Effectiveness of education program on Nurses' Knowledge about Practices toward Hydatidiform Mole Pregnancy in Baghdad Teaching Hospitals

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Abstract:

Study aimed to evaluate the effectiveness of the educational program on nurse's knowledge about hydatidiform mole **methods**: The nurses were exposed to pre-test, implementation of program, post – test 1 immediately after the application of the program, and the post-test 2 was done after two weeks from the first post-test. **Results**: nurses show a fair level of knowledge during the pre-test (Mean score= .44) , the post-tests 1 and 2, the nurses show a good level of knowledge (Mean score= .98 and .92) . **Conclusion**: The level of nurses' knowledge related to practices about hydatidiform mole pregnancy"; shows fair level of knowledge in the items during the pre-test. While during the post-tests 1 and 2, the nurses show a good level of knowledge among all items. **Recommendation**: Nurses that work in the maternity units should update their knowledge through training courses about hydatidiform mole

Keywords: education program ,Hydatidiform mole pregnancy, practice

Introduction

Hydatidiform mole occur due to abnormalities in chromosomes that affect the growth of the fetus. There are two types complete and partial [1].

The incidence of hydatidiform mole in Iraq was 1 in 221 cases. In Basra, The incidence of hydatidiform mole and risk cancer was 1.7 in 1000 cases and 0.04/1000 cases, respectively[2].

Nurses can be the first to offer women compassionate, understanding care. an obstetrics-trained nurse must be familiar with the pathological diseases that might affect expectant mothers. Understanding the various pathologies enables the nurse to contribute as a valuable member of the medical team. HM, or hydatidiform mole, is one of these ailments. [3].

Hydatidiform moles are categorized into complete and partial moles. [4] Uterine evacuation is used to treat hydatidiform mole and is often accomplished with an electric suction aspirator (EVA) [5].

In Early pregnancy between 6 and 12 weeks of gestation, problems such as missed abortion, hydatidiform mole, and blighted ovum can be diagnosed by Doppler ultrasonography [6]. Color Doppler Ultrasound is a potentially valuable technology to investigate the relationship between the tumor's blood flow and its clinical behavior because of the tumor's extensive vascular supply [7].

Material and methods

A quasi-experimental design was carried out on nurses who work in maternity units. The study started on 17th January 2022 up to 30th December 2022. Nonprobability (purposive sample), consists of (50) nurses . The study sample was exposed to a pre-test, an education program, post-test (1 and 2). The questionnaire developed by the researcher consisted of the following variables: Sociodemographic Characteristics like (age, marital status, educational level, and Nurses' Knowledge about practices about Hydatidiform Mole Pregnancy consisted of (10) items. For the purpose of scoring the instrument's items, a semantic scale was used and scored as follows: (1) for correct answers and (0) for incorrect answers. The overall level of nurses' knowledge was estimated by calculating the range score for a mean of the total score

after calculating the range from the minimum score and maximum score; the range score was rated into three levels and scored as follows: Poor= 0 - 19.66, Fair= 19.67 – 39.33, Good=39.34 – 59. The level of knowledge for each item in the scale was estimated by calculating the cutoff point for the mean of score and rated into three levels also as follows: Poor= 0 – 0.33, Fair= 0.34 – 0.67, Good= 0.68 – 1. Data analysis was done by using Descriptive and Inferential Statistical analysis.

Results

Table (1)

Distribution of Nurses according to their Socio-demographic Characteristics

No.	Characteristics		F	%
1	**Age** **M±SD= 26±5**	Less than 20 year	1	2
		20 – less than 26 year	28	56
		26 – less than 31 year	15	30
		31 – less than 36 year	4	8
		36 – less than 41 year	0	0
		41 year and more	2	4
		Total	*50*	*100*
2	**Marital status**	Married	29	58
		Unmarried	21	42
		Total	*50*	*100*
3	**Nursing qualification**	Secondary school	30	60
		Diploma	14	28
		Bachelor	6	12
		Total	*50*	*100*

No.: Number, f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

table (1) shows that nurses are with average age of 26±5 years in which 56% of them are with age group of 20-less than 26 years. Regarding marital status, more than half of nurses are married as reported among 58% of them, nursing qualification for nurses refers to nursing secondary school graduates among 60% of them.

Table (2)

Assessment of Nurses' Knowledge about Practices toward Hydatidiform Mole Pregnancy

List	VII- Knowledge about practices	Scale	Pre-test (N=50)			Post-test1 (N=50)			Post-test2 (N=50)		
			f	M	Asse	f	M	Asse	f	M	Asse

			(%)		ss.	(%)		ss.	(%)		ss.
1	The nurse gives information to the patient about Family planning methods	*Incorrect*	29(58)	.42	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	21(42)			49(98)			46(92)		
2	After a hydatidiform molar removed, the nurse measures the amount of bleeding is	*Incorrect*	28(56)	.44	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	22(44)			49(98)			46(92)		
3	The nurse keeps all the sanitary pads the woman used during the bleeding to check Clots and tissues that may have come out of them.	*Incorrect*	26(52)	.48	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	24(48)			49(98)			46(92)		
4	When giving chemotherapy, the nurse should ensure that there is no pregnancy before starting chemotherapy	*Incorrect*	26(52)	.48	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	24(48)			49(98)			46(92)		
5	When giving chemotherapy, the nurse reducing the patient's fear of treatment	*Incorrect*	18(36)	.64	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	32(64)			49(98)			46(92)		
6	Patient consent must be obtained before starting treatment	*Incorrect*	20(40)	.60	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	30(60)			49(98)			46(92)		
7	The nurse should answer honestly the patient's questions to foster a trusting relationship.	*Incorrect*	29(58)	.42	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	21(42)			49(98)			46(92)		
8	If the patient suffers from high-risk placental cancer, chemotherapy should be taken Intravenous drip	*Incorrect*	29(58)	.36	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	21(42)			49(98)			46(92)		
9	The nurse must give sufficient information about the side effects of chemotherapy, including loss of appetite	*Incorrect*	29(58)	.42	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	21(42)			49(98)			46(92)		
10	The nurse teaches the patient about personal hygiene to reduce the incidence of infections	*Incorrect*	33(66)	.34	Fair	1(2)	.98	Good	4(8)	.92	Good
		Correct	17(			49(9			46(9		

