

# **KAP on Obstetrics Danger Signs of Pregnancy Among ANC Attending Pregnant Mother in Gununno Health Center, Gununo Town, Wolaita Zone, Southern Ethiopia April: 2019**

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**Abstract:** Danger signs of pregnancies are a warning signs that women encounter during pregnancy, child birth and postpartum. It is important, to know this warning signs for women and health care providers to rule out serious complications and initiate treatment immediately. Pregnancy is normal process that results a series of both psychological and physiological changes in pregnant mother. However pregnancy is accompanied with some problems and complications which is life threatening for mother and the fetus. Awareness of obstetric danger sign is first step in accepting appropriate and timely health care service. However there is high maternal death in developing countries due the lack of adequate awareness about danger signs of pregnancy. Yet its factors are not well known in Ethiopia where maternal mortality is high. **METHODOLOGY:** Descriptive cross sectional study design was conducted for assessment of KAP of obstetric danger sign among pregnant mother at Gununo town, Gununo health center from May10 to June 20, 2019. The pregnant to be interviewed was selected by systematic random sampling ANC registration book at the time of data collection. The total sample size was 420. Structured interviewer administered questionnaire was used to collect data. Data was entered in to STATA 14 statistical software for analysis. Finally, results were presented in texts, graphs and tables. **RESULT:** A total of 420 pregnant women were included in the study making the response rate 100%. From those who were included in the study 302 (71.56%) identified severe vaginal bleeding at any time during pregnancy as danger sign. In general 248 (58.77%) of the study participants were found to have good knowledge by scoring above the mean value. overall assessment for attitude shows 203 (48.1%) of the study participants had negative attitude by scoring the mean value and below the mean value and 60% were found to have good practice. **Conclusion:** Knowledge on danger signs during pregnancy is low and greater than half of respondents have unacceptable attitude. The quality of ANC care particularly health education should be evaluated. Further studies are recommended to address the gaps of knowledge and attitude.

**Keywords:** Danger Signs, Pregnancy, Obstetric Care, Knowledge

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## **1. Introduction**

Although there have been substantial declines in the annual number of maternal deaths since 1990, an estimated 273,500 women die every year as a result of maternal causes [1]. Pregnancy is defined as the time during which one or more offspring develops in the womb of the mother. Danger signs in pregnancy are warning signs that women encounter

during pregnancy, child birth, and postpartum. It is important to know this warning signs rule out serious complications and initiate treatment immediately. Pregnancy is very important event both socially and medical points of view. Therefore pregnant women should receive special care and attention from community, family, and health care system. The major goal of ANC is to help women to maintain normal pregnancy through, early detection, and treatment of

complications, disease prevention, and birth preparedness [2, 3].

About 800 women die from pregnancy or childbirth related complications around the world every day. In 2013, 289 000 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low resources settings and most could have been prevented. WHO estimates that about 300 million women in the developing countries suffer from short and long-term illnesses due to complications related to pregnancy and child birth [4, 5]. African continent ranks highest maternal mortality ratio in the world by contributing 57% of maternal deaths despite progresses like reduction in maternal mortality by 41% between 1990 and 2010 including decrease in under five mortality in by 33% in the same period. The life time risk of dying from pregnancy related complications in Africa is 1 in 39 women but it is about 1 in 4,700 in industrialized world. Only about one half of 123 million women give birth in a year receive ANC care. In developing countries too few properly equipped health facilities and those that do exist rarely all the care that women and her baby need [4, 6].

Antenatal care (ANC) coverage is a success story in Africa, since over two-thirds of pregnant women (69 percent) have at least one ANC contact. However, to achieve the full life-saving potential that ANC promises for women and babies, four visits providing essential evidence based interventions, a package often called focused antenatal care is required [7].

Danger signs in pregnancy are not actual complications of pregnancy but they are signs and symptoms of possible complication that can even be identified by non-clinical personnel.

