How Aware are our Pregnant Women?

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Abstract: _Introduction: Pregnancy and childbirth, although, a normal physiological phenomenon in the life of women, yet many die from pregnancy-or childbirth-related complications globally every day. Aim: To assess level of Knowledge regarding obstetric danger signs among pregnant women and study the effect of socio-demographic variables on the knowledge of obstetric danger signs among pregnant women. Methodology: All pregnant females who were registered during the period of study at five sub-centers (Shanapora, Theed, Ishbar-Nishat, Nandpora, and Hazratbal) of the Block Hazratbal were approached. A total of 153 females wereincluded. Results: All women had at least knowledge about two danger signs of pregnancy. The current study reveals that 87% of females knew vagina bleeding, 84% knew decreased fetal movements and 63% knew increased blood pressure in pregnancy as danger signs of pregnancy. The main factors that were found to have statistical association with knowledge about danger signs were educational status, socio-economic class and parity of the pregnant females. Conclusion: The health education of pregnant women regarding obstetric danger signs should be encouraged through various mass media, IEC activities at community level with involvement of ANM, ASHA and other health care providers_.

Keywords: Danger sign, complications, Health care, Knowledge, Pregnancy

1. Introduction

Although Pregnancy and childbirth, is a normal physiological phenomenon in the life of women, yet many die from pregnancy-or childbirth-related complications globally every day Maternal Mortality is unacceptably high.

About 830 women die from pregnancy-or childbirth-related preventable complications globally every day. It was estimated that in 2015, roughly 303000 women died during and following pregnancy and childbirth. Almost all of these occurred in low- resource settings and most of these complications are preventable and treatable(1). Between 1990 and 2015, maternal mortality worldwide dropped by about 44 %.Between 2016 and 2030, as a part of SDG, the target is to reduce the global Maternal Mortality ratio to less than 70 per lac live births(2). At the national level, MMR dropped from 254 per thousand live births in 2005 to 167 per thousand live births in 2013(3).

About majority i.e., 75% of maternal deaths are accounted severe bleeding after childbirth, infections after childbirth, high blood pressure during pregnancy, complications from childbirth and unsafe abortions.Other complications include diseases such as AIDS or malaria, chronic diseases may exist before pregnancy but are worsened during pregnancy, especially if not manage as part of women's care(4).

Such complications are preceded most of the times with some symptoms which can act as alert signals for pregnant women and the health care providers. These signals include vaginal bleeding, high fever, severe abdominal pain, convulsions, severe headache, blurred vision, decreased or absent fetal movements, gush of fluid per vagina and foul smelling vaginal discharge.(4)(5)

These signals are known as danger signs of pregnancy and timely attention to these signals and prompt action can prevent untoward outcomes(5).So it is really very important that pregnant women and health care providers are well informed and aware about these signs so that when needed immediate health care can be sought and serious complication prevented.

2. Aims and Objectives

1) To assess level of Knowledge regarding obstetric danger signs among pregnant women.
2) To study the effect of socio-demographic variables on the knowledge of obstetric danger signs among pregnant women.

3. Methodology

This study was conducted in Block Hazratbal of District Srinagar, which is the field practice area of Government Medical College, Srinagar, Jammu and Kashmir. The study period was one year from May 2014 to May 2015. All pregnant females who were registered during the period of study at five sub-centers (Shanpora, Theed, Ishbar-Nishat, and Hazratbal) of the Block Hazratbal were approached and their consent for participation in the study was sought irrespective of the gestational age. All the females who gave their consent for participation in the study were enrolled. A total of 153 females wereincluded. The information was collected from the study subjects on basis of pretested semi-structured questionnaire. The information regarding age, literacy, residence, occupation, income, parity, gestational age was collected.

Statistical Analysis
The data was analyzed using Epi info version 16. Chi-square test (Chi-square trend for ordinal variables) was applied for evaluate effect of socio-demographic variables on knowledge of participants about obstetric danger signs.

4. Results

Socio-demographic characteristics
A total of 153 ante-natal women participated in the study.The mean age of participants was 27.5years with a minimum and maximum age of 18 and 43 respectively.Majority (35.29%) of women were in the age group of 26-30 years.38.2% of the study subjects were illiterate and only 6.98% were graduates /post-graduates. Regarding occupation, 95.67% women were home-makers and only 4.33% were employed in govt. /private institutions.53.25% of participants hailed from socio-economic class IV whereas 5% belonged to socio-economic class I.

Obstetric characteristics
Among 153 women, 33.3% were primary gravida whereas 3.4% participants had a parity of more than 3.Majority of females A in the second trimester. Regarding number of ANC visits 65.5% females had undertaken less than or equal to two visits during current pregnancy.

Knowledge about Obstetric Danger Signs
All women had at least knowledge about two danger signs of pregnancy. The current study reveals that 87% of females knew vagina bleeding, 84% knew decreased fetal movements 63% knew increased blood pressure in pregnancy, 34% knew severe abdominal pain, 30.1% knew gush of fluid per vagina, , 26.2 % knew swollen hands and feet while as less than 20% females knew blurred vision, severe headache, increase in weight and fever and chills as danger signs of pregnancy

Association between socio-demographic variables and knowledge of danger signs of pregnancy.
The main factors that were found to have statistical association with knowledge about danger signs were educational status, socio-economic class and parity of the pregnant females.

