Knowledge about Obstetric Warning Signs during Pregnancy among Mothers Attending the Primary Health Care Centers in Hilla City

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Abstract

Pregnancy is the most attractive stage in a woman's life. Signs of risk of pregnancy include bleeding, fluid leakage from the vagina, unusual abdominal pain, cramping, pelvic pressure, headaches or blurred vision, marked swelling in the hands and face, burning urination, foul odors, chills or fever, reduced fetal movements and others with all those the mother need to knowledgeable. A descriptive (cross-sectional) design study was conducted in Al.Hilla city from the period1st September/2018-13thJuly/2019, to assess the knowledge toward the obstetric warning signs during pregnancy and to find out the relationship between the knowledge of the study sample and their demographic characteristics with obstetrical history). The sample of the study was non- probability (convenient sample)consist of(250)pregnant women. Data was collected through the use of interview technique, each participant needs(25-30)minutes to complete the form. The questionnaire was validated through a committee of(19)experts. A pilot study was conducted to determine the reliability of the instrument. The data were analyzed using statistical and descriptive data analysis methods carried out by(SPSSversion20). The results of the present study shows that the overall knowledge assessment of the pregnant women were good responses regarding warning signs during pregnancy.

Keywords: *Knowledge, Pregnancy, Primary Health Care Centers.*

Introduction

Pregnancy is not a disease rather it is a natural life development. However, in many developing countries, warning signs is a major health risk for the mother. Thousands of women and newborns die every year. Almost all the mortality causes related to pregnancy and childbirth are known and most are preventable and treatable. Women with obstetric complications usually die within 48 hours. Complications during pregnancy, such as long-term labor and poor fetal representation, are common causes of perinatal mortality**(1)**.

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. About72%of maternal death is attributed to direct causes of maternal mortality**(2)**.

Globally, the maternal mortality was inappropriately high about830women die each day due to pregnancy or childbirth problem. In2015,the normal maternal mortality rate was216/100,000 live births in developing countries associated with developed countries it was 12/100,000. This high number reproduces inequity in access to health services. The leading effects of maternal deaths were severe vaginal bleeding, infections, pre-eclampsia, eclampsia and unsafe abortion**(3)**.

Knowledge of obstetric warning signs throughout the three steps is an important first step for the applicable organization and timely referral. Increasing knowledge of obstetric warning signs for pregnant women would decrease the delay in seeking care and develop quick detection of obstetric problems**(4)**.

The World Health Organization (WHO) around the world envisages every pregnant woman who may receive a new baby annually for good care during

pregnancy, childbirth and the postpartum. Within primary reproductive health care, antenatal care (ANC) provides a program for important and essential health care functions[5].

In Tanzania demographic health survey report (2011) shows 53%of pregnant women were told about warning signs of pregnancy through ANC visits[6]. In Iraq, the prevalence of maternal death rates around obstetric warning signs, with84women dying per100,000 live births. According to the health sector review and functional review published by the Iraqi Ministry of Health in 2011, Iraq is among a group of 68 countries representing 97% of all maternal and child deaths around the world. While neighboring Iran reduced the maternal mortality rate to 220%between 2000&2010, Iraq's rate declined by one-third during this period[7].

Methodology

A study aims: The purpose of the current study was to assess the knowledge of pregnant women toward the obstetric warning signs during pregnancy and to find out the relationship between the knowledge of the study sample with their demographic characteristics and obstetrical history).

Design of the study: A descriptive (cross-sectional) design study was conducted in Hilla city province from the period 1st Septemper /2018 to13th July/2019.

Study Sample: The study included nonprobability (convenient sample) consist of(250) pregnant women

Study instrument: A constructed questionnaire was prepared and modified after a thorough review of the relevant literature. This questionnaire covers four parts:

A. Socio-demographical characteristics of the sample includes (age, level of education, occupation, economics status, residency &first pregnancy age)

B. Past obstetric history of the sample includes (gravidity, parity, abortion, gestational age, type of previous delivery, place of delivery& type of antenatal visit)

C. Pregnant women's knowledge regarding warning signs includes (37)domain

Validity&Reliability: The content validity of the instrument was established through a panel of(19) experts, the reliability of the items was based on the internal consistency of the checklist was assessed by calculating Cronbach Alpha which was=0,896

A structured questionnaire used to collect data by direct interview. The approximate interview time of **25-30**minutes was provided for the questionnaire completion. Data collection is performed from**18th February- 1st May2019.**To determine whether the objectives of the study were met, the current study data were analyzed by using **SPSS**, version **25.**