Women who attend ANC are more likely to know obstetric danger signs during pregnancy and delivery. WHO also recommendations to raise awareness among women about danger signs of pregnancy during, before, or after delivery to improve early detection of problems and reduce in seeking health care. Therefore ANC a unique opportunity to strengthen awareness about danger signs of pregnancy and encourage institutional delivery [5, 8, 9]. In pregnancy, the health of the baby is entirely depends on the health of the mother. Many conditions which are harmless in normal conditions can dangerous in pregnancy. Vaginal bleeding is common in in the first trimester of pregnancy but it may not be sign of serious condition. Bleeding in 2<sup>nd</sup> and 3<sup>rd</sup> trimester are considered to be more dangerous. Generally vaginal bleeding can be due to abortion, ectopic pregnancy, and APH. Convulsion is another danger sign which is an indicator of life threatening conditions known as eclampsia which is characterized by high BP, proteinuria and seizure. Severe abdominal pain is common and usually harmless caused by false labor, stretching of muscles from gravid uterus and/or bloating. Fever is particularly dangerous in pregnancy because it interferes with normal of fetus which is dependent on protein which is normal only in normal range of body temperature. Reduced fetal movements most women notice fetal movement at 20 th week of gestation most women learn the pattern and frequency of fetal movement. Thus the

diagnosis is mainly dependent on what the mother feels. it may indicate intrauterine fetal death, premature rupture of membrane, abruption placenta and hypoxia. Furthermore, severe headache and body swelling are other danger signs which need early detection. Maternal health is useful indicator to assess not only womens health but also the accessibility, sufficiency, and effectiveness of countries health care system [8, 10–12].

Through a big emphasis was given to raise the knowledge of obstetric danger signs there is a little information about the current level of pregnant mothers' knowledge, attitude and practice about the danger signs of pregnancy. This study provides information to fill gaps of knowledge on danger signs of pregnancy.

## 2. Methodology

Quantitative facility based cross sectional descriptive Study design was applied for assessing Knowledge attitude and practice about obstetric danger signs Of pregnancy in Gununo health center, Wolaita zone, SNNPR, Ethiopia April, 2019. The sample size for this particular study was calculated using a formula for a single population proportion considering the following assumptions. A 95% confidence level, the margin of error (0.05), the proportion of mothers' knowledge of obstetric danger signs in Yirgachaffe town Gedeo Zone SNNP of Ethiopia was ( $p=0.491$ ). Total sample size was 422 including 10% none respondent rate. Knowledge, attitude and practice of mothers on obstetric danger sign, age, number of pregnancy, ethnicity, religion, educational status, income, occupation, ANC follow-up, residence, accessibility of information, number of children, educational status of husband and accessibility of health service. The questionnaire began with a section requesting selected demographics and obstetric characters-tics information. A structured and interviewer administered questionnaires was used to collect data on the socio-demographic variables and knowledge, attitude and practice. The questionnaires were developed in English language and then translated to Amharic. This interviewer administered questionnaire took approximately 15–20 min to complete. A structured questionnaire adapted from the survey tools developed by JHPIEGO Maternal Neonatal Health Program and other published literatures then modified in such a way that it includes some variables to meet the objectives (13). The structured questionnaire was translated in to Amharic and retranslated back to English to ensure accuracy of translation in to Amharic language.

Data was entered, cleaned, checked, edited, and coded in to Epidata version 4.6 and analyzed using STATA version 14 software. To determine the attitude about obstetric danger six questions were used in order to obtain what attitude they have. Mean value was used to classify attitude as positive for those who score above mean value and negative for those who score mean and below the mean value. Mean value was used to classify knowledge and attitude as good for those who score above mean value and

poor for those who score mean and below the mean value. To assess the practice of the study subjects' two questions which directly assess whether a practice is good or bad was used. Those who respond the two questions correctly were considered as good and otherwise poor practice. Categorical variables were summarized as numbers and percentages, whereas normally distributed continuous variables were presented as means and standard deviations by descriptive statistics.

**Operational definitions:**

**Obstetric danger sign:** The danger sign of pregnancy which can be identified by any non-health professional was considered this includes vaginal bleeding, fever, no/decreased fetal movement, Abdominal pain, too fatigue to rise from bed, blurring of vision, swelling of legs and finger, severe headache leaking of fluid from birth canal and foul smelling vaginal discharge [13, 14].

**Good knowledge:** refers to participants who respond knowledge questions with score above the mean value of 17.8.

**Low knowledge:** refers those participants who correctly respond to knowledge questions mean and score below mean value of 17.8.

**Practice;** women's activities in relation to obstetric danger signs

**Good practice:** refers to those who sought medical care immediately and from health institution when first notice danger signs.

**Poor practice:** refers those who sought obstetric care anywhere else than health institution and don't seek medical service immediately from is the when they notice danger signs.

**Positive Attitude;** refers those participants who respond correctly to attitude questions and score above mean value of 14.8.

**Negative attitude;** refers to those participants who respond correctly attitude questions score mean and below the mean value of 14.8.

