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KNOWLEDGE OF PREGNANT WOMEN ABOUT OBSTETRIC DANGER SIGNS IN A TERTIARY CARE HOSPITAL AT PESHAWAR, KHYBER PAKHTUNKHWA, PAKISTAN

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1. Abstract:

1.1. Background

The danger signs of pregnancy are the leading cause of death all over the world. It imposes significant burden on health care system because of high mortality and morbidity rates.

1.2. Objectives

1. *To assess the knowledge about pregnancy related danger signs among pregnant women visiting OPD of Khyber Teaching Hospital (KTH).*
2. *To assess the frequency of pregnancy related danger signs among pregnant women visiting OPD of Khyber Teaching Hospital (KTH).*
3. *To make recommendations regarding community awareness and reducing morbidity and mortality rates due to pregnancy related danger signs.*

1.3. Methodology

It was a cross sectional descriptive study conducted in gynecology ward and OPD of Khyber Teaching Hospital, Peshawar from December 2018 to April 2019. Sample size was taken as 250 through non- probable convenient sampling. Data was collected through a semi-structured questionnaire with open and close ended questions. Face to face interviews were conducted after taking informed verbal consent. Data was analyzed in SPSS for windows version 20. It was presented in the form of percentages and frequencies and was prepared in the form of tables, graphs and texts.

1.4. Results

Knowledge of major obstetric danger signs (61.5%) among pregnant women was found to be better as compared to the minor obstetric danger signs (57.4%). Among major danger signs, the knowledge about vaginal bleeding and lack of fetal movements in pregnant females was the highest, followed by pre- eclampsia and abdominal pain while high percentage of study subjects had knowledge of anemia as minor obstetric danger sign. Women having higher literacy rate, more antenatal visits and having greater number of pregnancies had better knowledge of obstetric danger signs. Anemia 48 (19.2%) was the most commonly occurring danger sign in current pregnancy followed by 25 (10%) pre-eclampsia and 21 (8.4%) hyperemesis gravidarum while lack of fetal movements 9 (3.6%) was the least common.

1.5. Conclusion

Analysis of collected data conclude that knowledge of major obstetric danger signs (61.5%) among pregnant women is found to be better as compared to the minor obstetric danger signs (57.4%). Regarding the frequency of occurrence of obstetric danger signs, it is concluded that anemia is most frequent (19.2%) while lack of fetal movements the least (3.6%).

Keywords: *Anemia, vaginal bleeding, pre-eclampsia, abdominal pain, hyperemesis gravidarum, lack of feral movements.*

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2. INTRODUCTION:

The danger signs of pregnancy threaten the life of the mother or her fetus. About 66,000 women die annually from preventable pregnancy-related causes, mainly due to complications during pregnancy and childbirth, which are often avoidable. Most deaths occur in low-resource settings [1]

Given that a significant percentage of maternal mortality and morbidity is linked to pregnancy, it is essential to investigate the contributing factors. While most women experience normal pregnancies, some face life-threatening problems. Evidence shows that 75% of maternal deaths are due to direct obstetric complications like hemorrhage, sepsis, hypertensive disorders, obstructed labor, prolonged labor, and unsafe abortion. [1-5]

Recognizing early signs of danger during pregnancy and delivery is crucial for women to obtain expert obstetric care. Limited understanding of risk factors and complications leads to delays in seeking care [6].
In 2013, around 289,000 women died from pregnancy and childbirth-related issues globally. The majority (62%) of maternal deaths occur in Sub-Saharan Africa [9] with high ratios in countries like Tanzania at 556 deaths per 100,000 live births [10]. Other countries in the East African region with a high maternal mortality ratio include Kenya (510/100,000 live births) and Uganda (343/100,000 live births) [12] Major causes of maternal deaths include severe bleeding, infections, hypertension, obstructed labor, and unsafe abortion. According to WHO, half a million women die annually from pregnancy-related causes, with 99% of these deaths occurring in developing countries [9-11].

In Pakistan, where the maternal mortality rate (MMR) is 178 per 100,000 live births [7] antenatal care coverage from skilled providers stands at 73.1%. However, only 37.1% of women complete their four antenatal visits, 48.2% of deliveries occur in health facilities, and just 52% of women deliver with a skilled provider present [8] This low utilization of skilled health services may be attributed to a lack of understanding of obstetric danger signs or strict adherence to cultural beliefs and practices. To promote greater use of skilled maternal care, it is crucial to understand women's beliefs regarding such care during pregnancy. This understanding can inform the creation of behavior change messages aimed at increasing healthcare service utilization among pregnant women, particularly in rural areas.

2.1. Rationale

There are limited studies documented in Khyber Pakhtunkhwa (KPK), specifically in Peshawar, concerning the obstetric danger signs of pregnancy. Therefore, the rationale for this study was to assess the knowledge and practices related to the recognition and management of obstetric danger signs among pregnant women at Khyber Teaching Hospital. This research not only contributes to the small number of existing studies on the prevalence of obstetric danger signs in pregnant women in Peshawar but also aids in raising awareness and educating women on how to recognize, avoid, and manage these dangers.

3. METHODOLOGY:

3.1. Study Design

It was a cross sectional descriptive study.

3.2. Study Area

Study was conducted in gynecology ward and OPD, Khyber Teaching Hospital, Peshawar.

3.3. Study Population

Pregnant and post-delivery female patients who were either admitted in ward or visiting OPD were interviewed.

3.4. Time Frame

Study was completed in 5-month duration from Dec 2018-April 2019 after approval of synopsis.

Stage	Estimated time	Start time	End Time
Research Design and Planning	30 days	1st Dec 2018	2nd Jan 2019
Data Collection	30 days	3rd Jan 2019	30th Jan 2019
Data Analysis	50 days	1st Feb 2019	20th March 2019
Writing up	30 days	25th March 2019	25th April 2019

3.5. Sampling

3.5.1. Sample size

According to a study conducted about knowledge of obstetric danger signs and birth preparedness in rural Uganda, only 19% had knowledge of 3 or more key danger signs [19].

Prevalence=19%

Absolute error/Precision =5%

Sample size is calculated as (1.96)2 [0.19x(1-0.19)]/(0.05)2=236 For convenience the total sample size was taken 250.

3.5.2. Sampling technique

Non-probable convenient sampling.

3.6. Variables

3.6.1. Lack of Fetal Movements

No fetal movements or kick for more than 12 to 24 hours after week 26 [12].