		ect	4)		8)		2)	
Total			.46	Fair		.98	Good		.92	Good

f: Frequency, %: Percentage, M: Mean, Asses: Assessment (Poor= 0 – 0.33, Fair= 0.34 – 0.67, Good= 0.68 – 1)

Table (2) presents the level of nurses' knowledge related to domain of "practices toward hydatidiform mole pregnancy"; the findings of this domain reveals that nurses show fair level of knowledge during pre-test (Mean score= .44) in which they show fair levels among all items of the scale. During the post-test 1 and 2, the nurses show good level of knowledge (Mean score= .98 and .92) in which the mean scores show good level among all items of the scale in this domain.

Table (3)

Repeated Measure Analysis of Variance (RM-ANOVA) Test for Effectiveness of Educational Program on Nurses' Knowledge about Hydatidiform Mole Pregnancy (N=50)

Descriptive		Within-Subjects Effect								
Knowledge	Mean (S.D)	Source		Type III Sum of Squares	Df	Mean Square	F	P-value	Sig.	Partial Eta Squared
Pre-test **Post-test 1** **Post-test 2**	22.06 (11.499) 58.08 (13.822) 54.28 (13.357)	**Time**	Sphericity Assumed	39166.813	2	19583.407	156.422	.000	H.S	.761
			Greenhouse-Geisser	**39166.813**	**1.287**	**30429.126**	**156.422**	**.000**	**H.S**	**.761**
			Huynh-Feldt	39166.813	1.307	29968.522	156.422	.000	H.S	.761
			Lower-bound	39166.813	1.000	39166.813	156.422	.000	H.S	.761
		Error(Time)	Sphericity Assumed	12269.187	98	125.196				
			Greenhouse-Geisser	12269.187	63.070	194.532				
			Huynh-Feldt	12269.187	64.040	191.587				
			Lower-bound	12269.187	49.000	250.392				

S.D: Standard Deviation, df: Degree of Freedom, f: F-statistics, P-value: probability value, Sig: Significance, H.S: High Significant

The analysis of RM-ANOVA test in this table indicates that educational program was highly effective on nurses' knowledge about hydatidiform mole pregnancy .

Discussion of the Study Results:

Discussion of Demographic Characteristics:

The descriptive analysis shows that nurses are with average age of 26±5 years in which 56% of them are with age group of 20-less than 26 years , 58% of them are married .The nursing qualification for nurses refers to nursing secondary school graduates among 60% of them, (table 1).

The study shows that the highest percentage (42.3%) of Nurses' age was (20-29) years. Regarding marital status, a higher percentage (59.6 %) of them were married. Regarding educational level more than half of them (62.5%) graduated from Secondary School [8]. The study revealed that (64.3%) were in the age group (24-30 years), (64.3%) were junior nursing graduates, (54.3%) were married, (1-3) were years of experience (28.5%) [9].

This study, carried out in the same place, design, sample, and data analysis, were conducted in the maternity hospitals in Baghdad. Results: The study's findings showed that the majority (25%) of nurses and midwives are between the ages of 20 and 24 (77.3%)[10].

Discussion of Nurses' Knowledge about Practices toward Hydatidiform Mole Pregnancy:

In Table (2) nurses show a fair level of knowledge during the pre-test (Mean score= .44). During the post-tests 1 and 2, the nurses show a good level of knowledge (Mean score= .98 and .92)

Nurses play a critical role in providing care for these women by offering clear, factual information and offering supportive, empathetic care [11].

Study reported that death rate was high between women with gestational trophoblastic disease as 60% of the women with chorio-carcinoma died during management[12].
The nurses must be knowledgeable about hydatidiform mole . [13] .

Effectiveness of education program

Table (3) indicates that the educational program was highly effective in nurses' knowledge about hydatidiform mole pregnancy.

This study was carried out in the same place, design, sample, and data analysis. Results: show the level of knowledge of nurses was low and moderate level in all knowledge-related items in the pretest, but it increased after the education program was implemented. These results are the same as my study results that the education program is highly effective in nurse knowledge [14].

This study was carried out in the same place, design, sample, and data analysis. Results: The pre-test results show poor mean scores. The mean scores for all items are high during the post-test period. These results are the same as my study results that the education programe is highly effective in nurse knowledge[15].

A quasi-experimental design is used in this study same my study design. The sample of the study was A non-probability (purposive sample) consist of 50 nurses working in maternity units is being used. The results show that nurses had a moderate level of knowledge at the time of the pre-test (36.562.771), and that level of knowledge improved to a good level at the time of the post-test 1 (90%) and post-test 2 (82%) [16].

Conclusion:

The level of nurses' knowledge related to practices about hydatidiform mole pregnancy"; show poor to fair level of knowledge during pre-test. While during the post-test 1 and 2, the nurses show good level of knowledge among all items.

Recommendation:

Nurses that works in the maternity unites should update their knowledge through training courses about hydatidiform mole.

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