Nurses' Knowledge Regarding Discharge Care Plan for Women with Vesicular Mole

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Abstract

Background: Vesicular mole is an abnormal condition where there is degeneration and changes in chorionic villi, endangering women's health by more severe complications. **The study aimed to:** to assess the nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole. **Research design:** Descriptive exploratory design was used to conduct the study. **Setting:** The study was conducted at all departments of Ain Shams university maternity hospital **Sample:** A convenient sample to recruit 200 nurses working at previously mentioned setting. **Data collection:** The first tool: structured interviewing questionnaire was used to assess nurses' general characteristics, Nurses' knowledge regarding vesicular mole and source of their knowledge Second tool: discharge care plan was used to assess nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole **Results:** Findings of the present study showed that 72% of the studied nurses had poor knowledge regarding vesicular mole, also 72% of them had their knowledge from study field, 67% of them had unsatisfactory knowledge regarding items of discharge care plan for women diagnosed with vesicular mole. **Conclusion:** The present study concluded that near to three quarters of study sample had poor knowledge regarding vesicular mole. Slightly more than two thirds of them had unsatisfactory knowledge regarding discharge care plan for women diagnosed with vesicular mole. **Recommendation:** Adding educational program regarding role of nurse in the participation in discharge care plan for women diagnosed with vesicular mole. **Further research**: Barriers of application of discharge planning process for women diagnosed with vesicular mole among maternity nurses.

Key wards: vesicular mole, discharge care plan, nurses' knowledge.

Introduction:

Vesicular mole (VM) (also known as hydatidiform mole (HM) and molar pregnancy) is a subcategory of diseases under gestational trophoblastic disease (GTD), which originates from the placenta and can metastasize. It is unique because the tumor originates from gestational tissue rather than from maternal tissue. vesicular moles are usually considered the non invasive form of gestational trophoblastic disease but have the potential to become malignant and invasive **(Sarmadi, Izadi-Mood, Sanii & Motevalli 2019).**

Women die as a result of complications during and following pregnancy and childbirth. Most of these complications develop during pregnancy and most are preventable or treatable. Other complications may exist before pregnancy but are worsened during pregnancy, especially if not managed as part of the woman's care **(Hailu and Berhe, 2014).**

Vesicular moles can cause serious complications, including infection of the uterus, a widespread infection of the blood (sepsis), dangerously low blood pressure as a result of bleeding that may lead to a shock, very high blood pressure with increased protein in the urine (preeclampsia), hyperthyroidism and in some cases it progresses to form malignant disease such as invasive mole, trophoblastic tumor in the site of the placenta and choriocarcinoma **(Jauniaux et al., 2018).**

Most maternal deaths are preventable, as the health-care solutions to prevent or manage complications are well known. All women need access to high quality care in pregnancy, and during and after childbirth. The main factors that prevent women from receiving or seeking care during pregnancy and childbirth are poverty, distance to facilities, lack of information, inadequate and poor quality services and cultural beliefs and practices. To improve maternal health, barriers that limit access to quality maternal health services must be identified and addressed at both health system and societal levels **(World Health Organization and United Nations Children's Fund, 2019).**

Nursing role is important and vital regarding management of vesicular mole through; remember to assess the BP, check if the patient is bleeding profusely, and make sure to notify the doctor immediately. Teach deep breathing techniques to alleviate the pain. Use diversional activities if possible. Check for abdominal pain; assess the abdominal area for signs of internal bleeding (e.g. Cullen's). If nausea and vomiting are present, make sure the patient would not aspirate it **(Hailu and Berhe, 2014).**

After Dilation and curettage (D&C) patient is at risk for infection. Make sure the patient has good perineal hygiene. Administer all medications as ordered. Remember that this might very hard for the patient to accept, make sure to provide emotional support. Explain to the patient that it is not her fault this happened. Discussed with the couple the available family planning methods. Remember to reiterate the importance of monitoring the Human chorionic gonadotropin (HCG) level and follow-ups **(Okour et al., 2017).**

