

# Assessment of Knowledge of Obstetric Danger Signs During Pregnancy Among Pregnant Mothers in Wolaita Sodo Hospitals and Sodo Town Health Centers in 2017

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## Abstract

**Background:** Pregnancy complications are the major health problems among women in developing countries. Approximately 529,000 women die from pregnancy related causes annually and almost all (99%) of these maternal deaths occur in developing countries. **Objective:** To assess knowledge of pregnant mothers towards obstetric danger signs during pregnancy in Wolaita Sodo town health centers and hospital, April- May, 2017. **Methods:** Institutional based cross-sectional quantitative study was conducted in April-May, 2017, on a sample of 365 mothers who are at least 4 months pregnant for prim gravid and multipara pregnant mothers selected from, 11 urban Kebeles of Wolaita sodo town and simple random sampling technique was employed to select the study participants. **Results:** A total of 365 pregnant mothers were enrolled in the study giving a response rate of 100%. The study participants from selected urban kebeles constituted 100%. (46%) of the study participants were found to have poor knowledge. Respondents who got obstetric danger signs information from health institution had 2 times good knowledge of obstetrics danger signs than those respondents who didn't get information from the same source. Participants who had formal education have 2.5 times knowledgeable than a participants who had informal education obstetric danger signs. **Conclusion:** Knowledge of study participants was assessed that 54% of participants have knowledge about obstetric danger signs during pregnancy and only 34% have knowledge about obstetrics danger signs during labor and child birth.

**Keywords:** Danger signs, Pregnancy, Obstetric care.

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## Background

Pregnancy complications are the major health problems among women in developing countries. Approximately 529,000 women die from pregnancy related causes annually and almost all (99%) of these maternal deaths occur in developing countries. The global maternal mortality is unacceptably high [1]. Although there was significant progress in all developing regions, the average annual percentage decline in the global maternal mortality ratio (MMR) was 3.1%, short of the millennium Development Goals (MDGs) target of 5.5%. Every day, almost 800 women still die due to pregnancy or child birth, and for every woman who dies 20 or more experience serious complications. One of the United Nations' MDGs is to reduce MMR by 75% by 2015 [2].

Developing countries account for 99% (284,000) of the global maternal deaths, the majority of which are in sub-Saharan Africa (162,000) and Southern Asia (83,000). These two regions accounted for 85% of global burden, with sub-Saharan Africa alone accounting for 56%. The average maternal mortality ratio in developing countries in 2010 was 240 per 100,000 births versus 16 per 100,000 in developed countries reflecting inequities in access to health services, and highlighting the gap between rich and poor. Sub-Saharan Africa had the highest maternal mortality ratio at 500 maternal deaths per 100,000 live births. According to a systematic analysis of progress towards Millennium Development Goal 5 more than 50% of all maternal deaths in 2008 were in only six countries (India, Nigeria, Pakistan, Afghanistan, Ethiopia, and the Democratic Republic of the Congo [3]. The situation in Ethiopia is similar to the situation in many developing countries. In Ethiopia the levels of maternal mortality and morbidity are among the highest in the world and the current estimate of MMR is 353 per 100,000 live births and it is reported that Maternal deaths accounted for 30% of all deaths to women age 15-49 [4]. Reduction of mortality and morbidity of both mother and newborn have been identified as priority areas need urgent attention by the health sector. Maternal morbidity and mortality could be prevented and minimized significantly if women and their families recognize obstetric danger signs and promptly seek health care [5-6]. The commonest danger signs during pregnancy include severe vaginal bleeding, swollen hands/face and blurred vision. Key danger signs during labor and childbirth include severe vaginal bleeding, prolonged labor, convulsions, and retained placenta. Danger signs during the postpartum period include severe bleeding following childbirth, loss of consciousness after

childbirth, and fever. Hemorrhage remains the leading cause of maternal mortality, accounting for approximately one third of deaths<sup>[7]</sup>. Many of the complications that result in maternal deaths contributing to prenatal deaths are unpredictable, and their onset can be both sudden and severe. The complications leading to maternal death can occur without warning at any time during pregnancy and childbirth<sup>[8]</sup>. Low awareness of danger signs and symptoms during pregnancy, labor, delivery and postpartum contribute to delays in seeking and receiving skilled care. Awareness of the danger signs of obstetric complications is the essential first step in accepting appropriate and timely referral to obstetric and newborn care. 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 care in complicated cases in low income countries. Increased knowledge and awareness is essential for reducing delays in seeking health care and in reaching a health facility. Communities and individuals should be empowered not only to recognize pregnancy related risks, but they must also have the means to react quickly and effectively once such problems arise<sup>[9-11]</sup>.

