatal education. A sample of 90 pregnant ladies were chosen for this study. **CONCLUSION:** Our study concludes that there is a significant association between gestational age of respondent and her post intervention score (p:0.044). Also the educational status of the lady had a significant bearing on the knowledge that she acquires & retained

**KEYWORDS :** Danger signs, pregnancy, awareness

### INTRODUCTION:

Pregnancy is a normal process involving physiological and psychological changes in expectant mothers. Pre-existing health problems can make pregnancies risky from the start. Even normal pregnancies can become complicated when unforeseen conditions arise.

Maternal mortality remains a public health challenge worldwide. A total of 99 % of all maternal deaths occur in developing countries. MMR in India is 167 per 100,000 live births, which is alarmingly high as compared to many developed & other developing nations<sup>1</sup>. The triad of MMR include haemorrhage, sepsis & eclampsia. They present with noticeable signs. These danger signs of pregnancies are the signs that women encounter during pregnancy, child birth and postpartum<sup>2</sup>. These can be easily recognized by the woman & her family & predict onset of complications.

Awareness about the significance of these danger signs can lead to timely access to appropriate emergency obstetric care<sup>3</sup>. These life threatening complications are treatable, and thus most of these deaths are avoidable if women are able to identify them and seek emergency care. Antenatal clinic is the main forum that enables doctors & other health care workers to educate pregnant women about these danger signs.

This study aims to assess awareness of danger signs of pregnancy among ANC attendant women in tertiary care hospital setting, pre & post antenatal education.

### REVIEW OF LITERATURE

For most women, early and regular prenatal care promotes a healthy pregnancy and delivery without complications. Even normal pregnancies can become complicated when unforeseen conditions arise. A pregnancy is considered high risk when there are potential complications that could affect either the mother or the baby or both. Studies have shown that the greater incidence of mortality and morbidity due to high risk pregnancy is directly related to the inadequate knowledge of the women about the factors that put pregnancy at risk.<sup>4</sup>

Although the maternal deaths have reduced significantly, the MMR of the country is still high. The tragedy is that these deaths are largely preventable. The progress in maternal health has been uneven, inequitable at social, economic and regional front. Pregnancy is not a disease and pregnancy related mortality is almost always preventable. Maternal deaths have both direct and indirect causes. Around 80% of maternal deaths worldwide is brought about by direct obstetric complications such as hemorrhage, infection, obstructed and prolonged labor, unsafe abortion and hypertensive disorders of pregnancy. Indirect causes such as malaria, diabetes, hepatitis, anemia and other cardiovascular disorders which are aggravated by pregnancy can also lead to maternal death<sup>5</sup>. Maternal morbidity and mortality could be prevented significantly if women and their families recognize

obstetric danger signs and promptly seek health care service during labor, delivery and early postpartum period under the supervision of skilled delivery attendant (SBA).

Pregnant women are supposed to be educated and counselled regarding pregnancy-related danger signs during antenatal visits. Counseling on pregnancy danger signs is to be conducted according to focused on antenatal care guidelines, which include signs such as vaginal bleeding, severe headache or blurred vision, severe abdominal pain, swollen hands and face, fever, baby stopped or reduced movement, and excessive tiredness/breathlessness.<sup>6</sup>

Evidence suggests that raising awareness of women about obstetric danger signs would improve early detection of problems and reduces the delay in deciding to seek obstetric care. It is the essential first step in the appropriate and timely referral to essential obstetric care. Though there are many African studies in this interest, no. of Indian studies in this context are few.

### AIMS & OBJECTIVES:

- To determine the awareness of pregnant women attending antenatal care about danger signs of obstetric complications.
- To evaluate post educational knowledge about danger signs among pregnant women.

### MATERIALS & METHODS:

**(a) Study Design:** Intervention based pre-test post-test study.

**(b) Place of study:** Antenatal Clinics in a tertiary care hospital setting in Pune.

**(c) Study Population:** All pregnant women who use antenatal care services during the data collection period of the study.

**(d) Method for obtaining sample size:** To evaluate the pre and post intervention difference in the overall knowledge score of ANC after<sup>7</sup> with 95% confidence interval and power of 80 with pre and post means of 8.38 and 13 with SD's as 17.99 and 15.75 the required sample size is 90.

### (e) Sampling Procedure:

A sampling frame was prepared using the list from ANC register of all registered cases in the hospital. 90 females was randomly selected for the study from the list (using random number tables). Patients were contacted through mobile phones to invite for participation in the study.

Their date of next visit was noted to contact the subject. Written informed consent from all subjects was taken.

### Inclusion criteria:

- Pregnant women attending antenatal clinics.
- Pregnant women willing to participate in the study.

**Exclusion criteria:**

Pregnant women who did not give consent.