3.6.2. Pre-Eclampsia

Blood pressure ≥140/90 mmHg [13].

3.6.3. Eclampsia

Having seizures in third trimester of pregnancy due to pregnancy induced hypertension, loss of consciousness, swelling of face and hands [14].

3..6.4.Vaginal Bleed

Any bleeding or spotting occurring up to three times in pregnancy classified as 1st, 2nd and 3rd trimester bleeding. [15].

3.6.5. Anemia

Females taking iron supplements [16].

3.6.6. Abdominal Pain

Dull abdominal pain with history of trauma. [17]

3.6.7. Hyperemesis-gravidarum

Pregnancy complication characterized by severe nausea, vomiting and weight loss [18].

3.6.7. Fits in Pregnancy

Most seizures during pregnancy occur in women who already have epilepsy. During pregnancy, most women will continue their previous level of seizures control, although 15-30% may experience an increase in seizures. Pregnancy induced changes in anti-epileptic drug pharmacokinetics are a major factor affecting changes in seizures control during pregnancy. Structural and metabolic changes precipitate new onset seizures during pregnancy.

3.6.8. Unconsciousness in Pregnancy

A pregnant woman may be unconscious for a few seconds as in fainting or for longer periods of time.Women who become unconscious in pregnancy don't respond to loud sounds or shaking. They may even stop breathing or their pulse may become faint.

3.7. Inclusion Criteria

Pregnant and postpartum females who were willing to participate in studies

3.8. Exclusion Criteria

Pregnant women with deranged mental status and those who were not willing to answer.

3.9. Data Collection Tool

Data was collected through a semi-structured questionnaire with open and close ended questions. Face to face interviews were conducted after taking informed verbal consent.

3.10. Pilot Study

The questionnaire was translated from English to Urdu and then back from Urdu to English by the experts in the field and necessary changes were made in the questionnaire and a pilot study was conducted in another hospital in Peshawar to pinpoint the discrepancies in the proposed methodology/questionnaire. Variables were coded and data were entered on daily basis in SPSS for windows version 20.

3.11. Data Analysis Technique

The collected data was analyzed in SPSS for windows version 20.

3.12. Data Presentation

Categorical data was presented in the form of percentage and frequency. Data was prepared in the form of tables, graphs and text.

3.13. Ethical consideration

Each selected subject was informed and consent was obtained. Ethical approval was taken from Institutional Review and Ethical Board of Khyber Medical College . Confidentiality of subjects was maintained.

4. RESULTS:

4.1. General Demographic Information

4.1.1. Age of Study Subjects

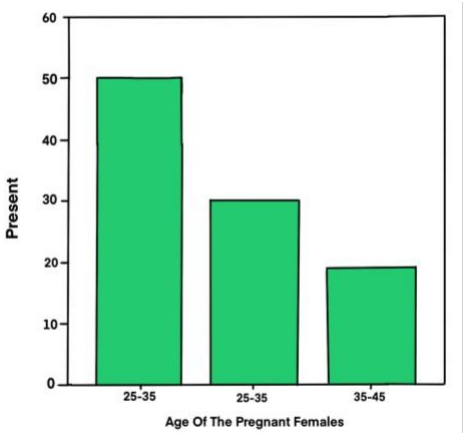
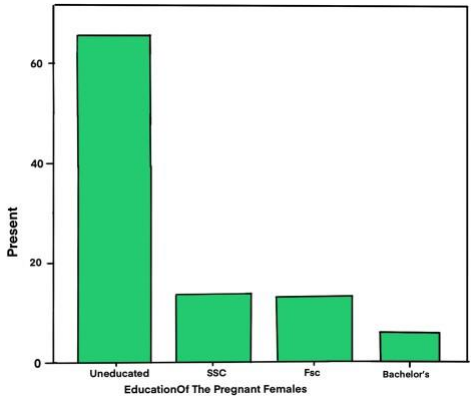


Figure l: Age of the pregnant women visiting Gynae Wards and OPD of Khyber Teaching Hospital, Peshawar

Out of 250 pregnant females 130 (52%) were between the age of 15-25 years 76 (30.4%) were between the age of 26-35 years and 44 (17.6%) were between the age of 36-45 years.

4.1.2. Educational level of Study Subjects



Ssc: Secondary school certificate, Fsc: Faculty of science

Figure 2: Education of the Pregnant Women Visiting Gynae Wards and OPD of Khyber Teaching Hospital,Peshawar

The graph shows that out of 250 study subjects 165(66%) were uneducated while 85(34%) were educated. Among the educated study subjects 36(14.4%) had SSC qualification, 35(14%) had FSC qualification and 14(5.6%) had bachelors qualification.

4.1.3. Education level of the Husbands of the Pregnant females

Ssc: Secondary school certificate, Fsc: Faculty of science

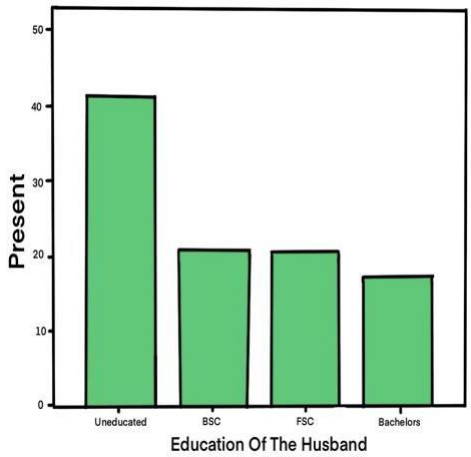


Figure 3: Education level of the Husbands of the Pregnant women visiting Gynae Wards and OPD of

Khyber Teaching Hospital, Peshawar.
Out of 250 study subjects' husbands,103 (41.2%)were uneducated, 147 (58.8%) were educated. Among the educated ones, 52 (20.8%) were SSC qualified, 52 (20.8%) were FSC qualified and 43 (17.2%) were bachelors qualified.