Discharge planning is an interdisciplinary approach to continuity of care; it is a process that includes identification, assessment, goal setting, planning, implementation, coordination and evaluation. The process of discharge planning includes the following; Effective discharge planning should consist of patient assessment, development of a comprehensive discharge plan, provision of services, patient education, and a follow-up evaluation to promote positive health outcomes There is also particular need for patient education regarding post-discharge medication, warning signs, follow up schedule, and contraceptive methods **(Linton, 2018).**

As nurses are focal points in patient care throughout hospital stay, their role in discharge planning cannot be ignored. Effective communication between patients and nurses is essential, and the lack of it may leave the patient unready for discharge. New guidance in discharge planning recommends that in the case of simple discharges nurses are the appropriate health care professionals to undertake the process. It also recommends the involvement of nurses in discharging patients who have more complex needs **(Abdulfattah & Mushcab, 2017).**

Significance of the study:

Vesicular mole incidence varies across countries. Incidence of molar pregnancy in Egyptian population 13.1 per 1000 live births. However, in Egypt and many developing countries spontaneous abortions specimens are not routinely subjected to histopathologic review and registration. The hospital-based incidence is more than reported in Taiwan (8.0 per 1000 deliveries), In-donesia (9.9 per 1000 pregnancies). Furthermore, population based incidence is less than reported in the Netherlands (0.68 per 1000), Japan (3.0 per 1000) and England (1.54 per 1000) **(Zakaria et al., 2020).**

Although vesicular mole is not a very common women health problem but when it happens it can lead to harmful complications, including infection of the uterus, a widespread infection of the blood (sepsis), dangerously low blood pressure as aresult of bleeding that may lead to a shock, very high blood pressure with increased protein in the urine (preeclampsia), hyperthyroidism and in some cases it progresses to form malignant disease such as invasive mole, trophoblastic tumor in the site of the placenta and choriocarcinoma that may lead to mortality.

Aim of the study:

The aim of the present study is to assess the nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole.

Research question:

1-What are levels of nurses' knowledge regarding vesicular mole?
2-What are the levels of nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole

Subjects and Methods

Research design:

Descriptive exploratory study

Setting:

The study was conducted at all departments of Ain Shams university maternity hospital because all nurses in this hospital are likely to be rotated between different departments so they might deal with cases of vesicular mole.

Subjects:

Sample type: A convenient sample

Sample size: All nurses working at the previously mentioned setting (200).

Tools of data collection:

Two tools were used for data collection:

It was designed by the researcher in the Arabic language after reviewing the related literature (**Masaud.H, 2019**) and consisted of 21 questions. It was divided into two parts:

Part (1): It was designed to assess general characteristics of the studied nurses (Age, place of residence, level of education, years of experience, qualifications, attending training courses).

Part (2): It was designed to assess Nurses' knowledge regarding vesicular mole and source of their knowledge as (definition, predisposing factors, types, signs and symptoms, common complications, diagnosis, surgical treatment, medical treatment, nursing care, etc.).

❖ **Scoring system:**

The scoring system for knowledge about vesicular mole is ranging from (1-3) in which score (1) denotes incorrect answer score (2) denotes incomplete correct answer and score (3) denotes complete correct answer The total knowledge score 36 and it will be categorized into three categories: A score <21.6 (<60.0 %) denotes poor knowledge, score from 21.6-27(60.0% to 75.0 %) denotes average knowledge and score > 27 (> 75.0 %) denotes good knowledge.

Tool II: Discharge care plan adapted from (**Australian Aphasia Association April (2020)**) used to assess nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole. It included 18questions.It was divided into 5 main parts as following:

- Part I : Items of initial assessment on each follow up visit such as (assessment of vital signs, assessment of body weight, checking quantitative βHCG level and checking hemoglobin level)

- Part II : Items of patient health education as (importance of follow up, warning signs which may experience, hygienic measures (local and general), giving instructions about healthy food and exercises, teach pharmacological and non-pharmacological pain management immediately after evacuation, stress on psychological aspect of the woman and her family especially her husband, importance of pregnancy delay for at least 1 year after evacuation, Suitable family planning method and help patient understand her condition and aim of treatment with answering related questions).