Results

Table(1) Socio- demographic and Personal Characteristics of the Studied Group (N= 250)

Demographic data	Groups	F	%
Age	17-25	88	35.2
	26-34	**130**	**52.0**
	<35	32	12.8
Educational level	Not read&write	8	3.2
	Read&write	51	20.4
	Primary school	37	14.8
	Secondary	**79**	**31.6**
	Diploma&above	75	30.0
Occupation	Unemployed	**90**	**36.0**
	Employed	72	28.8
	Student	28	11.2
	Others	60	24.0
Socio-Economic status	Satisfied	**135**	**54.0**
	Satisfied to some extent	90	36.0
	Unsatisfied	25	10.0
Residency	Urban	**176**	**70.4**
	Rural	74	29.6
First pregnancy age	<20	83	33.2
	20-29	**137**	**54.8**
	≥ 30	30	12.0

Table(1)The highest percentage of pregnant women(52.0%)was found to be(26-34)years(31.6%), and the profession of mothers in this sample(36.0%)of housewives.(54.0%)and their economic situation was sufficient. In terms of accommodation,(70.4%)of participants live in urban areas, and the first pregnancy age were(20-29)(54.8%).

Table 2. Past Obstetric History of the Study Sample(N=250)

Past obstetric history	Groups	F	%
Parity	Primi-para	59	23.6
	Multi-para	191	76.4
Gravidity	Once	52	20.8
	Twice	73	29.2
	3&more	125	50.0
Abortion	None	145	58.0
	Once	93	37.2
	>1	12	4.8
Gestational age	1–11weeks	48	19.2
	12–27 weeks	124	49.6
	28–40 weeks	78	31.2
Type of previous delivery	Normal delivery	146	58.4
	Cesarean/section	48	19.2
	Primi-gravide	56	22.4
Place of previous delivery	Home	39	15.6
	Traditional Birth Attendance(TBA)	20	8.0
	Hospital	135	54.0
	Primi-gravide	56	22.4
Type of antenatal visit	Regular	144	57.6
	Irregular	106	42.4

Table(2)indicates that the highest percent of the sample regarding parity(76.4%),had the highest number of gravity(50%), without any abortion(58.0%),and most pregnant mothers in the second trimester(49.6%).(58.4%)was normal vaginal delivery. In the hospital(54.0%)and visits to health centers were regular(57.6%).

Table (3)Overall of Mothers Knowledge Scores toward Obstetric Warning Signs during Pregnancy

	Responses	**F**	**%**	**Mean**	**S.D**	**Ass.**
Overall knowledge	Don't know	10	4	2.60	.459	Good
	Not sure	75	30.0			
	I know	165	66			
	Total	250	100.0			

Table(3)demonstrations that the overall responses of pregnant women are good regarding knowledge.

Table(4)Relationship between the Mothers Knowledge toward Warning Signs during Pregnancy&their Demographic Data

Demographic data	Groups	Overall assessment			χ2	d.f	P. value	sig
		Don't know	Not sure	I know				
Age	17-25	6	41	41	18.768	2	.000	S
	26-34	4	25	101				
	<35	0	9	23				
Educational level	Not read&write	3	3	2	.940	4	.919	NS
	Read&write	6	15	30				
	Primary school	1	11	25				
	Secondary	0	26	53				
	Diploma &above	0	20	55				
Occupation	Unemployed	6	23	61	5.540a	3	.136	NS
	Employed	1	24	47				
	Student	0	13	15				
	Others	3	15	42				
Socio-economic status	Satisfied	2	38	95	1.496a	2	.473	NS
	Satisfied to some extent	3	31	56				
	Unsatisfied	5	6	14				
Residency	Urban	8	57	111	1.612a	1	.204	NS
	Rural	2	18	54				
First pregnancy age	<20	3	40	40	21.007a	2	.000	S
	20-29	1	26	110				
	≥ 30	6	9	15				

Table(4)indicates that there were highly significant relationship between pregnant women's knowledge with their demographical data regarding age & first pregnancy age, while the study result shows that there was no-significant relationship with other demographical data such as educational level, occupation, socio-economic& residency.

