

Women's awareness regarding warning symptoms during pregnancy in Assiut city

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Abstract

Background: Awareness about health issues surrounding pregnancy can empower women to improve their health. **The aim of the study:** was to assess the pregnant women's awareness of warning symptoms during pregnancy. **Methods and materials:** A descriptive research design study of 400 pregnant women seeking care at 4 Maternal Health care center (MCH) in Assiut city. A structured interviewing sheet designed to collect data from all pregnant women who meeting inclusion criteria. Then giving them brochures of warning symptoms during pregnancy. Awareness was defined as "knowing at least 4 danger signs and symptoms". **Results:** Overall, 66.0% of the interviewed women were not aware of dangerous symptoms of pregnancy complications. It was observed high statistically significant difference relation between mother's occupation, mother's education and women's awareness of warning symptoms during pregnancy ($p > 0.05$). **Conclusion:** Awareness of dangerous symptoms of pregnancy complication among women in Assiut city is low. **Recommendations:** Increase women's awareness about dangers symptoms during pregnancy through the educational program during the ante-natal period.

Keywords: *Warning Symptoms During Pregnancy & Awareness of Woman.*

Introduction

Pregnancy is a normal process that results in a series of both physiological and psychological changes in expectant mothers. However, pregnancy may be accompanied by some problems and complications which are potentially life-threatening to the mother and / or the fetus, about seven percent of pregnant women, a complication will occur. Globally, every minute, at least one woman dies from complications related to pregnancy or childbirth that means 529, 000 women every year (Rashad & Essa, 2010).

Maternal morbidity and mortality could be prevented significantly if women and their families recognize obstetric danger symptoms and promptly seek health care. The commonest danger symptoms during pregnancy include severe vaginal bleeding, swollen hands/face and blurred vision. Raising awareness of pregnant women on the danger symptoms would improve early detection of problems and reduces obstetric complication (Jhpiego, 2004, Hailu et al., 2010, Kabakyenga et al., 2011).

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 childbirth. About 529,000 mothers die each year from maternal causes, out of which 99% of deaths being from the developing world (WHO, 2008).

The danger symptoms are not the actual obstetric complications, but symptoms that are easily identified by non-clinical personnel. They are mainly classified into three; the commonest/key danger symptoms during pregnancy include severe vaginal

bleeding, swollen hands/face and blurred vision. Major danger symptoms during labor and childbirth include severe vaginal bleeding, prolonged labor, convulsions and retained placenta. Major danger symptoms during the postpartum period include severe vaginal bleeding, foul-smelling vaginal discharge, and fever (Hailu, et al., 2010).

Maternal morbidity and mortality could be prevented significantly if women and their families recognize obstetric danger symptoms and promptly seek health care. The commonest danger symptoms during pregnancy include severe vaginal bleeding, swollen hands/face and blurred vision (Hailu et al., 2010, Kabakyenga et al., 2011).

The Egypt National Maternal Mortality Study 2001 reported that poor quality antenatal care was found to contribute to 15% of maternal deaths and to 13 maternal deaths per 100,000 live births. It played a more important role in death associated with hypertensive diseases 34%. In cardiac disease lack of antenatal care and poor quality antenatal care were considered to be avoidable factors in 19% - 28% of cases, respectively (Ministry of Health & Population Cairo, 2005).

The commonest danger signs during pregnancy include severe vaginal bleeding, persistent vomiting, severe persistent abdominal pain, swelling of face, fingers and feet, blurring of vision, fits of pregnancy, severe recurrent frontal headache, high grade fever, marked change in fetal movement, awareness of heart beats, high blood pressure, sudden escape of fluid

from the vagina, dysuria, oliguria or anuria and loss of consciousness (**Rashad & Essa, 2010**).

According to Egypt Demography and health Survey, slightly more than one-quarter of Egyptian pregnant women do not receive antenatal care. However, among those who receive antenatal care only one-third of them received advised about signs of obstetric complications and where and when to seek medical assistance (**Ministry of Health & Population, 2005**).