The national reproductive strategy of Ethiopia has given emphasis to maternal and newborn health so as to reduce the high maternal and neonatal mortality. The strategy focuses on the need to empower women, men, families and communities to recognize pregnancy related risks, and to take responsibility for developing and implementing appropriate response to them. One of the targets in the strategies is to ensure that 80% of all families recognize at least three danger signs associated with pregnancy related complications by 2010 in areas where health extension program is fully implemented<sup>[12]</sup>.

### Statement of the problem

Every minute, a woman dies due to causes related to pregnancy, childbirth and postnatal period<sup>[13]</sup>. Maternal deaths are avoidable, if women with complications are able to identify and seek appropriate emergency obstetric care which makes a difference between life and death<sup>[14]</sup>.

Maternal deaths have both direct and indirect causes. Around 80% of maternal deaths worldwide are brought about by direct obstetric complications the five major global causes of maternal death are:- severe bleeding (mostly bleeding postpartum), infections (also mostly soon after delivery), unsafe induced abortion, hypertensive disorders in pregnancy (eclampsia) and obstructed labour. Globally, about 80% of maternal deaths are due to these causes [6].

Hemorrhage alone accounts for one third of all maternal deaths in Africa, yet many of these deaths are preventable. Severe bleeding after birth can kill a healthy woman within two hours if she is unattended. Obstetric fistula resulting from obstructed labor is a long term complication suffered by as many as two million women (7).

Indirect causes such as malaria, diabetes, hepatitis, anemia and other cardiovascular disorders which are aggravated by pregnancy can also lead to maternal death<sup>[1, 3]</sup>. Awareness of the danger signs of obstetric complications is the essential first step in accepting appropriate and timely referral to obstetric and newborn care. Raising awareness of women on danger signs of pregnancy, childbirth and the postpartum period improve mothers' attitude to seek medical care and is crucial for safe motherhood.<sup>(11)</sup>

When mothers do not recognize the danger signs in pregnancy, adverse effects can occur to the mother, the unborn baby, or the pregnancy itself. Adverse effects include: Illness or death of the mother, for instance, severe bleeding can lead to anemia or death of the mother, infection to the unborn baby through prematurely ruptured membranes, when amniotic fluid leaks from the vagina. If not attended to, this can lead to fetal or neonatal morbidity and mortality, termination of a pregnancy before term in vaginal bleeding (9).

Maternal hypertension or fever, can lead to increased numbers of neonatal deaths or prematurely born babies who may eventually die due to inadequate facilities to care for them<sup>[2]</sup>. A mothers' death in childbirth denies her children their natural, primary care giver and significantly increases the risk that her infant will die or fail to survive to age 5. A mothers' death also has an extremely detrimental effect on her children's access to education and health care. Many children who survive without mothers also risk being emotionally lost<sup>[1-3]</sup>. Most maternal deaths are avoidable, as the health care solutions to prevent or manage complications are well known. All women need access to antenatal care in pregnancy, skilled care during childbirth, and care and support in the weeks after childbirth. It is particularly important that all births are attended by skilled health professionals, as timely management and treatment can make the difference between life and death<sup>[1,2]</sup>.