Table(5) Relationship between the Mothers Knowledge about Warning Signs during Pregnancy and their Past Obstetric History(N=250)

Past obstetric	Groups	Overall assessment			χ2	d.f	P. value	sig
		Don't know	Not sure	I know				
Parity	Primi-para	5	24	30	4.193a	1	.041	S
	Multi-para	5	51	135				
Gravidity	Once	5	17	30	2.212a	2	.331	NS
	Twice	3	17	53				
	3&more	2	41	82				
Abortion	None	8	34	103	10.289a	2	.006	S
	Once	2	39	52				
	>1	0	2	10				
Gestational age	1–11weeks	7	11	30	3.628a	2	.163	NS
	12–27 weeks	3	44	77				
	28–40 weeks	0	20	58				
Type of previous delivery	Primi-gravida	4	22	30	5.193	2	.075	NS
	Normal delivery	2	44	100				
	Cesarean/section	4	9	35				
Place of previous delivery	Primi-gravida	4	22	30	5.193	2	.075	NS
	Home	4	1	34				
	Traditional birth attendance	1	10	9				
	Hospital	1	42	92				
Type of antenatal visit	Regular	5	39	100	1.376a	1	.241	NS
	Irregular	5	36	65				

Table(5)shows that there was highly significant relationship between pregnant women's knowledge with their past obstetric history at(P>0.05)regarding to parity& abortion, while the study result shows that there was the no-significant relationship between other past obstetric history such as gravidity, gestational age, type of previous delivery, place of previous delivery and type of antenatal visit.

Discussion

- **Socio-Demographic characteristic**

The results of the study showed that most of the mothers were in the age group (25-34) years, most of females in this age may get an opportunity to marry and can give birth. In a cross-sectional study of (359) pregnant women, it was reported by [7] that majority of mothers' ages were (26-34) years.

In terms of educational level sample was distributed between secondary graduates, diploma and above. Mostly in Iraq and because some of cultural and other issues women may have only secondary education. And this is disagreed with[8] who reported that the sample educational level in their study was (79%) with primary education.

More than 50 per cent of the sample were satisfied with their economic situation from their point of view and according to their needs and their families requirement. While [9] found that economic situation of most Bangladesh mothers was unsatisfied.

The current study results illustrated that high percentage of sample were mothers live in urban areas, this can be justified due to the selection of the study sample as well as to the system followed by the Ministry of health and their distribution of the primary health care centers. This is agreed with [10] who stated that majority of participants about three fourth (76.7%) were urban residents.

Concerning the age of first pregnancy most mothers represented (54.8%) had their first one between the ages of (20–29). Most of the literatures verified that this is the reasonable age for pregnancy. [11] stated that (80.1%) became pregnant before 25 years of age.

- **Past Obstetric History of the Study**

The results of the study showed the high percentage of the sample was found multipara, multigravida, without any history abortion, and most pregnant mothers were in second trimester. Most of this study sample attending the health center for different reasons. Many researchers study, the obstetrical history as variable because it is related much to the topic of maternal health.[3]stated that among(137)had more than four children. About three-fourths of participants (75.9%) did not have any previous abortion.

The present study found that more than half of the participants had normal delivery, the same table illustrated that (54%)of the mothers delivered in the hospital and more than half of the sample had no risk before pregnancy (59.2%).In cross-sectional study which was conducted by[12]300of pregnant women in Libya found in the history of the previous pregnancy that, majority of the pregnant women had a normal pregnancy. 71.4% of the multiparous women mentioned that they had previous normal vaginal deliveries.

The same results indicated that (57.6%) of the sample their visits to health centers were regular. A descriptive cross-sectional study was done among 170 participants conducted by[13] in India

Overall Mothers Knowledge about Warning Signs

The result of the current study showed that most of mothers had(70%)good knowledge toward obstetric warning signs. More supportive evidence is provided by[14]in Indian who carried out a cross-sectional survey on mothers about "knowledge of danger signs of pregnancy, labor and post-partum period among mothers in rural Pondicherry.

Relationship between Mothers Knowledge & Demographic Characteristics

Socio-demographic factors can affect women's knowledge related risk signs during pregnancy. The results showed that age was significantly associated with the level of knowledge of women. Similar findings have been reported the woman in studies from Malaysia [15]. The best knowledge they have besides their previous pregnancy and childbirth experiences, especially for those who have had complications of childbirth during their previous pregnancy[16]. The occupational status seems to have an impact on women's knowledge. The study which done in Punjab by [17] matched the present results.

While the level of education appears to play a positive role in increasing women's knowledge of signs of risk during pregnancy. Educated women have better access to reproductive health information than uneducated women, are more independent in decision making and have greater access to quality health care services. The results of this study are inconsistent with a cross-sectional study by[18] in Maharashtra, who found that there was a statistically significant relationship

between the level of education &the mothers knowledge

Relationship between the Mothers Knowledge & Past Obstetric History

The result of the presented study shown significant relationship between pregnant women's knowledge with past obstetric history(parity & abortion) this results agreement with a study done in Baghdad conducted by[19], found that parity, abortion, statistically significant with the knowledge of pregnant

While show that the non-significant relationship between regarding gravid &else, this results agreement with a study done in Debre Birhan[10].