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 (**Jhpiego 2004**). The presence of skilled attendants at births and availability of emergency obstetric care have been shown to greatly reduce maternal deaths due to obstetric complications (**Paxton et al., 2005**).

Lack of awareness of the significance of symptoms of obstetric complications is one of the reasons of failure of women to identify and seek appropriate emergency care. Accordingly, assessment of women's awareness of obstetric danger signs and associated factors contributes to their awareness (**Rashad & Essa, 2010**). Awareness about health issues surrounding pregnancy can empower women to improve their health (**Nikiema et al., 2009**). Raising awareness of pregnant women on the danger signs would improve early detection of problems and reduces the delay in deciding to seek obstetric care (**Hailu et al., 2010**).

Studies indicate that education about pregnancy danger signs and symptoms targeting healthcare providers at different levels, as well as women of reproductive age, increased awareness and recognition of complications, motivated women to seek timely support, and improved referral to health services (**Pembe et al., 2010**). Studies in obstetrics indicate that pregnancy complications may not be regarded as abnormal by all women, owing to a lack of perception regarding important early danger signs and symptoms (**Anya et al., 2008**).

Significance of the study

Many studies indicate that education about pregnancy warning symptoms targeting healthcare providers at different levels, as well as women at reproductive age, increased awareness and recognition of complications, motivated women to seek timely support, and improved referral to health services (**Okour et al., 2012**). Studies conducted among women in Tanzania and Burkina Faso indicates low levels of awareness of Ethiopia obstetric danger symptoms during pregnancy leading to high levels of maternal mortality and morbidity (**Kabakyenga et al., 2011**).

According to Egyptian Demography and health Survey (2008), slightly more than one quarter of Egyptian pregnant women do not receive ANC. However, among those who receive ANC only one third of them received advised about symptoms of obstetric complications and where and when to seek medical assistance (**Rashad & Essa, 2010**).

Approximately 15% of pregnant women who experience complications are at risk of developing poor, yet preventable, pregnancy outcomes (**Anderson, 2008**). Studies in obstetrics indicate that pregnancy complications may not be regarded as abnormal by all women, owing to a lack of perception regarding important early danger symptoms (**Anya et al., 2012**).

Aim of the study

- This study was aimed to:
- Assess the pregnant women awareness about warning symptoms during pregnancy.

Research question

Are women aware of warning symptoms during pregnancy?

Subject & methods

Research design

A descriptive research -design was carried out in this study.

Setting

The study was conducted at two sectors in Assiut city. Which include West sector consist of three maternal and child health centers (koltaa M C H, Hay kharb M C H and Elarbaeen M C H) and East sector consist of four maternal and child health centers (Hay shark M C H , El hamaraa M C H , Ferial M C H and Walidea M C H). These centers provide free services to women who resident in Assiut city and neighboring villages. These centers provide many health services as "antenatal care, ultrasonography services, treatment for obstetrical and gynecological diseases, laboratory tests includes (urine analysis, hemoglobin concentration, glucose serum test and RH incompatibility). Also, tetanus vaccination for pregnant women and child immunization, family planning services, dental care services, premarital care and employee services, and child examination. These services for all centers but the number of days for services different from one center to the other, such as koltaa MCH work three days / week, Hay kharb MCH work two days/week, Elarbaeen MCH work one day / week and Hay shark MCH work every day for antenatal care. These centers provide services for women and children from 8 am to 1 pm with a range about 5-15 women's

per a day and may reach up to 15-25 women's at the days of tetanus vaccination.

Sample

According to last statistical of each sector (the West sector 1200 cases per month and East sector 800 cases per month) and sample size equation the sample size was 300 women but increase the sample to 400 cases for a statistical reason and 40 cases for pilot study.

The sample was chosen according to the following criteria.

Inclusion criteria

- All pregnant women with a single pregnancy.
- All pregnant women aged 20 to 35 years, who attended the prenatal care clinics.
- Pregnant women in all trimesters.