According to the Ethiopian Federal Ministry of Health, only 10% of the deliveries is attended by health professionals. In one nation where the maternal mortality ratio is 353 per 100,000 live and IMR 51.1/1000 and NMR 27.7/1000 live births which are the highest in the world. In Ethiopia, there is little information about the knowledge of obstetric danger signs during pregnancy since the introduction of Health Extension Workers (HEWs), despite the national Reproductive strategy aim to raise the awareness to 80% in the area in which HEW are deployed [12]. Studies conducted in Aleta Wondo district, indicated that the knowledge level of pregnant women about obstetric danger signs (during pregnancy, childbirth and postpartum period) was low and affected by residential area. Therefore, the identified deficiencies in awareness should be addressed through maternal and child health services by designing an appropriate strategies including provision of targeted information, education and

communication. In spite of great potential of knowledge, attitude and practice of obstetric danger signs in reducing the maternal and newborn deaths its status are not well known in most of Sub-Saharan Africa including Ethiopia [15].

The study therefore aims to fill this gap by assessing the current status of knowledge of danger signs among mothers in the study area.

### Significance of the study

As there is no adequate information on obstetric danger signs Knowledge, the study result will be vital and can be used as an input for maternal health curriculum, strategy and package establishment. This study will provide basic data on the issue that may help policy makers and as baseline data for MOH to reduce the highest maternal mortality rate of Ethiopia.

In addition to this, this study can have the following importance to different stake holders. The outcome of the study can be an input for concerned policy makers in decision making process regarding obstetric danger signs for pregnant and delivered mothers. And also it serves as an input for health education program undertaken by different organizations so as to keep the pregnant and delivered mothers being aware of the consequence of obstetric danger signs.

### OBJECTIVE

- ✓ To assess knowledge of obstetric danger signs during pregnancy among mothers In Wolaita Sodotown Health centers and wolaita sodo teaching and referral hospital, SNNPR, Ethiopia April- May, 2017.

### METHODS AND MATERIALS

#### Study area and period

The study was conducted in SNNPR, in Wolaita zone, Sodo town. WolaitaSodo town is 380km and 156km from Addis Ababa and Hawassa respectively. Sodo town is 82.1square km and consists of 11 urban kebeles. The weather condition of the town is “dega” with mean annual temperature of 15.1 to 20 degree Celsius. The town is found within the latitude of 6.48 up to 6.53 north and longitude of 37.44 up to 37.46 east. The mean annual rain fall of the town is about 1200 to 1400 milt. The total population of the town is 121,538. Among which 64,149 (52.8%)are males and 57,389 (47.2%) are females. WolaitaSodo town has 28,725 households. Among the women, 33,132 are in reproductive age group (15 to 49 years). There are various governmental, non-governmental and private health institutions in the town. There are two hospitals, three health centers, six health posts and thirty private clinics.

This study was conducted in 3 health centers and 1 governmental hospital in SNNPR,SODDO TOWN , from April- MAY , 2017 .

#### Study design

An institution based cross- sectional study design was conducted.

#### Source population

Women who were attending health centers and hospital at Sodo town within the study period in 2017.

#### Study population

All pregnant mothers who attend ANC follow up at Sodo town administration health centers and hospital which are included under study.

#### Sample size determination

The following assumptions were made to determine the sample size:

The formula to calculate the sample size ;

$$n = (z\alpha/2)^2 p (1-p) / D^2,$$

Where n=number of the study subjects

Z= the standardized normal distribution curve value for the 95% confidence interval (1.96)

P= the level of Knowledge of obstetric danger signs during pregnancy in Tigray region the study areas which is 61.1% have knowledge towards obstetrics danger signs during pregnancy.

d=the desired precision of the estimate (the margin of error between the sample and population, 5%)

$$= (1.96)^2 \times 0.611 (1-0.611) / (0.05)^2$$

$$= 365 + 18 (5\% \text{ None respondent rate}) = 383 \text{ is the final sample size.}$$

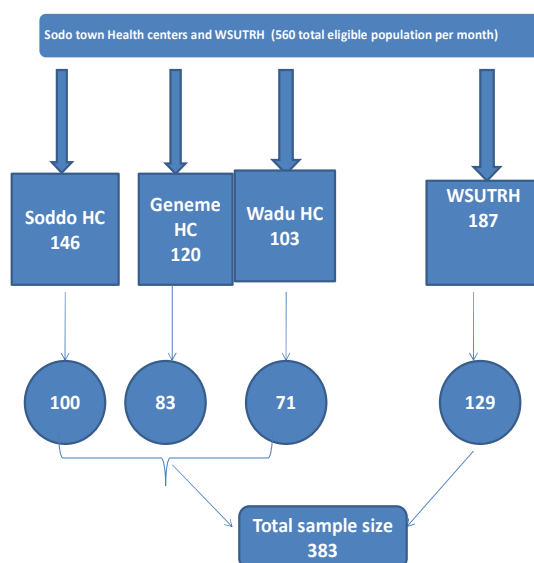


Figure 1 Schematic presentations of Sample allocation Inclusion criteria and Exclusion criteria