4.1.4. Occupation of the Pregnant females

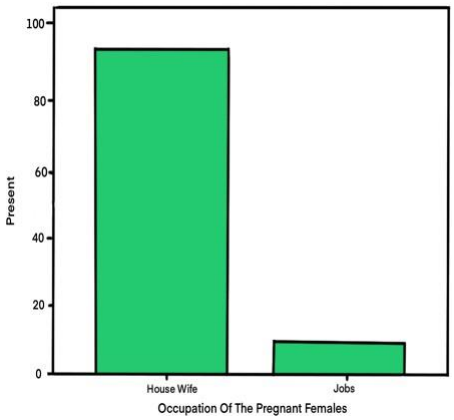
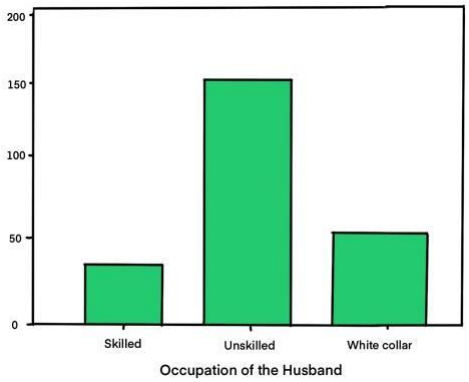


Figure 4: Occupation of the Pregnant women visiting Gynae Wards and OPD of Khyber Teaching Hospital, Peshawar
Out of 250 study subjects 235 (94%) were house wives and 15 (6%) were doing job.



4.1.5. Occupation of the Husband of Pregnant women

Figure 5: Occupation of the Husband of the Pregnant women visiting Gynae Wards and OPD of Khyber Teaching Hospital, Peshawar
Out of 250 study subjects' husbands, 36 (14.4%) were skilled, 158 (63.2%) were unskilled and 56 (22.4%) were white collars.

4.1.6. Number of Pregnancies of the Study Subjects

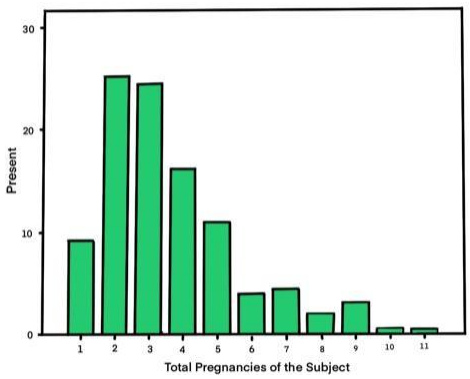


Figure 6: Number of Pregnancies of the Study Subjects visiting Gynae Wards and OPD of Khyber Teaching Hospital, Peshawar.
This graph shows that majority of the pregnant ladies had total number of pregnancies in the range of 2-5.

4.2. Place of Last Delivery of Pregnant Women

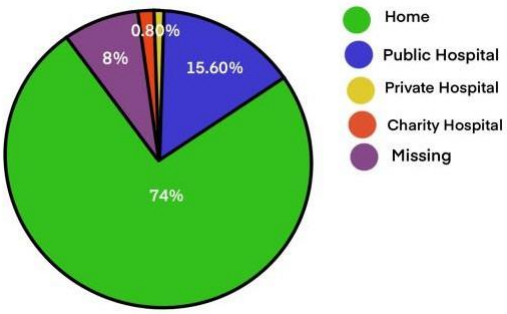


Figure 7: Place of Last Delivery of Pregnant Women visiting Gynae Wards and OPD of Khyber Teaching Hospital, Peshawar.

This figure shows that majority of the pregnant females delivered in public hospitals during their last pregnancies.

4.3. No of Ante-natal Visits in Current Pregnancy

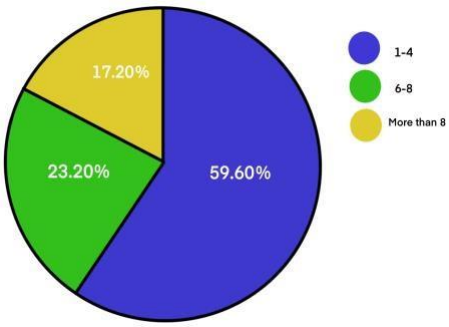


Figure 8: Number of Antenatal Visits in Current Pregnancy by the Pregnant Women

This figure shows hat majority of the pregnant females visited 1-4 times in current pregnancy while more than 8 visits were least common among the study subjects.

4.4. Delivery Advise at Hospital in Current Pregnancy

During our research it was noted that majority of the pregnant females were advised to deliver at hospital.

4.5. Medical Care Approach for Danger Signs During Previous Pregnancies

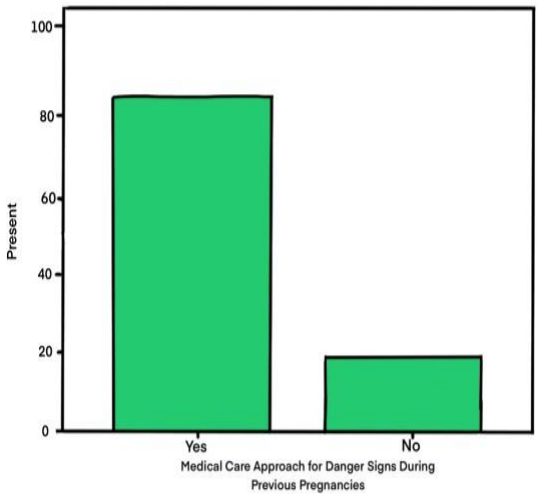
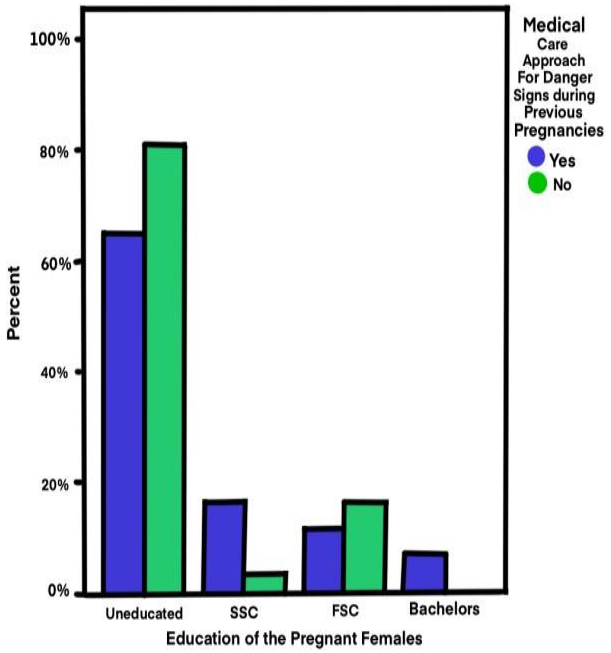


Figure 9. Medical Care Approach by the Pregnant Females for Danger Signs they Encountered During Previous Pregnancies

Graph shows that majority of the study subjects approached for medical care for danger signs during previous pregnancies.