-Part III: items of follow up card as (Patient personal data, Care providers information, and follow up schedule).

-Part IV: validate the patient continuity of care: it includes awareness of the nurses

about to how extent the woman continue her follow up visits

-Part V: information technology consideration it includes collaboration with the patient family and perform group sessions about vesicular mole using different information technology methods (telephone no., WhatsApp).

❖ **Scoring system:**

The scoring system for discharge care plan to assess nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole which included 18 questions, responses are ranging from (1-2) The correct answer is scored (2), the incorrect answer is scored (1), It includes the total knowledge level will be categorized into two categories;

- Satisfactory level from 60% or more of the total correct answers.
- Unsatisfactory level for less than 60% of the total correct answers.

Validity & reliabilityof the Tools: Content validity:

During construction of data collection tools, face and content validity of the study tools was assessed by a jury group of 3 experts in maternity and gynecology nursing field to judge the tool for its comprehensiveness, clarity, relevance, understanding and applicability. The tools was rephrased based on the jury opinion based on their recommendations, additions, correction and modification of some items were done.

Tool reliability:

Internal consistency reliability was assessed in the present study tools via Cronbach's alpha reliability analysis to indicate how the items in instrument will fit together conceptually, alpha Cronbach's test scores were.88 and.92 for the questionnaire about nurses' knowledge regarding discharge plan for women with vesicular mole.

Tool	Cronbach's alpha
Structured interviewing questionnaire	.88
Discharge care plan	.92

Ethical considerations:

- The research approval was issued from the Scientific Research Ethical Committee in Faculty of Nursing at Ain Shams University before starting the study.
- The researcher was clarified the importance and aim of the study to all the nurses included in the study.
- Oral consent was obtained from all the studied nurses.
- Questionnaire didn't include any immoral statements that touch nurses' beliefs, dignity, culture, tradition and religious issues.

Administrative design:

An official letter requesting permission to conduct the study was submitted from the Dean of the Faculty of Nursing, Ain Shams University to manger of Ain shams university maternity hospital. This letter included the aim of the study and photocopy from data collection tools in order to get the permission and help for collection of data.

Statistical design:

Data was collected, coded and entered to a personal computer. They were analyzed using Statistical Package for Social Science (SPSS), under windows version 20. Figures were performed using Microsoft office 2010.The collected data were organized, revised, analyzed, tabulated using number and percent distribution. Proper statistical tests were used to determine whether there were statistically significant differences between variables of the study. The statistical tests used in this study were:

- Descriptive statistics (mean and standard deviation).
- Chi-square test (X2) was used for comparisons between qualitative variables
- Spearman rank correlation to find relations between categorized data.
- $P>0.05$ there is a statistical insignificant difference
- $P<0.05$ there is a statistical significant difference
- $P<0.00$ there is a statistical highly significant difference.

Pilot study:

It was carried out to evaluate the reliability and applicability of the tools to find the possible obstacles that might be faced during data collection because some modifications were performed on study tools as revealed from the result of pilot study. 10% from total sample was included and chosen randomly from the previously mentioned setting, then later excluded from the sample. The pilot also served to assess the reliability of the scale through examining its internal consistency. It showed very high levels of reliability as test retest analysis was used.

Field Work:

This study started from the start of January 2021, till the end of July 2021, the researcher attended the previously mentioned setting 3 days/ week from Monday to Wednesday, from 9 am to 2 pm and this was conducted at nurses' room of each department. At first the researcher started by introducing her-self to the subjects. The researcher interviewed nurses individually and obtained oral consent after explanation of the aim of the study and the researcher filled 2 types of tool:

The first tool: Arabic structured interviewing questionnaire aimed to assess nurse's general characteristics of studied nurses, their knowledge regarding vesicular mole and source of their knowledge. This tool was filled within 10-15 minutes.

The second tool: Discharge care plan aimed to assess nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole. This tool was filled within 10-15 minutes.