Mothers who are mentally and physically capable of were interviewed and those who were volunteer to participate in the study were included and those mothers who were critically sick, pregnant health worker, mothers who are in labor and delivery service were excluded from study.

#### Ethical clearance and consideration

Ethical clearance letter was obtained from Research Ethics Committee (RIC) of Wolaita Sodo University health science and Medical College. Official letter of cooperation was obtained from WSU before conducting the interviews and observation was given to the participants and participants were assured of voluntary participation, confidentiality, anonymity and freedom to withdraw from the study at any time.

#### Data collection and Data quality control

**Data collection tool:** data collection was carried out by structured questionnaire which consisting of two parts: Socio demographic and knowledge towards obstetric danger sign The response was cared or written with pencil in provided space.

#### Procedure for data collection

Data collectors were interviewed the respondents and filled the questionnaires. The collectors were explained unclear questions if necessary during filling of the questionnaire. Finally, the filled questionnaires were collected by principal data collectors; it was tallied manually on tally sheet. The data was analyzed by using scientific calculator. Their statistically significance was assessed with the dependent variables. Finally using international and national data the result was compared, discussed and conclusion and recommendation was forwarded. The questionnaire was first Prepared in English and then translated into Amharic language for better understanding by respondents. The Amharic version of the questionnaire was then translated back to English language to check for its consistency.

Prior to the beginning of data collection each question was reached as to understand what variables were measured in each question and pretest was done by 10% of sample size. Questionnaires were reviewed for completeness at end of administering questions by group members. Students were cross checked the questionnaires for completeness every day.

#### Data processing and analysis

The collected data was checked for its completeness by investigators. The data was tallied using a tally sheet and analyzed manually using scientific calculator after its completeness checked. Then analyzed data was presented using table, charts and texts.

The nature of the study and associated risk and benefit was explained and then written consent was obtained for the participants.

## RESULTS

### Socio-demographic characteristics of the study subjects

A total of 365 pregnant mothers were enrolled in the study giving a response rate of 95.3%. The study participants from selected urban kebeles were participated by volunteer respondents. The mean ages of the respondents were 28 years. 136(37.2%) of the participant were Orthodox, 190 (52%) were protestant, 29(8%) were muslims, 10(2.8%) were others by religion. Majority, 356 (97%) of the women were married and most 316(86.5%)

of the respondents were wolaita by ethnicity. 188(51.5%) were housewives. 128(35%) had completed primary school, 90(24.6%) had completed secondary school. 101 (27.7%) of the respondents had income between 1001 to 1500 birr during the study period. (See Table 1)

**Table1: Distribution of socio-demographic and economic variables of respondents, of selected kebeles of wolaita sodo Town, 2017.**

Variable	Frequency	Percentages
<b>Age in years</b>		
15-19	50	13.7
20-24	122	33.4
25-29	120	32.9
30-39	68	18.6
>40	5	1.4
Total	365	100
<b>Marital Status</b>		
Single	4	1.1
Married	352	96.4
Widowed	5	1.4
Divorced	4	1.1
Total	365	100
<b>Religion</b>		
Orthodox	136	37.3
Protestant	190	52
Muslim	29	8
Others	10	2.7
Total	365	100
<b>Ethnicity</b>		
Wolaita	316	86.5
Gamo	22	6
Amhara	9	2.5
Kambata	7	2
Others	11	3
Total	365	100
<b>Occupation</b>		
Housewife	188	51.5
Governmental employ	89	24.4
Private employ	35	9.6
Own business	53	14.5
Total	365	100
<b>Educational status</b>		
Not able to read and write	30	8.2
able to read and write	11	3
Primary School	128	35.5
Secondary School	85	23.3
Diploma	79	21.6
Degree	32	8.8
Total	365	100
<b>Monthly incomes</b>		
<500	69	19
501-1000	79	21.6
1001-1500	83	22.7
1501-2000	101	27.7
>2000	33	9
Total	365	100
<b>Time taken to reach the nearest health center?</b>		
10-20 minutes	162	44.4
20-30 minutes	203	55.5
Total	365	100