4.6. Relation of Education Level of Pregnant Women with Medical Care Approach for Obstetric Danger Signs

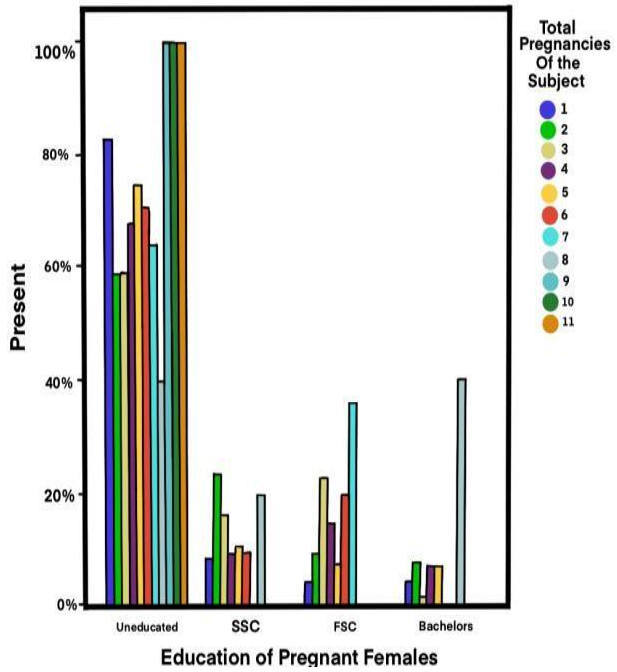


Ssc: Secondary school certificate, Fsc: Faculty of science

Figure 10: Relation of the Education Level of the Pregnant Women with Medical Care Approach for Danger Signs Encountered During their Last Pregnancies.

This graph shows that approach for medical care was practiced more among the educated subjects than the uneducated ones.

4.7. Relation of Education Level of Pregnant Women with Total No of Pregnancies

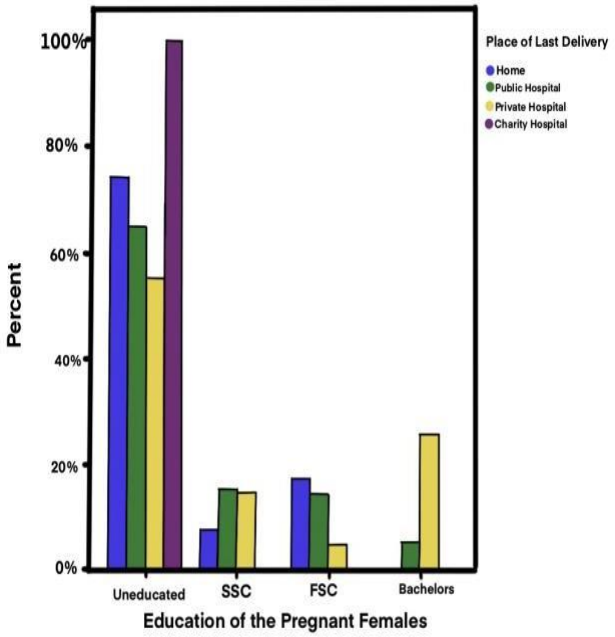


Ssc: Secondary school certificate, Fsc: Faculty of science

Figure 11: Relation of Education Level with the Total Number of pregnancies in Pregnant Women Visiting the Gynae Wards and OPD of KTH, Peshawar

This graph shows that number of pregnancies among educated women were much lesser compared to the uneducated ones.

4.8. Relation of the Education Level of the Pregnant Women with the Place they Selected for Last Delivery



Ssc: Secondary school certificate, Fsc: Faculty of science

Figure 12. Relation of the Education Level of-the Pregnant Women with the Place they Selected for Last Delivery.

This graph shows that most of the uneducated pregnant ladies delivered either at charity hospital or at home while most of the educated pregnant ladies delivered in private hospitals.

4.9. Relation of the Age of the Pregnant Women with Presence of Danger Signs in Present Pregnancy

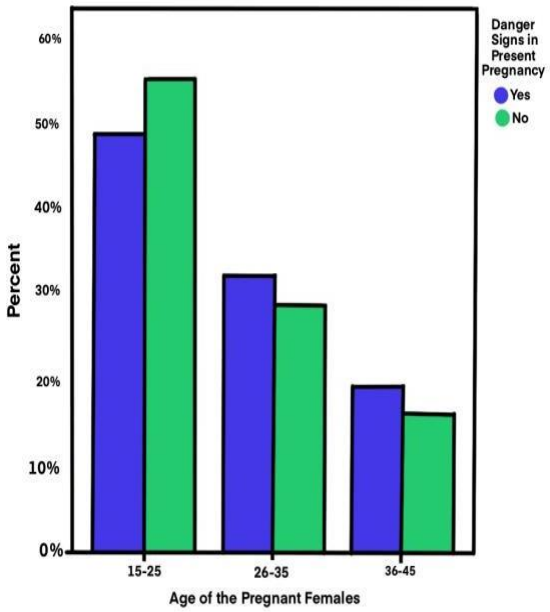
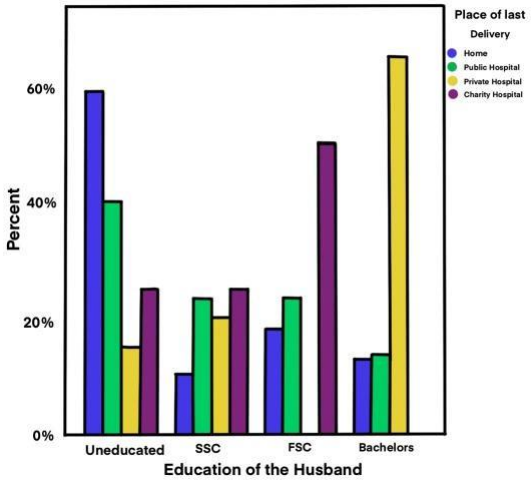


Figure 13: Relation of the Age of the Pregnant Women in Presence of Danger Signs in Present Pregnancy

This graph shows that the danger signs in present pregnancies were more common in young pregnant females compared to the females of the age group of 26-35 years and 36-45 years.

