



Nurses' Awareness of Key Pregnancy Danger Signs and Management Strategies

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Maternal mortality remains a critical global health challenge, necessitating enhanced awareness of pregnancy danger signs among healthcare providers. Nurses, as primary healthcare providers, play a pivotal role in managing obstetric emergencies; thus, their preparedness is essential for improving maternal outcomes. Despite the significance of their role, there is limited understanding of nurses' knowledge regarding the management of danger signs during pregnancy, particularly in the Al-Basrah region. This study aimed to evaluate nurses' knowledge about managing pregnancy danger signs and explore correlations with demographic factors. Conducted at Al-Basrah Maternity and Children Hospital from December 31, 2023, to March 24, 2024, the study included 50 nurses. Findings revealed that nurses exhibited moderate knowledge (68%) about danger sign management, with significant correlations identified between knowledge and demographic factors such as age, education, and years of experience. However, residency showed no statistical significance. This research highlights specific deficiencies in nurses' knowledge regarding critical pregnancy complications and underscores the need for targeted educational interventions. The study suggests implementing comprehensive training programs to improve nurses' capabilities in recognizing and managing pregnancy danger signs, ultimately contributing to better maternal health outcomes in the region.

Keywords : *Maternal mortality, nurses' knowledge, pregnancy danger signs, educational interventions, healthcare outcomes.*

INTRODUCTION

From a medical and social standpoint, pregnancy is an important event. The following services should be offered to pregnant women in order to support them in maintaining healthy pregnancies: early detection and treatment of complications and pre-existing problems; preparation for delivery and complication readiness; and health promotion and illness prevention (Aychiluhm et al., 2022). Every woman wants to treasure her pregnancy experience for the rest of her life since it is such an amazing and thrilling one. As a result, families, society, and the medical system should all give pregnant women a lot of consideration and care (Yibalih, 2019). Mothers pass away for a variety of causes. Among the primary causes of maternal mortality are issues that arise during pregnancy, labor, and the postpartum phase. The primary time these problems occur is during pregnancy. (WHO, 2019) Some dangerous pregnancy symptoms are excessive vomiting, abdominal pain, vaginal bleeding, edema of the hands, feet, and face, blurred vision, convulsions, high frequency of frontal headaches, elevated grade fever, noticeable abnormalities in the fetal movement, and elevated blood pressure (Emam and Saber, 2018). These symptoms are indicators of more serious problems that put the health of mothers at risk and increase the likelihood of maternal deaths worldwide. (Liben et al., 2019) During pregnancy, women might use a range of techniques to overcome their warning symptoms. While some women seek medical attention from a facility, others choose to speak with medical staff, seek advice from friends or family, practice self-care, speak with a traditional healer, or do nothing at all. This discrepancy could be explained by a variety of factors, such as women's varying levels of awareness, cultural contexts that may have an impact on their practices, or differences in how seriously pregnant women interpret warning indicators (Nurgi et al., 2017)

METHODOLOGY

The Al-Basrah Maternity and Children Hospital in the Al-Basrah Governorate employed a descriptive study design to evaluate the nurses' knowledge of pregnancy danger signs. The 31st of December 2023–24th of March 2024 was the study period (Mohammed and Ghafel, 2022). 50 nurses who were trained in emergency, labor room, and maternal words were included in a non-probability (purposive sample). The investigator designed and constructed the questionnaire after reviewing relevant literature and prior studies (Kidanu et al., 2020). It consists of two main parts: (1) an assessment of the study's sociodemographic characteristic data, such as age, education level, and years of experience; and (2) an assessment of the participants' knowledge of managing danger signs in pregnancy through twenty-five items (Liben et al., 2019).

RESULT AND DISCUSSION

Table 1. Study Sample Distribution according to Socio-Demographic Variables (SDVs)

SDVs	No.	%
Age Group		
20-24	24	48.0
25-29	6	12.0
30-34	14	28.0
35 and older	6	12.0
average age =26.38 ± 5.57 years		
Residents		
Urban	48	96.0
Rural	2	4.0
Education level		
School nursing	6	12.0
Midwifery	4	8.0
Institute	30	60.0
College	10	20.0
Years Experience		
1 to less than 5	15	30
5 to less than 10	11	22
10 to less than 15	15	30
15 and above	9	18
Total	50	50

Table 2. Distribution of Nurses Knowledge regarding Risk management during Pregnancy

Nurses Knowledge Items	No		Yes		MS	Assessment
	n	%	n	%		
Vaginal bleeding, severe headaches with blurred vision, and severe abdominal pain are a danger signs of pregnancy.	37	74.0 %	13	26.0 %	0.26	Poor
Implantation bleeding is a type of vaginal bleeding	41	82.0 %	9	18.0 %	0.18	Poor
Early bleeding may include: an ectopic pregnancy	15	30.0	35	70.0	0.70	Good