**Obstetric characteristics of the respondents**

From total number of respondents 291(79.7%) had history of 2-4 pregnancies and 35(5.5%) mothers were pregnant for more than four times. Regarding first pregnancy age mothers got their first pregnancy at 20-29years. From the total number of mothers 291(79.7%) had 1-4 number of children. Regarding history of previous of pregnancy, 263(90.4%) had ANC follow up, among those who had ANC follow up 253(96%) had 4 visits and majority of mothers 347(95%) properly receiving ANC follow up for current pregnancy. From those attended ANC 237(81.4%) gave birth at health institutions were 136(69%) of the study participants had got danger signs information from health personnel followed by media ,friends and relatives with respective frequencies of 11.7%, 10.7% and 8.6% respectively.

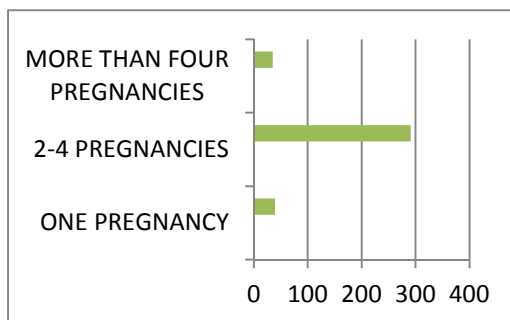


FIGURE 2 Total number of pregnancies among pregnant mothers who had ANC follow up at Sodo town administration health centers and hospitals, April \_May, 2017.

**Obstetric danger signs Knowledge, during pregnancy, child birth and postnatal period in Wolaita Sodo town.**

Out of the 365 respondents, 197(54%) reported that they had got information about obstetric danger sign during pregnancy. From those who had the information 78(39.6%) identified severe vaginal bleeding at any time during pregnancy as danger sign while decreased or absence of fetal movement was indicated by 40(20.3%). Swelling of the body 25(12.7%), feeling of tired 17(8.6%), unusual abdominal pain 14(7.1%), persistent headache and blurred vision 12(6%), persistent back pain 11(5.6 %) were also indicated by the study subjects as danger sign. Foul smelling vaginal discharge was mentioned by 11(5.6%) of the respondents and 14(7.1%) respondents mention other danger signs not mention here. (Table 2).

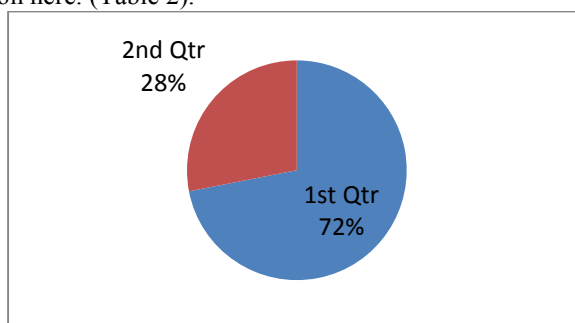


Figure 3: Knowledge of pregnant mothers who had ANC follow up at Sodo town administration health centers and hospitals, April-May, 2017.



**Table 2: knowledge of obstetric danger signs during pregnancy among pregnant mothers in wolaita Sodo town health centers and wolaita Sodo university teaching and referral hospital selected Kebeles of Wolaita Sodo town April-May, 2017.**