Results:

Table (1) Showed that, regarding the age of the studied nurses, their age ranged from (20-≥40 years) with a mean age (31.565±7.57). While, near to two thirds (64%) of them were from urban areas. About their educational qualification, near half(48%)of them educated at nursing technical institute of nursing. While, in relation to years of experience ranged from (<5-≥15years) with mean (9.96±7.94) years. Finally,

the majority of them (94.5) %didn't attended training courses regarding vesicular mole.

Table (2): Clarified that minority(8%)of the studied nurses had complete correct knowledge regarding predisposing factors and diagnosis of vesicular mole and follow up schedule, while slightly more than one quarter(28.5%) had incomplete correct knowledge regarding nursing care and health education provided for women during hospitalization. In addition, more than three quarters (78.5%) had incorrect knowledge regarding investigations that the patient should perform each follow-up visit.

Figure (1): revealed that 72% of the studied nurses had poor knowledge regarding vesicular mole

Figure (2): showed that 67% of them had unsatisfactory knowledge regarding items of discharge care plan for women diagnosed with vesicular mole

Table (3): Clarified that less than one quarter (24%) of the studied nurses had correct knowledge regarding items of follow up card, also 68% had incorrect knowledge regarding validation of patient continuity of care. While, the majority (88%) of them had incorrect knowledge regarding information technology as parts of discharge care plan for women diagnosed with vesicular mole.

Table (4): Illustrated that there was highly statistically significant relation between total knowledge regarding vesicular mole scale with age, educational qualification, years of experience and training about the vesicular mole when (p-value <0.001). While, there was a statistically non-significant relation with place of residence (p-value >0.05).

Table (5): Shows that there was a highly statistically significant relation between total knowledge regarding discharge plan with age, educational qualification, training, and years of experience (p-value <0.001), also there was a statistically non-significant relation between total knowledge regarding discharge plan and place of residence (p-value>0.05).

Table (1): Percentage distribution of the studied nurses regarding their characteristics (n=200).

| Variables	N	%
Age (year)		
-<20	108	**54**
30-	60	30
40 or more	32	16
Mean±SD 31.565±7.57		
Place of residence		
Rural	72	36
Urban	128	**64**
Educational qualification		
Nursing diploma	56	28
Technical institute	96	**48**
Bachelor of nursing	32	16
Post graduate studies	16	8
Nurses' experience(in years)		
<5	56	28
5-	67	**33.5**
10-	37	18.5
15 or more	40	20
Mean± SD 9.96±7.94		
Training regarding the vesicular mole		
Yes	11	5.5
No	189	**94.5**
If yes since when		
10 years	5	2.5
11 years	2	1
12 years	3	1.5
13 years	1	.5
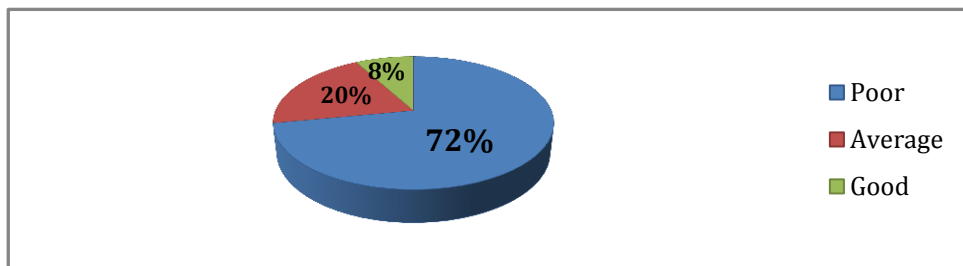
Figure (1): Percentage distribution of the studied nurses' total knowledge score regarding vesicular mole (n=200).

Table (2): Percentage distribution of studied nurses' knowledge regarding vesicular mole (n=200).