		%		%		
First trimester miscarriage occurs when an unborn child is born without a mother.	36	72.0 %	14	28.0 %	0.28	Poor
Abortion symptom is vaginal bleeding.	7	14.0 %	43	86.0 %	0.86	Good
Not implanting the fertilized egg results in an ectopic pregnancy. The fertilized egg implants somewhere else instead of in the uterus.	8	16.0 %	42	84.0 %	0.84	Good
An anomalous growth of placental tissue results in a molar pregnancy. In the process of fertilization	10	20.0 %	40	80.0 %	0.80	Good
Premature birth, advanced placenta, and placental abruption are examples of delayed bleeding.	11	22.0 %	39	78.0 %	0.78	Good
Placenta previa causes bleeding that is painless.	15	30.0 %	35	70.0 %	0.70	Good
In the event of serious bleeding or pain, immediate medical attention is required.	12	24.0 %	38	76.0 %	0.76	Good
"Abstaining from marital relations until the bleeding stops" is a crucial piece of advice for women to follow at home to minimize bleeding issues.	12	24.0 %	38	76.0 %	0.76	Good
Increased electrical activity in the brain is what causes spasms.	37	74.0 %	13	26.0 %	0.26	Poor
"Vascular problems and genetic factors" are among the causes of eclampsia or preeclampsia during pregnancy.	17	34.0 %	33	66.0 %	0.66	Moderate
Being older than 35 is one of the risk factors that can raise the likelihood of developing eclampsia.	12	24.0 %	38	76.0 %	0.76	Good
A typical sign of preeclampsia is elevated blood pressure.	39	78.0 %	11	22.0 %	0.22	Poor
Testing for preeclampsia involves both urine and blood.	37	74.0 %	13	26.0 %	0.26	Poor
Kidney failure is a preeclamptic complication.	17	34.0 %	33	66.0 %	0.66	Moderate
Dialing the obstetrician or other healthcare practitioner should be done if a headache is accompanied by lightheadedness or impaired eyesight.	9	18.0 %	41	82.0 %	0.82	Good
High blood pressure during pregnancy is one of the reasons why some people experience vision difficulties or flashing lights in their eyes.	36	72.0 %	14	28.0 %	0.28	Poor
Ectopic pregnancy is one of the reasons of stomach pain.	12	24.0 %	38	76.0 %	0.76	Good
Consult your doctor if you also feel vaginal bleeding or spotting in addition to the pain.	31	62.0 %	19	38.0 %	0.38	Moderate
Asthma causes of rapid or difficult breathing	36	72.0 %	14	28.0 %	0.28	Poor
Sexually transmitted infections are the source of urinary tract infections.	13	26.0 %	37	74.0 %	0.74	Good

Symptoms of urinary tract infection is frequent need to urinate and a painful burning sensation when urinating.	33	66.0 %	17	34.0 %	0.34	Moderate
Yellow, green, or gray discharges are among the indicators of atypical vaginal secretions.	28	56.0 %	22	44.0 %	0.44	Moderate

Table 3. Overall, Nurses Knowledge Regarding Risk-management during Pregnancy

Scale	Ms	SD	Score	No.	%	Ass.
Overall, Knowledge (25 Q)	29.63	4.93	Poor	5	10.0	Moderate
			Moderate	34	68.0	
			Good	11	22.0	
			Total	50	100.0	

Table 4. Statistical differences in nurses' knowledge with regard their age groups

Variable	Ranks			Ass.	by ²	d.f	Sig.
	Age groups	No.	Mean Rank				
Nurses' knowledge	20-24	24	18.58	Moderate	18.414	3	.001
	25-29	6	24.83	Moderate			
	30-34	14	29.96	Moderate			
	35 and older	6	43.42	Good			

Table 5. Statistical differences in nurses' knowledge with regard their residents

Variable	Residents	No.	Mean Rank	cz ₋	Sig.
Nurses' knowledge	Urban	48	25.45	45.500	.901
	Rural	2	26.75		

Table 6. Statistical differences in nurses knowledge with regard their Education

Variable	Ranks			Ass.	b ² _χ	d.f	Sig.
	Education level	No.	Mean Rank				
Nurses' knowledge	School nursing	6	14.00	Poor	23.597	3	.001
	Midwifery	4	16.63	Poor			
	Institute	30	23.18	Moderate			
	College	10	42.90	Good			

Table 7. Statistical differences in nurses' knowledge with regard their Years of Experience

Variable	Ranks			Ass.	$b\chi^2$	d.f	Sig.
	Years	No.	Mean Rank				
Nurses' knowledge	1 to less than 5	15	18.23	Moderate	25.120	3	.001
	5 to less than 10	11	21.91	Moderate			
	10 to less than 15	15	23.43	Moderate			
	15 and above	9	45.44	Good			