**(f) Data Collection Method:**

A structured questionnaire (duly validated) was administered to pregnant women to assess the current knowledge about the danger signs of pregnancy along with the sociodemographic data such as age, the level of education, the occupation, obstetric characteristics such as parity, complications in previous deliveries, etc. These pregnant women was given a talk about the danger signs of pregnancy thus educating them about pregnancy related complications. The same questionnaire was administered in the next visit to evaluate the effectiveness of the antenatal education given.

**(g) Statistical Analysis:**

Frequency distribution & mean was used to analyse the basic parameters. To find association of knowledge with age, education, socio economic status etc, chi square test was used. Paired t test was used to find the impact of intervention. Data was entered in excel sheet and analysed using SPSS software version 20.

**RESULTS:**

**Table 1**

Variable	Score<60%	Score>60%	Total	Chi-square value	p value
<b>Educational status</b>					
>10th class	11	39	50	4.357	.037
<10th class	17	23	40		
<b>Occupation</b>					
Housewife	30	43	73	0.000	.995
Working	7	10	17		
<b>Parity</b>					
Nulli para	7	18	25	2.458a	.117
>1	30	35	65		
<b>Abortions</b>					
Nil	22	40	62	2.607	.106
Atleast 1 or more	15	13	28		
<b>Comorbidities</b>					
Nil	18	31	49	.851	.356
Atleast 1 or more	19	22	41		
<b>Gestational age</b>					
First trimester	1	16	17	6.257	.044
Second trimester	10	16	26		
Third trimester	17	30	47		

Chi square test was applied

There is a significant association between educational status of respondent and her post intervention score (p:0.037)

There is a significant association between gestational age of respondent and her post intervention score (p:0.044). Higher percentage of females in first trimester had better score as compared to second and third trimester

**TABLE 2**

	Mean Score	Std. Deviation	Std. Error Mean	t value	Df	p value
Pre (n=90)	7.556	4.0892	.4310	-15.914	89	.000
Post (n=90)	17.300	4.4202	.4659			

Paired t test was applied.

There is a significant increase in knowledge score before and after intervention

**CONCLUSION:**

Our study concludes that there is a significant association between gestational age of respondent and her post intervention score (p:0.044). Higher percentage of females in first trimester had better score as compared to second and third trimester. Also the educational status of the lady had a significant bearing on the knowledge that she acquires & retained.

A good delivery of health education during antenatal care, use of electronic media to disseminate health information and community enlightenment of women groups increased the knowledge of the

women of the danger signs of pregnancy. These activities should be sustained as awareness of the danger signs of pregnancy is a step towards improving maternal health. The first trimester antenatal visits can be utilised as a platform for educating the lady about the danger signs of pregnancy along with the nutritional & required medical advices.

In view of a busy OPD setting, medical students, community medicine specialists or trained counsellors can do the needful & play a major role in preventing maternal deaths.

**REFERENCES:**

- Ossai EN, Uzochukwu BS (2015) Knowledge of Danger Signs of Pregnancy among Clients of Maternal Health Service in Urban and Rural Primary Health Centres of Southeast Nigeria. *J Community Med Health Educ* 5: 337. doi:10.4172/2161-0711.1000337
- Dile M, Tadesse D, Gedefaw M, Asmama T (2015) Knowledge of Obstetric Danger Signs and its Associated Factors in Debaytilatgin District, Ethiopia: A Community Based Cross Sectional Study. *Gynecol Obstet (Sunnyvale)* 5: 315. doi:10.4172/2161-0932.1000315
- Mesay H, Abebe G, Fessahaye A. Knowledge about obstetric danger signs among pregnant women in Aleta Wondo District, Sidama Zone, Southern Ethiopia. *Ethiop J Health Sci* 2010; 20:25–32.
- Effectiveness of danger signs of pregnancy among primigravida women; R Deepa, Prof. V. Hemavati; *IJIRSET* Vol 4, Issue 5, May 2015.
- Simarpreet, Mamta, Pooja Tondon and Jasbir Kaur 2015. "Study on awareness regarding high risk factors of pregnancy among pregnant women: systematic literature review", *International Journal of Current Research*, 7, (10), 21868-21869
- Dr. Madhuri Badrinath1, Dr. Saraswathi A Karekal 2. 1,2, Dept of OBGYN, SDM Medical College, India " Maternal Mortality: A Retrospective Study" *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* e-ISSN: 2320-1959-p- ISSN: 2320-1940 Volume 4, Issue 2 Ver. V (Mar.-Apr.2015), PP 10-13
- Waldron DM. Improvement in Nutrition Knowledge and Retention about Gestational Diabetes Mellitus among Hispanic Pregnant Women.[2011]