Exclusion criteria

- Previous cesarean section.
- Women with a history of medical complications as (hypertension, diabetes etc-). Those women should be involved in the study no reasons to excluded from the study, this group of women needed assess their awareness.

Tools for Data collection

The structured face-to-face interviewing sheet was designed, by the researcher to be completed from every woman attended to antenatal care clinic at each center.

The data collected in the record include the following parts

Socio-demographic data include:-

Name, age, mother's level of education, employment, husband's education, family income, family size, duration of marriage and residence.

Obstetrical history includes

Number of gravidity, parity, abortions, living children and number of neonatal deaths, antenatal follow-up, if presence of any complications in previous pregnancy (yes or no) and types of these complications (as bleeding, premature rupture of membrane etc.---)

Data about current pregnancy

Duration of pregnancy (weeks), Time of booking visit, presence of any complications in the current pregnancy (yes or no), types of complications (as bleeding, premature rupture of membrane etc----) and if she has any warning symptoms during pregnancy.

Assessment of women's awareness as regard warning symptoms during pregnancy

The woman's knowledge of pregnancy warning symptoms was recorded: participants responded either "yes" or "no" regarding each of the 12 warning symptoms included in the study. The women considered "aware" when know four or more of the listed of symptoms, and "not aware" if they knew

fewer than 4 of these symptoms, include Vaginal bleeding, persistent Vomiting, Dizziness, absence of fetal movement, abdominal pain, swelling in face or feet, intermittent headache, rupture of membranes, contraction of the uterus, dysuria, fever and blurred vision (Okour et al., 2012).

Pilot study

A pilot study was done on 10% (40 women) to evaluate the clarity and understanding of the tools. It also helped in the estimation of the time needed to fill the form. According to the results of the pilot, tools were modified. The pregnant women who were in the pilot study were not included in the main study sample.

Administrative Design

An official approval was obtained from Directorate of Health Affairs at Assiut governorate. The letter included a permission to carry out the study and explained the purpose and nature of the study.

Before starting data collection a visit to each MCH center was done by the researcher, to introduced me to the director of MCH centers and presented to him a copy of the letter was taken from the directorate of Health Affairs at Assiut governorate.

Ethical considerations

A clear explanation of the nature and the aim of the study were given to women who agree to participate in the study to obtain their informed verbal consent which include the right of privacy and confidentiality, and their right to withdrawn from the study at any time.

Procedure

400 pregnant women were included in the study and 40 women for pilot study collected through four days per week, the investigator went to center at 09:00 Am according to schedule of antenatal of each centers, The investigator introduce herself to the health care providers working in the center and to all pregnant women who were agreed to participate in the study. All cases were taken according to inclusion criteria, sometimes some cases that enter the clinic while interviewing another women, the researcher was waiting this cases until return from laboratory investigation then interviewing her and obtain the necessary data.

The nature and the aims of the study were explained for each woman, then an oral consent taken to participate in the study. Every Women were reassured that any obtained information will be used only for the purpose of the study; A code number was used for every woman to maintain confidentiality, the investigator assured voluntary participation and confidentiality of every women who agreed to participate. Every women interviewed separately, then start to collect data related to the socio-demographic characteristics, after that asked about

obstetrical data related to the current pregnancy and asked about if she had information about warning symptoms during pregnancy and the source of this information's, the answer were yes or no answer Time taken with every case about 20 minute. Explained to the women each part of the interview sheet before starting the interview. The women's knowledge among warning symptoms were done by listed to the women, after assessment any question asked by the women were answered and brochure which contains information about different warning symptoms during pregnancy, the brochure is in the Arabic language.

Operational Design

Statistical analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 16 .Continuous data were expressed as frequency, percentage; mean and standard deviation (SD). Discrete data were expressed as frequency and percentage. Comparison between variables was done using chi-square (χ^2) test. Probability (p-value) less than or equal to 0.05 was considered significant and less than 0.001 was considered highly significant.

Results

Table (1): Distribution of the pregnant women according to their Socio-demographic Characteristics.