Variable	Category	Frequency	Percent
Heard of "obstetric danger signs during pregnancy	Yes	197	54
	No	168	46
	<b>Total</b>	<b>365</b>	<b>100</b>
<b>Mentioned severe bleeding as danger sign during pregnancy</b>	Yes	78	39.6
	No	119	60.4
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned swelling of the body as danger sign during pregnancy</b>	Yes	25	12.7
	No	172	87.3
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned unusual abdominal pain as danger sign during pregnancy</b>	Yes	14	7.1
	NO	183	92.9
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned severe headache or blurred vision as danger sign during pregnancy</b>	Yes	12	6
	No	185	94
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned feeling very tired as danger sign during pregnancy</b>	Yes	17	8.6
	NO	180	91.4
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned absent or decreased fetal movement as danger sign during pregnancy</b>	Yes	40	20.3
	NO	157	79.7
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned persistent back pain as danger sign during Pregnancy</b>	Yes	11	5.6
	No	186	94.4
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned foul smelling vaginal discharge as danger sign during pregnancy</b>	Yes	11	5.6
	NO	186	94.4
	<b>Total</b>	<b>197</b>	<b>100</b>
<b>Mentioned high fever as danger sign during pregnancy</b>	Yes	12	6
	NO	185	94
	<b>Total</b>	<b>196</b>	<b>100</b>
The source of information about obstetric danger signs during pregnancy	Health personnel	136	69
	Relatives	17	8.6
	Friends	21	10.7
	Media	23	11.7
	<b>Total</b>	<b>197</b>	<b>100</b>
Can any woman develop obstetric danger signs during pregnancy?	Yes	14	7
	No	134	68
	Don't know	49	25
	<b>Total</b>	<b>197</b>	<b>100</b>

Variable	Category	Frequency	Percent
Is Information given about obstetric danger sign/s at the clinic?	Yes	150	76.1
	No	47	23.9
	<b>Total</b>	<b>197</b>	<b>100</b>
Experienced any obstetric danger sign during pregnancy	Yes	29	14.7
	No	168	85.3
	<b>Total</b>	<b>197</b>	<b>100</b>
Received antenatal care during last pregnancy (For multi gravid and delivered mothers only).	Yes	263	90.4
	NO	28	9.6
	<b>Total</b>	<b>291</b>	<b>100</b>
Properly receive antenatal care during current pregnancy	Yes	347	95
	No	18	5
	<b>Total</b>	<b>365</b>	<b>100</b>
Number of antenatal visits during current pregnancy	First	54	14.8
	Second	86	23.5
	Third	103	28.2
	Fourth	108	29.5
	>Fourth	14	4
	<b>Total</b>	<b>365</b>	<b>100</b>
Place of delivery during last pregnancy (For multi gravid and delivered mothers only).	Health center	237	81.4
	Home	41	14
	TBA	13	4.6
	<b>Total</b>	<b>291</b>	<b>100</b>

### Knowledge on danger signs during child birth and postnatal period

#### Knowledge on danger signs during child birth

Out of the 365 respondents, 124(34%) reported that they had got information about obstetric danger during child birth and postnatal period. From those who had the information 52(42%) identified severe vaginal bleeding at any time during child birth and postnatal period as danger sign, while prolonged labor 31(25%), mali position 24(19.3%), retained placenta 17(13.7%), were indicated by respondents.

**Table 3: knowledge of obstetric danger signs during child birth among pregnant mothers in Wolaita Sodo town health centers and Wolaita sodo university teaching and referral hospital Apri-May, 2017.**

Variable	Category	Frequency	Percent(%)
Have information about danger sign during labor and child-birth?	Yes	124	34
	NO	241	66
	<b>Total</b>	<b>365</b>	<b>100</b>
Mentioned Sever vaginal bleeding as danger signs	Yes	52	42
	NO	72	58
	<b>Total</b>	<b>124</b>	<b>100</b>
Mentioned Prolonged labor as danger signs	Yes	31	25
	NO	93	75
	<b>Total</b>	<b>124</b>	<b>100</b>
Mentioned Mali position as danger signs	Yes	24	19.3
	NO	100	80.7
	<b>Total</b>	<b>124</b>	<b>100</b>
Mentioned Retained placenta as danger signs	Yes	17	13.7
	NO	107	86.3
	<b>Total</b>	<b>124</b>	<b>100</b>



**Table 4: knowledge of obstetric danger signs during postnatal period among pregnant mothers in wolaita sodo town health centers and wolaita sodo university teaching and referral hospital selected kebeles of Wolaita sodo town Apri-May, 2017.**