4.10. Relation of the Education Level of the Pregnant Females' Husbands with the Place They Selected for Delivery During the Last Pregnancy



Ssc: Secondary school certificate, Fsc: Faculty of science

Figure 14: Relation of the Education Level of the Pregnant Females' Husbands The practice of with The Place They Selected for Delivery During the Last Pregnancy

The practice of home deliveries was more common in wives of uneducated men aıs compared to the educated men.

4.11. Knowledge of Pregnant Women Visiting Gynae Wards and OPD of KTH Peshawar About Various Minor and Major Danger Signs of Pregnancy

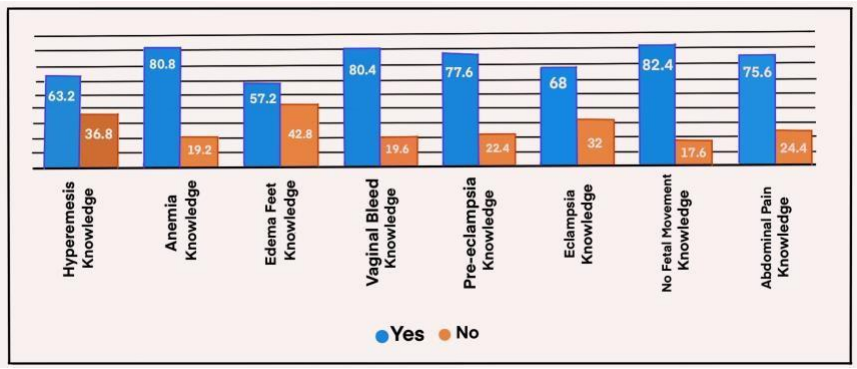


Figure 15: Knowledge of Pregnant Women Visiting Gynae Wards and OPD of Khyber Teaching Hospital, Peshawar About various Minor and Major Danger Signs of Pregnancy

Graph shows that a large proportion of the subjects under study had knowledge about the different major and minor danger signs of pregnancy.

4.12. Obstetric Danger Signs ıı Current Pregnancy

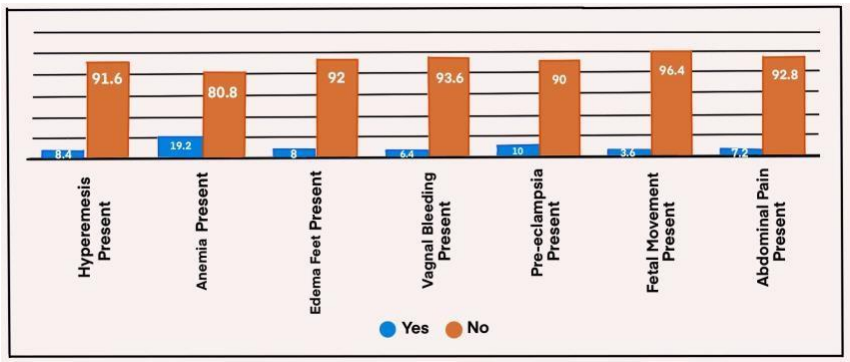


Figure 16: Obstetric Danger Signs in Current Pregnancy

The above graph indicates that anemia 48(19.2%) was the most commonly occurring danger sign in current pregnancy followed by 25(10%) pre-eclampsia and 21(8.4%) hyperemesis while lack of fetal movements 9(3.6%) was least common.

4.13. Obstetric Danger Signs in Previous Pregnancy

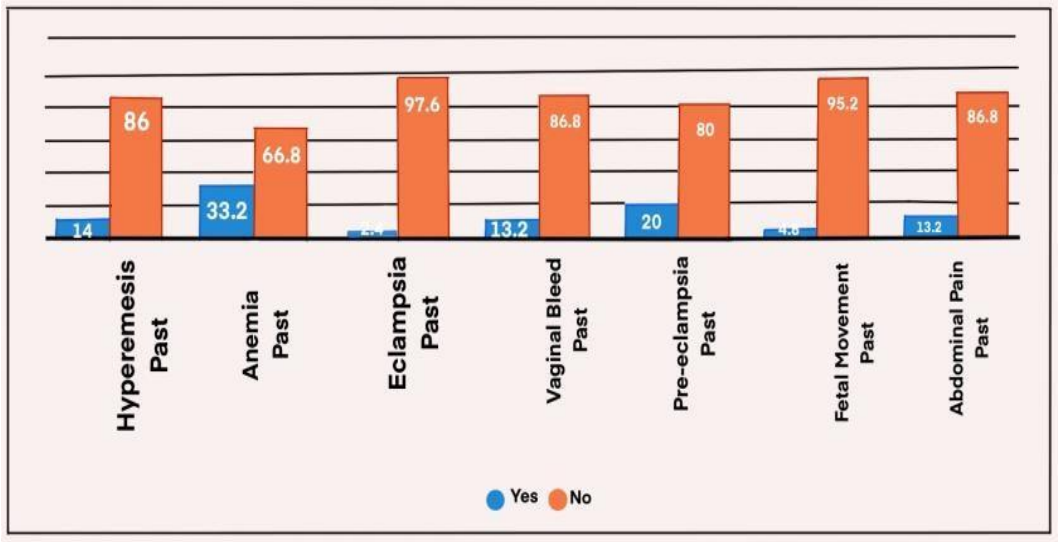


Figure 17: Obstetric Danger Signs in Previous Pregnancy

The graph indicates that anemia 83(33.2%) was the most commonly occurring danger sign in past pregnancy followed by 50(20%) pre-eclampsia and 35 (14%) hyperemesis gravidarum and lack of fetal movements 12(4.8%) was the least common.