Socio-demographic Characteristics	Frequency N= 400	Percentage (%)
Mothers age in years		
< 25-	171	42.8
30 -	154	38.5
≥ 30	75	18.7
Mean ± SD	25.59 ± 4.08 (20 - 35)	
Residence		
Urban	287	71.7
Rural	113	28.3
Type of family		
Nuclear	214	53.5
Extended	186	46.5
Mothers occupation		
Working	143	35.7
Housewife	257	64.3
Mothers education		
Illiterate	101	25.3
Read & write	109	27.3
Secondary	132	33.0
University	58	14.4
Consanguinity		
Relatives	159	39.8
Not relatives	241	60.2
Husband education		
Illiterate	134	33.4
Read & write	88	22.0
Secondary	121	30.3
University	57	14.3

Table (2): Distribution of the pregnant women according to their attendance pattern to the MCH centers.

MCH center	Frequency (N= 400)	Percentage %
Hay sharka	167	41.7
El - Arbaeen	58	14.5
Hay Gharb	122	30.5
Kolta	53	13.3
Total	400	100

Table (3): Distribution of pregnant women according to their obstetrical history.

Obstetric history	Frequency (N= 400)	Percentage %
Gravidity		
primigravida	177	44.3
2 - 3	144	36.0
> 3	79	19.8
Parity		
Nulipara	199	49.7
Multipara	201	50.3
Abortion		
None	331	82.7
Aborted	69	17.3
Number of living children: N=200		
1 - 2	146	73.0
> 2	54	27.0