Variables	Complete correct		Incomplete correct		Incorrect	
	N	%	N	%	N	%
1- Definition of vesicular mole.	32	16	52	26	116	58
2- Predisposing factors of vesicular mole.	16	8	43	21.5	141	70.5
3- Types of vesicular mole	9	4.5	61	30.5	130	65
4- signs and symptoms of vesicular mole.	15	7.5	38	19	147	73.5
5- complications of vesicular mole.	7	3.5	33	16.5	160	80
6- Diagnosis of vesicular mole.	16	8	42	21	142	71
7- Surgical treatment of vesicular mole.	24	12	49	24.5	127	63.5
8- Medical treatment of vesicular mole.	18	9	40	20	142	71
9- Nursing care and health education provided for women during hospitalization.	17	8.5	57	28.5	126	63
10- Danger signs that may occur.	19	9.5	43	21.5	138	69
11- Follow up schedule.	16	8	37	18.5	147	73.5
12- Investigations that the patient should perform each visit.	12	6	31	15.5	157	78.5

Table (3): Percentage Distribution Of Studied Nurses 'Knowledge Regarding Discharge Care Plan For Women Diagnosed With Vesicular Mole. (n=200).

Variable	Correct		Incorrect	
	N	%	N	%
Part I: Initial assessment	90	45	110	55
Part II: Patient health education	66	33	134	67
Part III- Follow up card	48	24	152	76
Part IV: Validate continuity of care	64	32	136	68
Part V: Information technology consideration	24	12	176	88
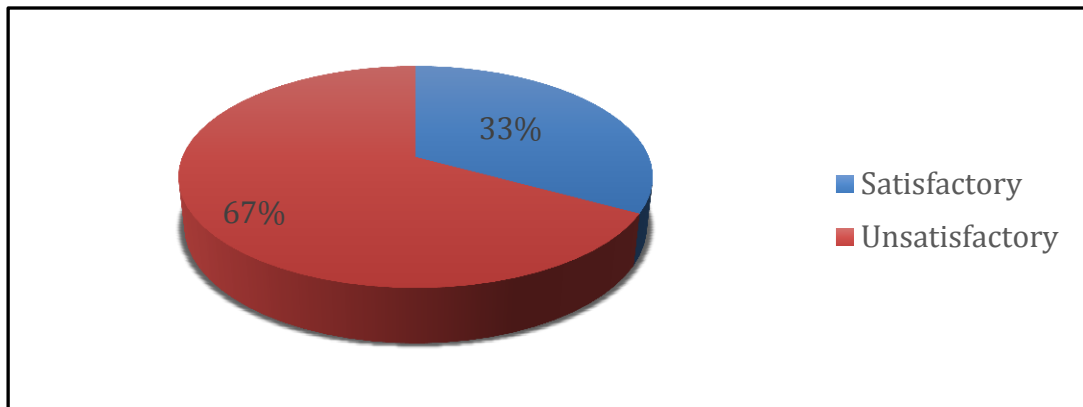
Figure (2): Distribution of the studied nurses according to their total knowledge score regarding items of discharge care plan for women diagnosed with vesicular mole (n=200).

Table (4): Relation between studied nurse's knowledge regarding vesicular mole & personal characteristics (n=200).

Variables	Total Knowledge Regarding Vesicular Mole							Chi-square	
	Good		Average		Poor		Total	X^2	P-value
	N	%	N	%	N	%			
Age (year)									
20-	6	5.6	15	13.9	87	80.6	108		
30-	3	5.0	10	16.7	47	78.3	60	31.901	<0.001**
≥40	7	21.9	15	46.9	10	31.3	32		
Place of residence									
Rural	4	5.6	12	16.7	56	77.8	72	1.987	0.370*
Urban	12	9.4	28	21.9	88	68.8	128		
Educational qualification									
Nursing diploma	5	8.9	6	10.7	45	80.4	56		
Technical Institute	0	0.0	9	9.4	87	90.6	96	112.586	<0.001**
Bachelor of Nursing	2	6.3	20	62.5	10	31.3	32		
Post Graduate Studies	9	56.3	5	31.3	2	12.5	16		
Work experience(years)									
<5	0	0.0	4	7.1	52	92.9	56		
5-	1	1.5	14	20.9	52	77.6	67		
10-]	5	13.5	7	18.9	25	67.6	37	45.075	<0.001**
'zexx	10	25.0	15	37.5	15	37.5	40		
≥15									
Training about the vesicular mole									
Yes	7	63.6	1	9.1	3	27.3	11	48.966	<0.001**
No	9	4.8	39	20.6	141	74.6	189		

    *Non Significant p>0.05 **   Highly Significant p<0.001

Table (5): Relation between studied nurse's knowledge regarding discharge plan for women diagnosed with vesicular mole & persomal characteristics (n=200).