4.14. Relation of the Education of Pregnant Women with the Knowledge About Obstetric Danger Signs

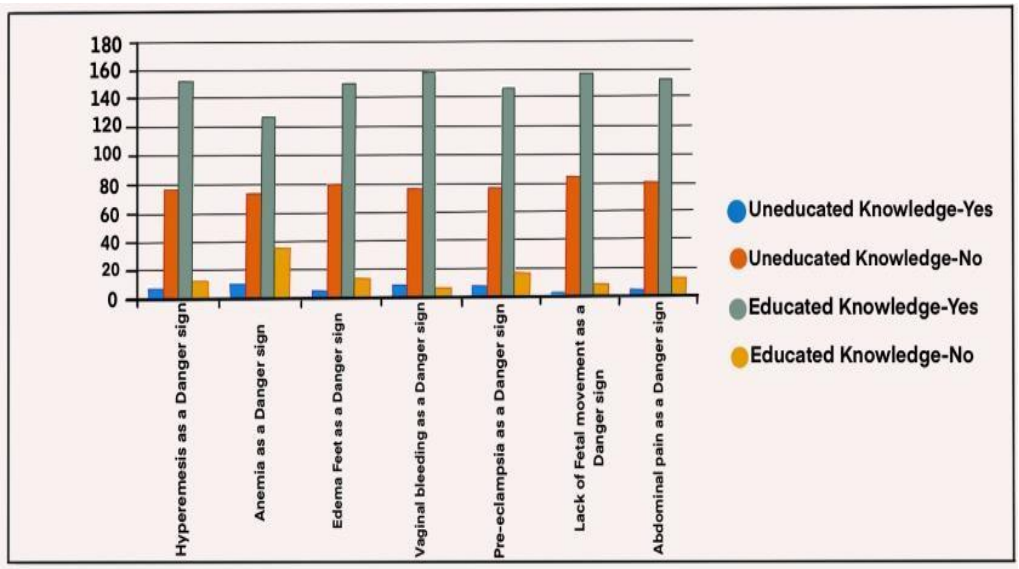


Figure 18. Relation of the Education of Pregnant Women with the Knowledge about Obstetric Danger Signs

The graph indicates a direct relationship between knowledge of obstetric danger signs and the education level of women. Specifically, educated women demonstrate greater awareness of these danger signs compared to their uneducated counterparts.

4.15. Relation of the Number of Antenatal Visits in Current Pregnancy with the Knowledge about Obstetric Danger Signs

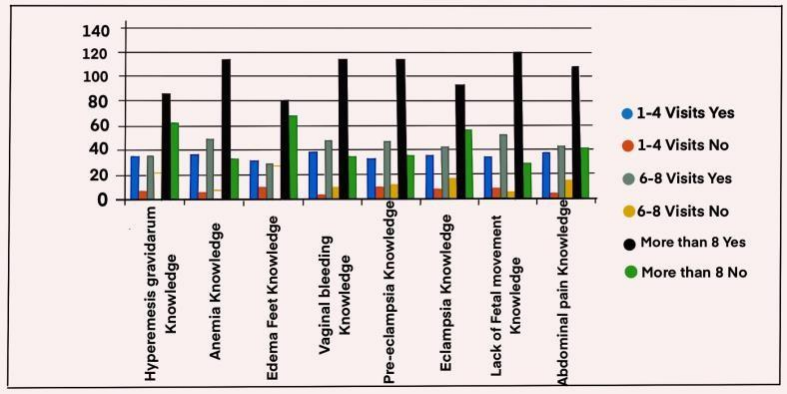


Figure19. Relation of the Number of Antenatal visits in Current Pregnancy with the Knowledge About Obstetric Danger Signs.

The graph indicates that women who attended more antenatal visits during their current pregnancy had greater knowledge of obstetric danger signs, while those with fewer visits had less awareness.

4.16. Relation of Seeking Medical Care in Past Pregnancies with Knowledge about Obstetric Danger Signs

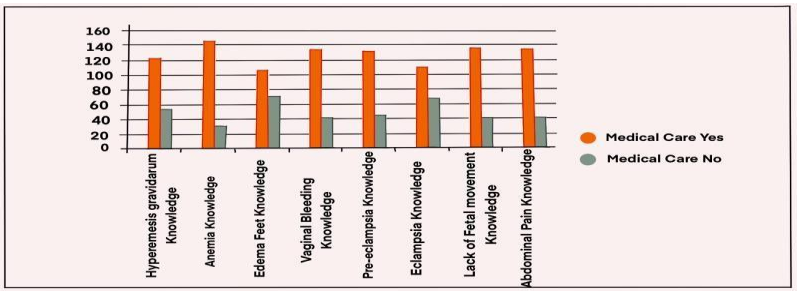


Figure 20: Relation of Seeing Medical Care in Past Pregnancies with Knowledge about Obstetric Danger Signs

This graph shows that those females who approached medical care in past pregnancies had better knowledge about obstetric danger signs as compared to those who didn't.

6.17. Relation of the Number of Pregnancies of Females with the Knowledge About Obstetric Danger Signs.

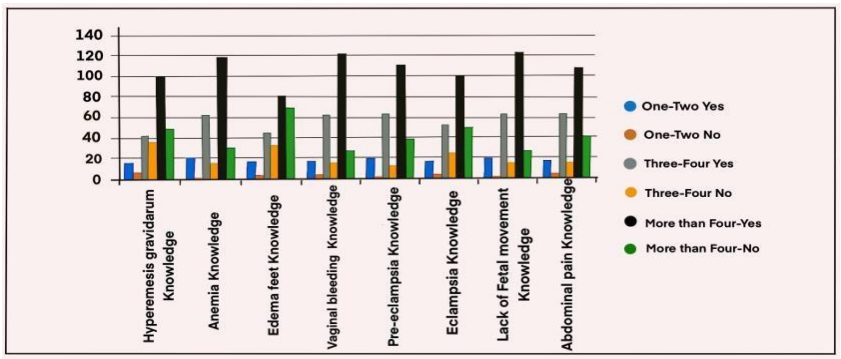


Figure 21: Relation of the Number of Pregnancies of Females with the Knowledge About Obstetric Danger Signs

This graph shows that knowledge about obstetric danger signs improved with increasing number of pregnancies ie. the women who had pregnancies more than four had better knowledge about obstetric dangər signs as compared to the females who had less number.

5. DISCUSSION

Obstetric danger signs are the leading cause of death all over the world, causing high rates of morbidity and mortality. Over the course of our research, we conducted a cross- sectional study in 250 pregnant females visiting Gynecology OPD and wards of Khyber Teaching Hospital, Peshawar to assess their knowledge about obstetric danger signs and the frequency of occurrence of obstetric danger signs through a semi- structured questionnaire.

Our study found that 183 out of 250 subjects

(73.15%) knew the major and minor obstetric danger signs, while 67 (26.85%) did not. A similar study in Mekelle city, Ethiopia in 2014 showed that 82.5% of pregnant women visiting antenatal care were aware of at least two danger signs. Awareness was high for one danger sign but low for two or more [20], indicating a negative correlation between illiteracy rates and knowledge of obstetric danger signs. The knowledge about minor and major danger signs was assessed individually and results are as follows:

Study results indicated that 202 (80.8%) of the study subjects were knowledgeable about anemia as a minor danger sign of pregnancy, while 48 (19.2%) were not. A comparable study in Malawi assessed maternal knowledge among 629 randomly selected women (mean age 27.9 years), revealing that 96.6% were aware of anemia, with at least two-thirds understanding its causes, prevention methods, and treatments [25].