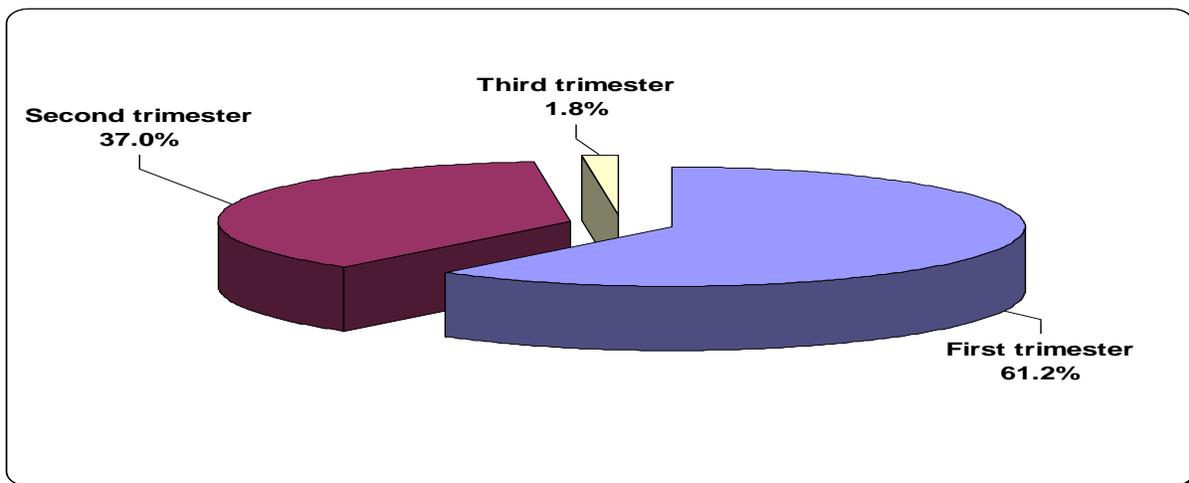


Figure (1) Distribution of pregnant women according to time of booking

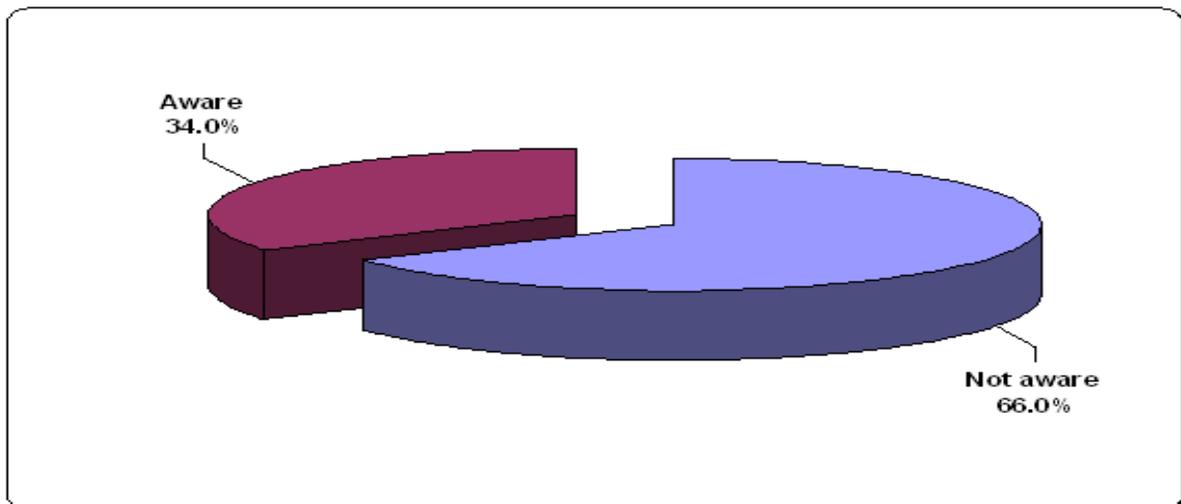


Figure (2) Distribution of pregnant women according to their knowledge about warning symptoms

Table (4): Distribution of women's according to warning symptoms during pregnancy.

pregnancy warning symptoms	*Known symptoms	
	frequency	Percentage %
Vaginal bleeding	264	66.0
Persistent vomiting	190	47.5
Dizziness	117	29.2
Abdominal pain	156	39.0
Swelling of face or feet	198	49.5
Absence of fetal movement	179	44.8
Intermittent headache	94	23.5
PROM	44	11.0
Contraction of uterus	91	22.8
Dysuria	15	3.8
Fever	12	3.0
Blurred vision	12	3.0

Table (5) Relation between Socio-demographic condition and women's awareness about warning symptoms during pregnancy.

Socio-demographic data	Knowledge about pregnancy warning symptoms				P-value
	Aware (136)		Un aware(264)		
	No.	%	No.	%	
Mother's age					
< 25 years	46	26.9	125	73.1	0.010*
25 - 30 years	58	37.7	96	62.3	0.221
> 30 years	32	42.7	43	57.3	0.079
Residence					
Urban	108	37.6	179	62.4	0.015*
Rural	28	24.8	85	75.2	
Type of family					
Nuclear	70	32.7	144	67.3	0.559
Extended	66	35.5	120	64.5	
Mother occupation					
Working	73	51.0	70	49.0	0.000*
Housewife	63	24.5	194	75.5	
Mother education					
Illiterate	19	18.8	82	81.2	0.000*
Read & write	25	22.9	84	77.1	0.004*
Secondary	53	40.2	79	59.8	0.068
University	39	67.2	19	32.8	0.000*
Husband education					
Illiterate	26	19.4	108	80.6	0.000*
Read & write	25	28.4	63	71.6	0.210
Secondary	46	38.0	75	62.0	0.264
University	39	68.4	18	31.6	0.000*