### 3. Result

**Soicodemographic Characteristics of the Study Subjects**

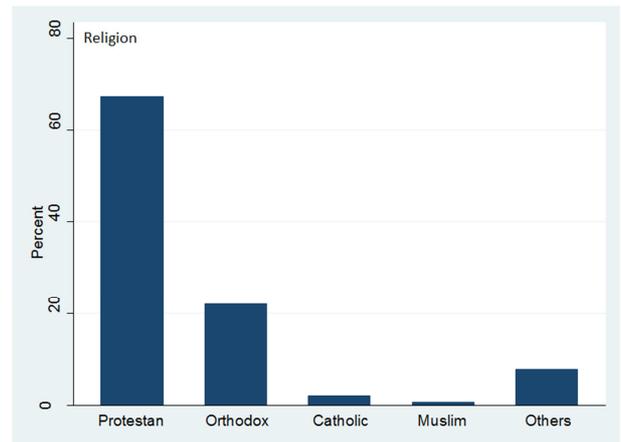
A total of 422 mothers were enrolled in the study giving a response rate of 100%. The mean age of the respondents was 28.5+4.3 years. Most of respondents were located in age category of 25-29years which accounts 43.0% followed by 30-34 years (28%). the maximum age of respondents was found to be 37 year and the least was found to be 18 years (Table 1).

**Table 1.** Age distribution of selected pregnant mothers in Gununo health center gununo town administration April, 2019 (N=422).

Age in year	Frequency	Percentage
15-19	5	1
20-24	66	16
25-29	180	43
30-34	118	28
35-39	53	12

Age in year	Frequency	Percentage
Total	422	100

Out of 422 respondents, most of participants 284 (67.3%) belonged to protestant religious group. Majority of participants (94%) were wolaita in Ethnicity, Gamo represented the proportion of (1.6%) while the least was represented by Oromo (1.1%). By educational status, 183 (43.3%) respondents were Primary.



**Figure 1.** Religious status of selected pregnant ANC attending mothers in gununo health center Gununo health center Gununo town Administration April, 2019.

A total of 422 mothers were enrolled in the study giving a response rate of 100%. Most of respondents were other in occupation category of householder were 194 (45.97%). Out of 422 mothers 398 (94.43%) were married and 185 (43.84%) their income were greater than or equal 2000 (Table 2).

**Table 2.** Occupation, Marital Status, and Income distribution of selected pregnant mothers in Gununo health center gununo town administration April, 2019 (N=422).

Occupation	Frequency	Percent
Private Employment	32	8.92
Governmental Employment	82	19.43
Farmer	30	7.11
Merchant	81	19.19
Householder	194	45.97
Total	422	100.00
Marital Status	Frequency	Percent
Single	8	1.90
Married	398	94.43
Widowed	6	1.42
Divorced	10	2.37
Total	422	100.00
Monthly Income	Frequency	Percent
<=499	4	0.95
500-999	66	15.64
1000-1499	86	20.38
1500-1999	81	19.19
>=2000	185	43.84
Total	100.00	100.00

**Obstetric Characteristics of the Respondents**

From total number of respondents 266 (76.66%) had history of 2-4 pregnancies and 57 (16.43%) mothers were pregnant for more than four times. About 272 (79.77%)

respondents had one to four live children followed by 55 (16.13%) who have 4 live children. From total involved study participants 95 (21.56%), 117 (27.73%), 125 (29.62%) and 89 (21.09%) had ANC follow up one time, two times, three time and four times respectively.

#### Knowledge on Danger signs During Pregnancy

From those who had the information 302 (71.56%) identified severe vaginal bleeding at any time during pregnancy as danger sign while Persistent vomiting especially from 4th month of pregnancy onwards was indicated by 118 (27.96%). Swelling of the body 106 (25.12%), persistent headache and blurred vision 143 (33.89%), leaking of fluid from birth canal 184 (43.6%) were also indicated by the study subjects as danger sign. Foul smelling vaginal discharge was mentioned by 91 (21.56%) of the respondents. The least identified danger sign in this study's participants was unusual severe abdominal pain. 248 (58.77%) of the study participants were found to have good knowledge by scoring above the mean value.