Heard information about danger sign during postnatal period	Yes	104	28.5%
	NO	261	71.5%
	Total	365	100%
Mentioned Fever as danger signs	Yes	21	20.2%
	NO	87	79.8%
	Total	104	100%
Mentioned vaginal Bleeding as danger signs	Yes	39	37.5%
	NO	71	62.5%
	Total	104	100%
Mentioned Offensive vaginal discharge as danger signs	Yes	26	25%
	NO	83	75%
	Total	104	100%
Mentioned Loss of consciousness as danger signs	Yes	18	17.3%
	No	91	83.7%
	Total	104	100%

## DISCUSSION

According to this study 54% had heard obstetric danger signs and from those mothers about 150(76.1%) got information from clinic and it is less than the study done in Mekele that 79.6% respondents had information about danger signs of pregnancy (17). This difference might be due to socio-economic and geographical location.

According to this study 69% of the study participants had got danger signs information from health personnel followed by media, friends and relatives with respective frequencies of 11.7%, 10.7% and 8.6% respectively was higher than the study done in Northern Nigeria, about a quarter of respondents in Birnin Gwari cluster and 13% in Kunchi cluster indicated that danger sign songs in the media were the sources of information about safe motherhood. Over 10% of women in Birnin Gwari cluster and almost 30% in Kunchi cluster indicated that friends and neighbors were their sources of information of safe motherhood (37). The differences might be due to cultural and geographic location variations and the area where the study conducted.

Based on this study from those who had the information of obstetric danger signs 39.6% identified severe vaginal bleeding at any time during pregnancy which is lower than the findings in Aleta Wondo district(45.9%) (15), higher than the findings in Burkina Faso (39.4%) and Guatemala (31.0%) (38, 39). This difference might be due to socio-cultural difference and difference of sample size used. According to this study 46% of the study respondents were unable to mention an obstetric danger sign which is more than the study done in Aleta Wondo district 39.1% and Tsegedie district 35.1% and (15,16). The differences might be due to socio economic and health education provided.

This study revealed that the respondents' occupation, educational level, monthly income, first pregnancy age, having ANC follow up, time to nearest health facility, source of information and place of residence were significantly associated with knowledge of obstetric danger signs during pregnancy.

It was found that residence had significant association with knowledge of obstetric danger signs during pregnancy that urban residents had 2.2 times good knowledge than rural respondents [2.2] . This is greater than the study done in Aleta Wondo(15).

Based on this study it was found that the study respondents' occupation was significantly associated with obstetric danger signs knowledge of the respondents: those respondents who were government employee had 2.1 times good knowledge than housewives. It is less than the study done in Egypt (8) found that occupation appeared to influence women's awareness of danger signs of obstetric complications. However, this finding is contrasted with study done in rural Tanzania (19).

In this study, the respondents' educational level seems to play a role in having knowledge of obstetric danger signs that respondents who have had formal education had 2.1 times good knowledge than who have informal education and respondents who have had high level education had 3 times good knowledge than those respondents with informal education. This study is similar with the study done in Egypt (8) and rural Tanzania (19) which found that women with higher levels of education were more aware of danger signs of obstetric complications than women with lower or no formal education. This study found no statistically significant difference in knowledge of danger signs of obstetric danger signs with respondent's number of ANC visits, similar to the study done in Tanzania (19), Pembe et al (2009:6) found that women who made four or more ANC visits were more aware of danger signs of obstetric complications than those who made less than four ANC visits, independent of gestational age at booking. This difference might be due health education given during ANC follow up.

## CONCLUSION

Based on this study finding majority of mothers had got information about obstetric danger sign different areas but few mothers have knowledge about the complications of obstetric danger signs and its severity. are significantly associated with obstetric danger signs knowledge.

The researcher recommend that concerned body should act to increase the knowledge of the community regarding obstetric danger sign.

Researcher recommend also other scholars to conduct in this area because this research only describes the reality but it does not show the factor associate with it

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## Declaration:

We declare that this article is our original work. It was not copied from any other research and all references used for the preparation of this article were cited properly. Regarding fund of research; it was fully covered by researchers.

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