* $P < 0.05$

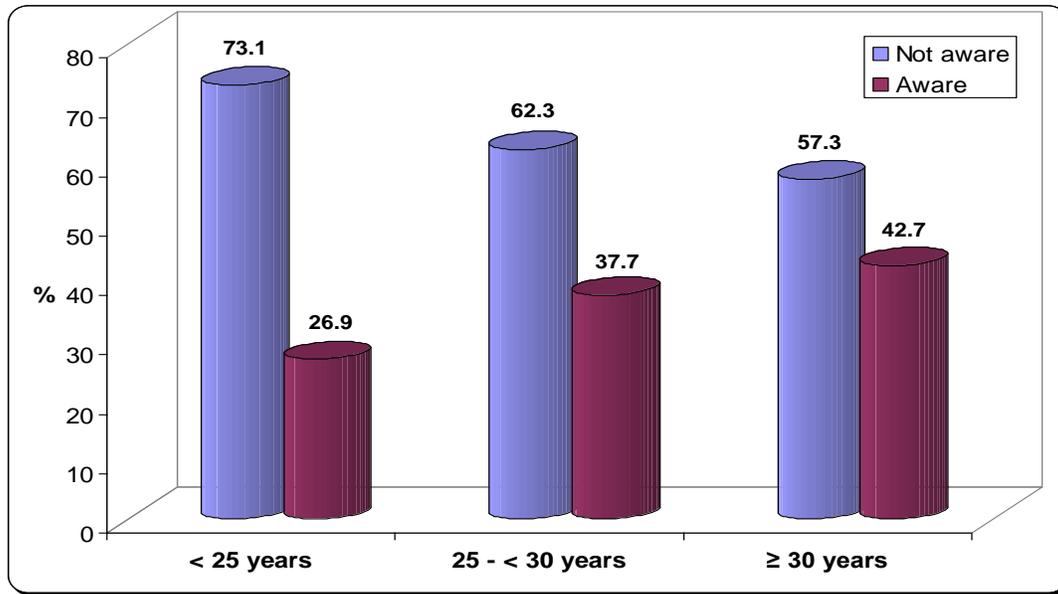


Table (1): Regarding mothers age 42.8% of the samples were less than 25 years while more than one-third of them were (38.5%) age range between 25- 30 years and 18.7% of the samples were more than 30 years. As regards to the residence, more than two third of the sample (71.7%) was living in urban areas, while the rest of sample (28.3%) was living in rural area. According to women's occupation, it was estimated that 64.3% of the sample were housewives while more than one-third of the sample (35.5%) were working women. Regarding the level of education, one-third of the sample (33.4%) were illiterate, while 33.3% were secondary educated and 14.3% of the sample was university educated.

By shedding light on the socio-demographic characteristics of the husband it was observed from the table that 33.4% were illiterate, while 30.3% of them were secondary educated and only 14.3% of them were University educated.

Table (2): show that, according to their attendance pattern to the MCH centers, shows 41.7% of the sample were attending Hay sharka center. While nearly one-third (30.5%) of the sample were attending Gharb El Ballad, only 14.5% of the sample were attending El Arbaeen center and 13.3% of the sample were attending kolta center.

Table (3): illustrated that, concerning to their obstetrical history, it observed that 44.3% of the sample was primigravida while the rest of sample 19.8% of the sample were multigravida. According to Parity, nearly one-half of the sample (49.7%) were nullipara, while more than one-half (50.3%) of the sample were one or more times delivery. Concerning to history of abortion, more

than three quarters (82.7%) of the sample had not abortion, while 17.3% of the sample was aborted.

Figure (1): It was observed that 61.2% of the samples had there booking a visit in the first trimester of pregnancy while the rest of sample 1.8% in the third trimester of pregnancy.

Figure (2): Shows that 34.0 % of the sample had aware about warning symptoms during pregnancy while 66.0% of the sample had not aware about this warning symptoms.

Table (4): It was observed that the most of women's were known Vaginal bleeding , Persistent vomiting , dizziness , abdominal pain , Swelling of face or feet and absence of fetal movement as warning symptoms(66%, 47.5% ,29.2% , 39% , 49.5%, 44.8% respectively) .

On the other hand, the **Table (5)** was showed that high statistically significant difference relation between mother's occupation, mother's education and husband education and women's awareness about warning symptoms during pregnancy($p = 0.000^*$). It can be noted from this table that, there was statistically significant relation between mother's age and residence and women's awareness about warning symptoms ($p = 0.026^*$, $p = 0.015^*$, respectively). The table observed that, no statistically significant difference relation between the type of family and women's awareness about warning symptoms ($p = 0.559$).