Anemia prevalence among the women studied is attributed to cultural, nutritional, and economic factors. Nutritional issues stem from inadequate dietary intake and frequent pregnancies without sufficient intervals. Economic factors include poverty, family dynamics, and high food prices.

Knowledge about Hyperemesis gravidarum was found in 158 (63.25%) study subjects, while 92 (36.8%) lacked this knowledge. No previous studies on this specific danger sign have been conducted Regarding edema of feet, 143 (57.2%) had knowledge, whereas 107 (42.8%) did not. A study of 384 women from two health centers in Kinondoni Municipality, Dar es Salaam, Tanzania, identified the most commonly known pregnancy danger signs as vaginal bleeding (81%), swelling of the fingers, face, and legs (46%), and severe headache (44%). [27]

Study results showed that 201 (80.4%) had knowledge about vaginal bleeding being a major danger sign of pregnancy while 49 (19.6%) had no knowledge. A similar study conducted in Tesegedie district, Tigray region, Ethiopia in 2013 assessed knowledge about obstetric danger signs. Among 485 women, vaginal bleeding was the most commonly mentioned danger sign of pregnancy (49.1%). Two hundred eighty-five (58.8%) respondents mentioned at least two danger signs of pregnancy, whereas one hundred seventy (35.1%) did not know any danger signs [21].

Knowledge about pre-eclampsia was present in 194 (77.6%) and absent in 56 (22.4%). In a study conducted in the United States, 112 pregnant patients were interviewed to determine their preeclampsia knowledge. Patients correctly answered only 43% of the 25 questions assessing preeclampsia knowledge. Additionally, only 14% of the patients provided a definition that accurately reflected the syndrome [26]

Knowledge about eclampsia was present in 170 (68%) participants and absent in 80 (32%). No prior study addressed this danger sign.

Knowledge about lack of fetal movements was present in 206 (82.4%) participants and absent in 44 (17.6%). A study at three maternal clinics in Stockholm, Sweden found that 93 (89%) women were positive towards Mindfetalness, with high compliance at 78 (75%). Negative perceptions were held by 11% of women [26]

Knowledge about abdominal pain was present in 189 (75.6%) participants and absent in 61 (24.4%). A study in Ethiopia on 422 pregnant mothers showed that 79.6% knew about pregnancy danger signs; 61.9% had information about vaginal bleeding, followed by 41.9% aware of sudden fluid gush before labor.

Severe unusual abdominal pain was the least known danger sign, mentioned by 19% of mothers. [28]

Our research concluded that during the current pregnancy, study subjects encountered the following danger signs:
Anemia was the most common danger sign, appearing in 48 (19.2%) of pregnant females, while it was absent in 202 (80.8%). Pre-eclampsia, the second most common danger sign, was present in 25 (10%) and absent in 225 (90%). Hyperemesis gravidarum was observed in 21 (8.4%) subjects and absent in 229 (91.6%). Fetal edema was found in 20 (8%) and absent in 230 (92%). Abdominal

pain was present in 18 (7.2%) and absent in 232 (92.8%). Vaginal bleeding occurred in 16 (6.4%) subjects, while it was absent in 234 (93.6%). The least common danger sign, lack of fetal movements, was found in 9 (3.6%) and absent in 241 (96.4%) pregnant females. No prior research had investigated these findings.

Abdominal pain is relatively common but may not always manifest. Our study also concluded that during past pregnancies, the occurrence of danger signs among subjects was as follows: Anemia was the most common, found in 83 (33.2%), followed by pre-eclampsia in 50 (20%). The least common danger signs were fetal movement (12 or 4.8%) and edema in feet (6 or 2.4%). Again, no previous research was conducted on these findings.

From our research on 250 subjects, we determined that 85 (34%) were educated while 165 (66%) were uneducated. Among the uneducated, 6 (2.3%) were aware of major danger signs and 8 (3.3%) knew about minor danger signs. Among the educated women, 154 (61.5%) were aware of major danger signs and 144 (57.4%) knew about minor danger signs. This indicates that the level of knowledge is directly proportional to literacy rates. A study conducted in the United States concerning the knowledge of danger signs indicated that individuals with higher literacy rates provided a greater proportion of correct answers on the questionnaire [24] Another study conducted at DR KLES Prabhakar Kore Hospital, Belgaum, aimed to find associations between mothers' knowledge and selected variables. It revealed that age, educational status, occupational status, income, religion, parity, and area of residence were associated with knowledge scores at the 0.05 level of significance [23]

Research conducted on 250 subjects indicates that knowledge of obstetric danger signs is directly proportional to the number of antenatal visits. Specifically, among females who made 1-4 antenatal visits, 37 (14.25%) were knowledgeable about these signs. This percentage increased to 43 (17.4%) for those with 4-8 visits and 104 (41.55%) for those with 8 or more visits. A study in Papua New Guinea across Hiri District (Central Province), Karkar (Madang Province), and Asaro (Eastern Highlands Province) revealed that almost all women (95.2%; 459/482) attended at least one antenatal care session, and 68.2% attended four or more sessions. Of the women who attended antenatal clinics, 53.6% (246/459) reported receiving information about pregnancy danger signs from a healthcare provider, with 60.2% (148/246) able to recall at least one sign. Additionally, 16.4% (35/213) of women who did not receive information still reported pregnancy-related danger signs. Among the 183 women who identified danger signs, 39.3% (72/183) reported vaginal bleeding, while 36.6% (67/183) noted swelling of the face, legs, and arms [27]

Our research also found that women with more pregnancies demonstrated greater knowledge of obstetric danger signs. For instance, among women with more than 8 pregnancies, 107 (42.9%) had good knowledge, compared to 57 (22.6%) for those with 3-4 pregnancies, and 19 (7.6%) for those with 1-2 pregnancies. A positive correlation between the number of pregnancies and knowledge was observed.