Discussion of Demographic Variables

The features of the current sample, which comprised 48% of the study's age group (20–24) years old. These findings contradict the findings of a research named "Assessment of Nurses' Knowledge about Management of Pregnancy with Danger Signs" that was carried out in Baghdad and found that 38% of the nurses were between the ages of 26 and 30. (Mohammad and Ghafel, 2022) Residents-related results indicate that Urban was majority of study findings and represented that (96%).The researcher believes that these results appeared because only 4 of the participants were from the countryside While 48 of them are from urban areas, there is no comparable proportion between them. These results agreed with a study conducted in Baghdad “Assessment of Nurses' Knowledge about Management of Pregnancy with Danger Signs”, that the majority of nurses were from urban residents. (Mohammad and Ghafel, 2022) The results showed that most of the study participants held a diploma in nursing (a graduate of the institute), at a rate of 60%. The results of this study agreed with a study conducted in Sudan “Nurses Knowledge Regarding Nursing Care of Pregnancy Induced Hypertension at Kassala Saudi New Hospital”, which Nursing institute was the highest proportion (60%).In Iraq, we have a nursing secondary school, nursing institute, and Nursing college. Nursing Secondary School and Nursing Institute graduates Work in nearly all wards. In contrast, college nursing graduates nurses work in maternal wards are less than other nurses (Abdalmajed, 2018).

Discussion of Nurses' Knowledge about management of danger signs during pregnancy

Tables (4–2) for nurses' statistics present the findings of the current investigation. awareness on how to handle warning indicators when pregnant. The majority of nurses (68%) have a moderate understanding of managing danger indicators during pregnancy, according to the study's results. Because most nurses are new hires and have studied how to manage danger signs during pregnancy as part of their

curricula, the researcher believes that the nurses' moderate knowledge of managing signs during pregnancy may be the result of their lack of continuous review of their information or their failure to study the subject as required. They did not take part in the educational programs. These findings align with research carried out in Baghdad on 50 nurses. (Mohammad and Ghafel, 2022) "The program's effectiveness in improving nurses' knowledge and skills in managing pregnant patients exhibiting risk indications. The findings demonstrated that the nurses' pre-test knowledge level was average (36.56 ± 2). These findings align well with our present study's findings (29.63 ± 4.93). 10% of nurses exhibit inadequate knowledge on the management of warning symptoms during pregnancy. The researcher hypothesizes that a lack of study on managing danger indicators during pregnancy at all nursing school levels may be the cause of nurses' poor knowledge of these signs. There aren't enough training programs for nurses to handle pregnancy danger indicators, and they don't regularly refresh their expertise in these areas (Negese et al., 2019). The findings indicated that the majority of nurses (68%) knew about managing danger indicators during pregnancy just on average. The results demonstrate how little nurses know about a variety of subjects, including the many types of vaginal bleeding (Tawfeek et al., 2018). These outcomes support the study's findings that maternity nurses' general knowledge of vaginal bleeding was insufficient prior to the adoption of the educational intervention. (Emam and Saber, 2018) Additionally, it shows that nurses have a modest level of information about the various components (high blood pressure). The results (Emam and Saber, 2018) showed that nurses' knowledge of elevated blood pressure during pregnancy was lacking. The outcomes show that there is a fair level of understanding about controlling the risk of bleeding throughout the first trimester of pregnancy (Waggiallah et al., 2023). The findings show that nurses' understanding of various topics, including the kinds of vaginal bleeding, is lacking. These results corroborate those of the study, which found that prior to the implementation of the educational intervention, maternity nurses' general understanding of vaginal bleeding was inadequate. (Emam and Saber, 2018) Additionally, it shows that nurses have a modest level of information about the various components (high blood pressure). The results of (Emam and Saber, 2018) indicate that nurses' knowledge of elevated blood pressure during pregnancy was lacking. Although the findings show a good level of understanding about controlling the risk of bleeding during the first trimester of pregnancy.

Discussion of Relationship between Nurses' Knowledge and Demographic Variables

The findings of this study indicate a substantial correlation between the demographic factors of nurses (age, education level, and years of experience) and their expertise. An investigation titled "Assessment of Nurses' Knowledge about Management of Pregnancy with Danger Signs" carried out in Baghdad and the results of this study do not agree. The expertise of nurses and their demographic

characteristics (residency) did not significantly correlate, according to the results (Mohammad and Ghafel, 2022).

CONCLUSION

In conclusion, this study reveals that nurses at Al-Basrah Maternity and Children Hospital possess a moderate level of knowledge (68%) regarding the management of pregnancy danger signs, with significant correlations identified between knowledge and demographic factors such as age, education, and years of experience. However, the lack of sufficient understanding in critical areas, such as vaginal bleeding and elevated blood pressure, underscores the urgent need for targeted educational interventions. These findings emphasize the importance of implementing comprehensive training programs to enhance nurses' competencies in recognizing and managing obstetric emergencies, ultimately improving maternal health outcomes in the region. Further research is warranted to explore the effectiveness of these educational initiatives and to assess their impact on actual nursing practices and patient care in diverse healthcare settings.

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