Variables	Total Knowledge Regarding Discharge Plan						
	Satisfactory		Unsatisfactory		Total	Chi-square	
	N	%	N	%		X^2	P-value
Age (year)							
20-	23	21.3	85	78.7	108		
30-	19	31.7	41	68.3	60	32.270	<0.001**
≥40	24	75.0	8	25.0	32		
Place of residence							
Rural	23	31.9	49	68.1	72	0.057	0.812*
Urban	43	33.6	85	66.4	128		
Educational qualification							
Nursing diploma	12	21.4	44	78.6	56		
Technical institute	10	10.4	86	89.6	96	100.302	<0.001**
Bachelor of nursing	29	90.6	3	9.4	32		
Post graduate studies	15	93.8	1	6.3	16		
Years of Experience(years)							
<5	7	12.5	49	87.5	56		
5-	18	26.9	49	73.1	67	29.284	<0.001**
10-	16	43.2	21	56.8	37		
≥15	25	62.5	15	37.5	40		
Training about the vesicular mole							
Yes	8	72.7	3	27.3	11	8.309	0.004**
No	58	30.7	131	69.3	189		

*Non Significant p>0.05 **   Highly Significant p<0.001

Discussion:

The most common form of Gestational trophoblastic disease (GTD) is vesicular mole pregnancy, also known as molar pregnancy. A molar pregnancy occurs when the placenta doesn't develop normally. Instead, a tumor forms in the uterus and causes the placenta to become a mass of fluid-filled sacs, also called cysts. About 1 in every 1,000 pregnancies (0.1 percent) is a molar pregnancy. This kind of pregnancy usually doesn't last because the placenta typically can't nourish or grow a baby at all. In rare cases, it may also lead to health risks for mom **(Naif Almansour, 2021)**

This study aimed to assess the nurses' knowledge regarding discharge care plan for women diagnosed with vesicular mole. This study was carried out at Ain Shams University maternity hospital units. The subject of this study included 200 nurses by a convenient sample.

Regarding the personal characteristics of the studied nurses, the current study result revealed that, the nurses'age ranged from (20-≥40 years) with a mean age (of 31.565±7.57).While nearly two-thirds of them were from urban areas. Also, their educational qualification, nearly half of them are educated at

technical institute of nursing. While years of their experience ranged from (<5-≥15years) with a mean (9.96±7.94) years. Finally, the majority of them didn't attend training courses regarding the vesicular mole.

Regarding studied nurses' knowledge about vesicular mole the present study result mentioned that, less than one fifth of the studied nurses had complete correct knowledge regarding predisposing factors and diagnosis of vesicular mole and follow up schedule, while slightly more than one quarter of them had incomplete correct knowledge regarding nursing care and health education provided for women during hospitalization. In addition, more than three quarters of them had incorrect knowledge regarding investigations that the patient should perform each follow-up visit. This result may be due to absence of educational program regarding this topic. Also, this lack of knowledge may be related to absence of training programs regarding vesicular mole.

The current study result disagree with **O'Shaughnessy, O'Donoghue &Leitao, (2021)** who conducted study entitled " Termination of pregnancy: Staff knowledge and training" and founded that, the majority of the studied nurses had correct knowledge of the laws surrounding maximum gestation for an early termination of pregnancy while more than half of them had accurate knowledge of the mandatory waiting time of termination of pregnancy.

Concerning their Source of knowledge regarding vesicular mole the current study result mentioned that, less than three quarters of the studied nurse obtained their knowledge from study field, and only more than one tenth of them obtained knowledge from work experience while minority of them obtained knowledge from medical seminars and through internet.

The current study result disagree with **Mohammed, Abd-Elazim & Kamel, (2022)** who found that, less than three quarters of the studied nurses their source of knowledge was from the work experience, and less than one fifth of them were from their studying. This finding may be related to the fact that work experience helps nurses gain more knowledge through practices and the different experience situations.