Furthermore, an Ethiopian study showed women with 4-6 pregnancies were 2.976 times more likely to be aware of obstetric danger signs than those with 1-3 pregnancies. This study highlighted that awareness of danger signs during pregnancy, delivery, and the postnatal period was high for a single sign but low for two or more, influenced by antenatal follow-up [20]

Additionally, our research found that out of those who sought medical care for danger signs in past pregnancies, 128 (51.15%) had knowledge of these signs, whereas 122 (48.85%) did not. This demonstrates a direct relationship between knowledge of danger signs and seeking medical care. A study in Uttah found that hearing about obstetric danger signs from healthcare providers, having symptoms described by them, and having a history of preeclampsia (PE) were significantly associated with higher knowledge scores regarding obstetric danger signs [22]

Finally, our study observed that higher educational qualifications correlated with increased knowledge of obstetric danger signs and fewer encounters with such signs. However, it was noticed that despite having knowledge, some women might not seek medical help. The frequency of doctor visits did not satisfactorily increase with the frequency of danger signs.

6. CONCLUSION:

Analysis of the collected data indicates that knowledge of major obstetric danger signs (61.5%) among pregnant women is higher than that of minor obstetric danger signs (57.4%). The results show an increase in knowledge about obstetric danger signs with attendance at antenatal visits and a greater number of pregnancies. In terms of the frequency of occurrence, anemia is the most common obstetric danger sign (19.2%), while lack of fetal movements is the least frequent (3.6%). Data also suggests that younger pregnant women experience obstetric danger signs more frequently, indicating a potential association between age and

the occurrence of these signs.

7. REFERENCES:

1. WHO, UNICEF, Unfpa WBG, Division and the UNP. Trends in maternal mortality 1990 to 2015. [Online] 2015[cited 2019 MARCH 6]; https://data.unicef.org/wp-content/uploads/2015/12/Trends-in-MMR-1990-2015_Full-report_243.pdf
2. Cross S, Bell JS, Graham WJ.What you count is what you target: the implications of maternal death classification for tracking progress towards reducing maternal mortality in developing countries. Bull World Health Organ 2010;88:147-53. https://iris.who.int/bitstream/handle/10665/270615/PMC2814479.pdf?sequence=1&isAllowed=y
3. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, Shackelford KA,Steiner C, Heuton KR, et al. Global, regional, and national levels and causes of maternal mortality during 1990-2013: https://www.thelancet.com/journals/%20lancet/article/PIIS0140-6736%2814%2960696-6/fulltext
4. WHO,Maternal mortality Fact Sheet No 348; 2015; pp 1-5 https://www.who.int/news-room/fact-sheets/detail/maternal-mortality
5. Say L,Chou D, Gemmill A, Moller AB, Daniels J, A Metin Gülmezoglu, et al. Global causes of maternal death:A WHO systematic analysis. Lancet Global Health 2014;2: 323 https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(14)70227-X/fulltext
6. Thaddeus S,Maine D. Too far to walk:maternal mortality in context. Soc Sci Med 1994;38:1091- 110 https://www.sciencedirect.com/science/article/abs/pii/0277953694902267
7. WHO,UNICEF, UNFPA,World Bank Group and the United Nations Population Division. Trends in maternal mortality in 1990-2015. World Health Organization;2015. https://iris.who.int/handle/10665/194254
8. Pakistan Demographic and Health Survey, 2012-13.Islamabad and Calverton, MA: National Institute of Population Studies and ICF International. https://dhsprogram.com/pubs/pdf/fr290/fr290.pdf
9. WHO,UNICEF, UNFPA,The World Baık and the United Nations Population Division 2013.Trends in Maternal Mortality:1990-2013 https://iris.who.int/bitstream/handle/10665/112682/9789241507226_eng.pdf
10. Ministry of Health,Community Development, Gender,Elderly and Children MoHCDGEC/ Tanzania Mainland, Ministry of Health - MoH/Zanzibar, National Bureau of Statistics – NBS/Tanzania, Office of Chief Government Statistician -ocGS/Zanzibar, and ICF.2016. Tanzania demographic and health survey and malaria indicator survey (TDHS-MIS) 2015-16. Dares salaam/Tanzania: MoHCDGEC,MoH, NBS,OCGS,and ICF. https://www.scirp.org/reference/referencespapers?referenceid=2581827
11. WHO,UNICEF, UNFPA,World Bank Group and the United Nations Population Division. Trends in Maternal Mortality 1990-2015. WHO Publication https://iris.who.int/bitstream/handle/10665/193994/WHO_RHR_15.23_eng.pdf
12. https://www.parents.com/pregnancy/my-life/why-isnt-my-baby-moving/
13. https://www.msdmanuals.com/professional/gynecology-and-obstetrics/antenatal-complications/preeclampsia-and-eclampsia
14. https://en.wikipedia.org/wiki/Eclampsia
15. https://americanpregnancy.org/healthy-pregnancy/pregnancy-complications/bleeding-during pregnancy/
16. https://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/anemia-during- pregnancy/art-20114455
17. https://consumer.healthday.com/encyclopedia/pregnancy-33/pregnancy-news-543/warning-signs- in-pregnancy-643992.html
18. https://en.wikipedia.org/wiki/Hyperemesis_gravidarum
19. https://reproductive-health-journal.biomedcentral.com/articles/10.1186/1742-4755-8-21
20. https://www.researchgate.net/publication/313880808_Awareness_Of_Obstetric_Danger_Signs_And_Its_Associated_Factors_Among_Pregnant_Women_In_Public_Health_Institutions_Mekelle_C ity_Tigray_Ethiopia
21. Desta Hailu, Hailemariam Berhe Plos one 9 (2),e83459,2014 https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0083459
22. https://www.tandfonline.com/doi/full/10.1080/10641955.2017.1397691
23. https://www.researchgate.net/publication/271260532_Assess_the_Knowledge_Regarding_Preeclampsia_and_Its_Selfcare_Measures_among_Antenatal_Women_Attending_Antenatal_Outpatient_Department_of_KLES_Dr_Prabhakar_Kore_Hospital_Belgaum
24. https://pubmed.ncbi.nlm.nih.gov/20860492/
25. https://www.researchgate.net/publication/43554803_Maternal_Knowledge_and_Practices_Related_to_Anaemia_and_Iron_Supplementation_in_Rural_Malawi_A_Cross-sectional_Study

26. https://pmc.ncbi.nlm.nih.gov/articles/PMC5644086/
27. https://www.researchgate.net/publication/330866843_Women's_knowledge_of_maternal_danger_signs_during_pregnancy_Findings_from_a_cross-sectional_survey_in_Papua_New_Guinea
28. https://www.primescholars.com/articles/awareness-of-danger-signs-of-pregnancy-and-its-associated-factors-among-pregnant-women-who-visit-anc-in-mekelle-public-hospitals.pdf