Conclusions

Most of the pregnancy who attended the PHC centers are young age multipara in their second trimester of gestation and their visits were regular. Most of mothers have heard information from family ,relative and friends. The overall assessment of knowledge about warning signs during pregnancy was good .

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the Community health Department and all experiments were carried out in accordance with approved guidelines.

References

1. Kuo C. Community Awareness of Maternal and Perinatal Danger Signs in Rural Haiti. UCHC Graduate School Masters, Theses 2010.
2. Dessu S , Gedamu G , Tamiso A. Assessment of Knowledge on Danger Sign of Pregnancy and Associated Factors among ANC Attendant Pregnant Women in Arbaminch Town Governmental Institutions, Southern Ethiopia. *Annals of Medical and Health Sciences Research*. 2018.
3. Kheamy AD, Bardisi S M. Knowledge and Factors Associated with Obstetric Danger Signs among Pregnant Women in Al-Nawariah Primary Health Care Center, Makkah Al-Mukarramah,2016(A Cross-Sectional Study.*Int.J.Adv.Res.* 2017*;5(8):381-393*
4. Bililign N , Mulatu T. Knowledge of obstetric danger signs and associated factors among reproductive age women in Raya Kobo district of Ethiopia:A community based cross-sectional study. *BMC pregnancy and childbirth*, 2017*;17*(1):70.
5. Mwilike B. *Knowledge of danger signs during pregnancy and subsequent health seeking actions among women in Kinondoni municipality, Tanzania*. 2013.
6. Webster PC. Roots of Iraq's maternal and child health crisis run deep. *The Lancet*, 2013*;381*(9870):891-894.
7. Abiyot T , et al .Awareness of obstetric danger signs and its associated factors among pregnant women in public health institutions, Mekelle City,Tigray,Ethiopia2014. *Journal of Pregnancy and Child Health*, 2014; *2*(3):1-
8. Dhakal S , et al., Skilled care at birth among rural women in Nepal: practice and challenges. *Journal of health, population, and nutrition*, 2011*;29*(4):371-37
9. Mansur M,et al. Quality of antenatal care in primary health care centers of bangladesh. *Journal of family & reproductive health*, 2014;8(4):175.
10. Nurgi S , et al. Knowledge, Attitude and Practice of Obstetric Danger Signs during Pregnancy in Debre Berhan, Ethiopia. *Health Science Journal*, 2017*;11*(6):1-7.
11. Acharya T, Poudel A. Knowledge Regarding Obstetric Danger Signs among Antenatal Mothers Attending a Tertiary Level Hospital, Nepal. IJNRP. 2016;3(2):31-40
12. Ibrahim K , et al. Knowledge,attitude&practices of pregnant women towards antenatal care in primary healthcare centers in Benghazi, Libya.*The Journal of The Egyptian Public Health Association,* 2014;89(3):119-126.
13. Boratne A , et al. Knowledge of Danger Signs of Pregnancy, Labour&Post-Partum Period among Mothers in Rural Pondicherry. *Indian Journal of Public Health Research&Development*, 2017;8(2):116-121
14. Felix W, Devi R , Manobharathi M. Level of awareness about pregnancy danger signs among pregnant women attending antenatal care, Chidambaram. *Int J Community Med Public Health,* 2018*;5(6):2480-2485*
15. Teng P , et al. Knowledge of pregnancy danger signs and associated factors among

Malaysian mothers. *British Journal of Midwifery*, 2015;*23*(11):800-806

16. Duysburgh E, et al. Counseling on and women's awareness of pregnancy danger signs in selected rural health facilities in Burkina Faso, Ghana and Tanzania. *Tropical Medicine & International Health*, 2013*;18*(12):1498-1509.
17. Kaur A, et al. Knowledge and practices regarding antenatal care among mothers of infants in an urban area of Amritsar, Punjab. *Int J Community Med Public Health*, 2018;5(10):4263-4267.
18. Patel B, et al. A study on knowledge& practices of antenatal care among pregnant women attending antenatal clinic at Tertiary Care Hospital of Pune, Maharashtra. *Medical Journal of Dr*, 2016;9(3):354.
19. Abas AA ,Fakhredeen E. Knowledge about danger signs and symptoms of pregnant women attending antenatal care centers in Baghdad city. *IOSR Journal of Nursing&Health Science(IOSR-JNHS),* 2017;6(4): 37-40.