Table 1: Age of women and knowledge of obstetric danger signs

Age (years)	Number (N)	Percentage (%)	Knowledge <3(N)	Knowledge <3(%)	Knowledge >3(N)	Knowledge >3(%)
≤ 20	4	2.62	3	75	1	25
21-25	30	19.6	13	43.3	17	56.71
26-30	54	35.2	28	51.8	26	48.14
31-35	50	32.6	16	32	34	68
>35	15	9.8	4	26.6	11	73.33
Total	153	100%	64	41.8%	89	58.2%
Chi square =7.46, do 4 , p =0.113						

Table 2: Educational status of women and knowledge of obstetric danger signs

Education	Number (N)	Percentage (%)	Knowledge <3(N)	Knowledge <3(%)	Knowledge >3(N)	Knowledge >3(%)
Illiterate	59	38.5	38	64.4	21	35.6
Primary*	13	8.4	9	69.3	4	30.7
Middle*	24	15.6	11	45.8	13	54.2
High	38	24.8	7	18.4	31	81.6
Higher secondary**	11	7.1	2	18.1	9	81.9
Graduate and above**	8	5.2	0	0	8	100
Total	153	100	67	43.7	86	56.3
Chi-square = 30.25, df 3 , p value =0.000001224*, ** groups clubbed for analysis						

Table 3: Occupation of women and knowledge of obstetric danger signs

Occupation	Number (N)	Percentage (%)	Knowledge <3(N)	Knowledge <3(%)	Knowledge >3(N)	Knowledge >3(%)
Homemaker	143	93.4	58	40.5	85	59.5
Teachers	7	4.51	0	0	7	100
Others	3	1.96	2	66.6	1	33.4
Total	153	100	60	39.2	93	60.8
Chi square =5.57, df=2, p=0.06						

Table 4: Socio-economic class* of women and knowledge of obstetric danger signs

Socio-economic class*	Number (N)	Percentage (%)	Knowledge <3(N)	Knowledge <3(%)	Knowledge >3(N)	Knowledge >3(%)
Class I	5	1.9	2	33.3	3	66.7
ClassII	9	5.9	4	44.4	5	55.6
ClassIII	59	38.7	41	69.5	18	30.5
Class IV	80	53.6	67	45.1	13	54.9
Total	153	100	114	74.5	39	25.5
Chi-square 11.76, df 2, p=0.0027* = As per Kuppuswamy scale 2017						

Table 5: Parity of women and knowledge of obstetric danger signs

Parity	Number (N)	Percentage (%)	Knowledge <3(N)	Knowledge <3(%)	Knowledge >3(N)	Knowledge >3(%)
1	53	34.7	37	69.8	16	30.2
2	66	43.2	32	48.4	34	51.6
3	29	18.8	10	34.5	19	65.5
>3	5	3.2	2	40	3	60
Total	153	100	81	52.9	72	47.1
Chi square(M-H) =10.24, p=0.00137						

Table 6: Knowledge of obstetric danger signs among the participants

Danger signs of pregnancy	Knowledge (N)	Percentage (%)
Vaginal bleeding	134	87
Decreased/Absent fetal movements	129	84
Sudden increase in Blood pressure	97	63.3
Persistent vomiting	76	49.8
Convulsions/Seizures	72	46.7
Severe Abdominal Pain	52	34
Gush of fluid per vagina	46	30.1
Swollen face, hands and feet	40	26.2
Blurred Vision	24	15.7
Severe headache	23	14.8
Sudden increase in weight	18	12
Fever with chills	18	11.7

5. Discussion

The present study was conducted among pregnant females to assess their knowledge about danger signs of pregnancy and the sociodemographic factors associated with it.The danger signs of pregnancy are parameters of paramount importance for preventing complications during pregnancy and thus preventing deaths.

The current study reveals that majority (87%) of females knew vagina bleeding followed by decreased fetal movements (84%) and blood pressure in pregnancy (63%) as danger signs of pregnancy , while as less than 20% females knew blurred vision , severe headache , increase in weight and fever and chills as danger signs of pregnancy. The findings are comparable to Demisse et al, who have conducted a similar study in Ethiopia(5).In contrast to our result a study from Nigeria reported that more than half of respondents had no knowledge about danger signs of pregnancy. The difference in results could be attributed to the reason that study in Nigeria was conducted among illiterate females(6). On the other hand, a study from Gorakhpur reported that 90.5% and 80% females had knowledge about vaginal bleeding and decreased fetal movement as danger signs of pregnancy.46% of females in our study knew seizures as danger sign while as Sangal R et al, reported 80% knowledge in their study(7). This difference could be due to better awareness and better education status of females in their study. Among systemic complications the findings in our study are higher when compared to Hailu D et al who reported 23.3% knowledge about sudden increase in blood pressure as an obstetric danger sign(8).

In the present study, educational status socio-economic class and parity affected the level of knowledge regarding danger signs of pregnancy.in our study majority (38.5%) of females were illiterate and the knowledge about number of danger signs increased with education level and was more than 80% among females who were educated up to high school and above. Similar findings were reported from study conducted in Egypt who showed that as educational status of females increased, awareness also increased(9). Thus illiteracy could be cited as a barrier for women to seek timely health care during pregnancy. Our findings are also in comparison with Demise E et al, (p<0.05)(5).

6. Conclusion

The present study reveals that although women have knowledge about some danger signs of pregnancy but not all signs .This implies that the health education of pregnant women regarding obstetric danger signs should be encouraged through various mass media, IEC activities at community level with involvement of ANM, ASHA and other health care providers. This can be a step for reducing further pregnancy complications and its untoward outcomes.

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