Discussion

Awareness of the danger symptoms of pregnancy complication should help women make timely decisions about medical care (Okour et al., 2012). Raising awareness of pregnant women on the danger

symptoms would improve early detection of problems and reduces obstetric complication (**Hailu et al., 2010, Kabakyenga et al., 2011**).

Knowledge of danger signs of obstetric complications during pregnancy, labor and postnatal period is the first essential step for appropriate referral time (**Hailu et al., 2010**). Knowledge of obstetric dangerous symptoms and 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 (**Kabakyenga, et al., 2011**).

The present study aimed to assess the pregnant women awareness about warning symptoms during pregnancy and provide health education to pregnant women about warning symptoms during pregnancy. The present study included 400 pregnant women presented to the MCH centers in the first, second and third trimesters of pregnancy. The most of the women were illiterate and secondary educated, living in urban areas and housewives. A large number of women's in the study having inadequate knowledge about warning symptoms during pregnancy that should necessary need an appropriate health education and counseling about warning symptoms during pregnancy. Concerning to socio-demographic characteristics of women, the result of the present study revealed that, most of the women less than 30 years, 71.7% were in urban areas, 64.3% of the sample was housewives, most of the women were illiterate and secondary educated and husband illiterate and secondary educated.

Regarding age result of the present study revealed that, 42.8% of mothers' aged less than 25 years. Similar finding with study conducted by **Okour et al., 2012, Hailu, et al., 2010** those reported in their study to assess awareness of pregnancy danger signs and symptoms and associated factors among a group of Jordanian women, the mean of mothers' age were (25 ± 4) and most women were less than 30 years of age.

The present result disagrees with a study conducted by (**Rashad & Essa, 2010**), who reported in their study to assess women's awareness of danger signs of obstetric complications, reported 23.5% of the samples were aged 20 to less than 25 years old and 34.5% aged 25 to less than 30 years old. This differentiated may be related to the sample size 200 cases only. The current study revealed that there was a statistically significant relation between mothers' age and awareness of warning symptoms during pregnancy ($p = 0.010$).

The result in the same line with (**Rashad & Essa, 2010**), who found there was a high statistically significant relation between mother age and level of knowledge ($p = 0.001$). The present study showed

that more than two third of the sample (71.7%) was living in urban areas, on another hand, this results disagree with **Hailu, et al., 2010**, the majority of the sample 86.7% were in the rural area.

The present study showed that there was statistically significant relation between residence and women's awareness ($p=0.015^*$), this result supported by **Hailu, et al., 2010**, who found there was statistically significant relation between residence and level of awareness about warning symptoms during pregnancy. This could be due to the fact that urban residents have better access to health information and maternal health services compared to rural counterparts (**Hailu, et al., 2010**).

According to women's occupation, it was estimated that 64.3% of the women's were housewives, this supported by another study (**Rashad & Essa, 2010**), who found the majority of the study samples (83.5%) were housewives. This result is in the same line with (**Okour et al., 2012**), who found the employment of women play a part in the level of awareness, in that working women have more opportunities to share experiences with others than do housewives ($p=0.001$).

The result of present study cleared that there was high statistically significant difference relation between mother's occupation and level of women's awareness ($p=0.000$). It was supported by (**Rashad & Essa, 2010**), who found was statistically significant relation between the level of awareness about obstetric danger signs and mother's occupation. ($p = 0.0031$). Regarding women's education, the majority of the sample was illiterate and secondary educated, This result is in the same line with (**Rashad & Essa, 2010**), who found, the majority of the sample was illiterate and secondary educated,

The current study cleared that there was high statistically significant difference relation between mother's education and level of women's awareness ($p=0.000^*$). However, this result is agreement with (**Okour et al., 2012**), who found high statistically significant difference relation between mother's education and level of women's awareness ($p=0.001^*$) and (**Rashad & Essa, 2010**), ($p=0.001^*$).

Also (**Anya, et al., 2008**), who stated that, educated women have better pregnancy outcome compared with uneducated women, this may be partly because they are better informed and make better choices. Moreover, occupation seems to influence the level of women awareness about signs of obstetric complications.