#### Attitude Towards Obstetric Danger Signs

Majority 395 (93.6%) agreed (sum of strongly agree plus agree) of the study respondents were agreed with importance of knowing obstetric danger signs. Regarding the prevention of obstetric danger signs 85.55% of the respondents were agreed. Most 53.32% disagree on the idea that mothers who develop obstetric danger signs should seek help from traditional birth attendants/neighbor/relative. Approximately about half (53.2%) of the study participants disagreed on the idea that every pregnant mother can develop obstetric danger signs. As overall assessment shows 203 (48.1%) of the study participants had negative attitude by scoring the mean value and below the mean value.

#### Practice of obstetric danger signs

Majority of 381 (90.28%) of the study participants have claimed as they did not experience any obstetric danger signs during pregnancy. out of 41 (9.72%) who experienced obstetric danger signs 35 of them had Good practice as seeking medical care immediately from health institution when they faced problem. About 6 of them study subjects who had history of danger signs experience had Poor practice.

## 4. Discussion

Based on this study from those who were enrolled for the study of obstetric danger signs 71.56% identified severe vaginal bleeding at any time during pregnancy which is higher than the findings in Aleta Wondo district (45.9%) [15]. And comparable to findings in yirgacheffe (75.4%) [8, 16, 17]. This difference might be due to socio-cultural difference and difference of sample size used. This study is higher than study conducted in Shashemane stated that (64.7%) [18].

The cross section study conducted in Kenya stated that the mother included under study only (4.7%) know about Obstetric danger which was Vaginal bleeding and the same study conducted in Uganada stated that (52%) as well as study conducted in Ethiopia in Adama city stated 44% and the same study conducted Ethiopia in Dire Dawa stated 24.4 knew about Obstetric danger signs, it's low when compare to this study [16,

18–21]. It due to educational status and Age of the mothers during that time. The study conducted Ethiopia in Gojjam stated that (55.1%) which is low when compare with this study [22].

The qualitative study done in Unguja Island, Zanzibar women acknowledged that, they know some of the danger signs, knowing about the danger signs in advance would help women and their partners implement their birth and emergency plans and they would know when to seek care from the skilled attendants [15]. The study done in Ethiopia show that 98.37% women where know vaginal bleeding and its higher when compare with our study [2].

This is almost compatible with the study conducted in Debre Birhan city that stated 88% the study participants agreed that knowing obstetric danger signs is important to seek medical care on time, and this study conducted in Mizan Aman Public stated 72.6% of mothers had positive attitude on prevention of obstetric danger sign during pregnancy [23].

In this study the women had good attitude 51.9 and it's higher than study conduct in Debre Behran stated that 52.7% had negative attitude [14]. In this majority of 381 (90.28%) of the study participants have claimed as they did not experience any obstetric danger signs during pregnancy its compatible study conduct in Harar [24].

From 41 (9.72%) of the respondents who experienced obstetric danger signs 35 of them had good practice seeking medical care when they faced problem, it's higher than study conducted in the Mezan Aman [22, 25].

## 5. Conclusion

Knowledge on danger signs during pregnancy is low and greater than half of respondents have unacceptable attitude. The quality of ANC care particularly health education should be evaluated. Further studies are recommended to address the gaps of knowledge and attitude. Women should be empowered with good awareness of obstetric danger signs (ODS) of pregnancy, delivery and postpartum because every pregnancy can be faced with risks [21].

Based on the findings of this study, it can be concluded that there is poor knowledge on danger signs of pregnancy and greater than half of respondents have unacceptable attitude. Majority of the study respondents were agreed with importance of knowing obstetric danger signs. Regarding the prevention of obstetric danger signs 52.5% of the respondents claimed as acceptable activity.

Finally, even if knowledge and attitude of study participants are not satisfactory (57% poor knowledge and 53.2% negative attitude) the practice of the study participants who had experienced obstetric danger signs during pregnancy was good. According to this study majority had good practice. The information should be given to individual women and their families so that they can collaborate in situation where care is needed. Different posters and banners that have messages about danger signs during pregnancy should be prepared in simple terms for easy understanding even among illiterate people.

The quality of health education at the health facility should

be checked in context. The content of health education and how do health workers disseminate the correct information should be evaluated. Factors such as shortages in staff and inadequate medical supplies can be reduced by producing an adequate number of health professionals and increase budget allocation for health services. The government should increase the number of skilled health care workers at all levels of health care facilities so as to improve the availability of quality services. Lastly, health professionals who are the majority in most health facilities should be involved in policies and procedures making. These policies should emphasize the best way of interaction among mothers and service providers which is important in health information dissemination. This will ultimately empower women with the required knowledge and to have appropriate attitude for danger signs of pregnancy.

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