According to their obstetrical history, it observed that 44.3% of the sample were primigravida, nearly one-half of the sample (49.7%) were primipara, more than three quarters (82.7%) of the sample not

aborted and more than three quarters (18.2%) of the sample had warning symptoms.

The present study showed that, statistically significant difference relation between women's awareness and number of abortion and ($p=0.022^*$). On another hand these results disagreed with (**Rashad & Essa, 2010**), who found statistically significant difference relation between awareness of obstetric danger signs number of pregnancies and number of deliveries ($p = 0.014^*$, $p = 0.028^*$, respectively).

Also, these findings agree with **Okour, et al., 2012**. According to the current pregnancy, Shows that , 61.2% of the samples were in the first trimester of pregnancy, the majority of the sample (89.2%) had antenatal follow-up during pregnancy and the majority of the sample (88.0%) had no complications during current pregnancy.

The present study shows that, the statistically significant difference relation between the level of women's awareness about symptoms during pregnancy and time of booking visit of current pregnancy ($p = 0.033^*$).because most women's attending ANC in the first trimester of pregnancy. One of the most important functions of ANC is to offer health information and services that can significantly improve the health of women and their infants. ANC is also an opportunity to inform women about the danger signs and symptoms for which immediate assistance should be sought from a health care provider (**WHO, 2005**).

The present study shows that no statistically significant difference relation between current pregnancy status and experienced warning symptoms during current pregnancy and women's awareness ($p = 1.000$, $p = 0.747$, respectively).this result related to decreasing level of knowledge of health team provides especially nurses .This finding disagree with (**Rashad & Essa, 2010**), ($p = 0.001$)

Also, the study showed that 34.0 % of the samples were aware of warning symptoms during pregnancy, while 66.0% of the samples were not aware of warning symptoms during pregnancy. This result was supported by another study (**Okour et al., 2012**) who found that 38.8% of the sample had aware about warning symptoms during pregnancy and 61.2% of the sample had not aware about warning symptoms during pregnancy.

On the other hand, these results disagreed with (**Rashad & Essa, 2010**),

who found that slightly more than one-quarter of the study (26.5 %) were unaware of obstetric danger signs compared to almost the same proportion (26.0 %) that had good awareness about the obstetric danger signs while 47.5 % of the study exhibited fair awareness. The findings of low awareness in the

present study do not reconcile with actual health-seeking behaviors of the women because 86.0% of those who experienced a warning sign sought medical care. This result at the same line with (**Okour, et al., 2012**), who found low awareness in the study, while 91.3% of those who experienced a warning sign sought medical care.

This study reflects the need for the strategic plane to increase the awareness of pregnant women and provide health seeking behavior of the public related to signs of obstetric complications, because if the pregnant women do not have appropriate information about pregnancy and childbirth they would be unable to make a choice that will contribute to their own well-being.

The importance of knowledge to provide health seeking behaviors which contribute to saving women's live from preventable causes of maternal deaths is stressed by many authors (**Rashad & Essa, 2010**). Knowledge of danger signs of obstetric complications during pregnancy, labor and postnatal period is the first essential step for appropriate and timely referral (Hailu, et al , 2010).

As a while, the results of the current study revealed that age, level of education, occupation, residence, abortion and presence of complication are associated with the level of awareness of women about warning symptoms of pregnancy complication among women. This result was in the same line with **Rashad & Essa, (2010)** who showed that lack of awareness about obstetric danger signs was related younger age, low level of education, gravidity and parity, previous experiences with any obstetric complications and lack of antenatal care.

Conclusion

Based on the finding of this study 66% of the study sample were not aware of warning pregnancy symptoms. The study also demonstrated a strong association between level of awareness and age, residence, occupation, and level of education. Low awareness of warning symptoms coupled with the lack of preparedness contributes to the delay in seeking skilled care.

Recommendations

- An education program should be implemented for mothers about warning symptoms especially ANC services.
- Raising community awareness about warning symptoms during pregnancy is important to reducing mortality and morbidity rates from obstetrical causes.

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