Concerning total knowledge score regarding vesicular mole the current study result revealed that less than three-quarters of the studied nurses had a poor level of knowledge related to vesicular mole. This may be due to that they didn't attend training courses regarding it or due to increase work load that not facilitate accessibility to knowledge by training courses or online.

The present study result disagree with **Mahmood et al., (2019)** who mentioned that, most of the nurses have an average knowledge of the hydatidform mole also **Mohammed, &Ghafel, (2022)** who applied study entitled "Effectiveness of Educational Program on Nurse's Knowledge and Practices Regarding Management of Pregnancy with Danger Signs" and found that, most of the studied nurses their level of knowledge increased to good level during the post-test.

As regard knowledge about discharge care plan regarding contents of initial assessment on each follow up visit for women diagnosed with vesicular mole the current study result Clarified that, more than half of the studied nurses had incorrect knowledge regarding items of initial assessment on each follow-up visit as apart from discharge care plan for women diagnosed with vesicular mole

Concerning knowledge regarding items of patient health education for women diagnosed with vesicular mole the current study result Showed that, slightly more than two thirds of the studied nurses had incorrect knowledge regarding items of patient health education as a part of discharge care plan for women diagnosed with vesicular mole.

This in context, with **Wray et al., (2021)** who applied study entitled " Utilization of Educational Videos to Improve Communication and Discharge Instructions" and mentioned that, Decreased understanding of discharge instructions then leads to decreased compliance, inadequate follow-up, increased readmission rates, and decreased women satisfaction. And mentioned that, There were significantly better survey scores after video discharge instructions (VDI) vs. standard discharge instructions (SDI) for vaginal bleeding in early pregnancy

Concerning total knowledge regarding items of discharge plan for women diagnosed with vesicular mole the current study result showed that one third of the studied nurses had satisfactory knowledge while two thirds of them had unsatisfactory knowledge regarding items of discharge plan for women diagnosed with vesicular mole.

In this respect, **El-Feshawy et al., (2018)** who mentioned that, discharge counseling after abortion is a beneficial component of care. It has a positive impact on alleviating post abortion grief and improving woman's satisfaction with care. Accordingly, discharge counseling should be an integral part of nursing process after abortion to improve overall quality of care.

Regarding to relation between studied nurse's knowledge regarding vesicular mole & personal characteristics the current study result illustrated that, there was highly statistically significant between total knowledge regarding vesicular mole scale with age, educational qualification, years of experience and training about the vesicular mole when (p-value <0.001). While, there was a statistically non-significant relation with place of residence (p-value >0.05).This may be due to demographic characteristics affected in level of knowledge The current study result in the same line with **Abdelhakm, & Said, (2017)** who founded that, there was positive statistically significant relation between knowledge and age also there was positive statistically significant relation between knowledge and years of experience

Regarding to relation between studied nurse's knowledge regarding items of discharge plan for women diagnosed with vesicular mole &personal characteristics the present study result showed that there was a highly statistically significant relation between total knowledge regarding discharge plan with age, educational qualification, training, and years of experience (p-value <0.001), also there was a statistically non-significant relation between total knowledge regarding discharge plan and place of residence (p-value>0.05). This indicated age and educational level when increased increase level of education.

The current study result agree with **Zakiyah & Basuki, (2017)** who applied study entitled "Relationship between nurse characteristics with discharge planning implementation" and founded that, there were statistical significant relation between educational level and discharge plan while disagree in relation to marital status and gender there was non- statistical significant relation between discharge plan and marital status and gender.

Conclusion:

In the light of the previous study, it was concluded that more than near to three quarters of study sample had poor knowledge regarding vesicular mole. Slightly more than two thirds of them had satisfactory knowledge regarding discharge care plan for women diagnosed with vesicular mole.

Moreover there was highly statistically significant relation between total knowledge regarding vesicular mole scale with age, educational qualification, years of experience and training about the vesicular mole and a highly statistically significant relation between total knowledge regarding vesicular mole scale and source of knowledge regarding vesicular mole. while there was a statistically non-significant relation between total knowledge regarding discharge plan and place of residence. While there was a highly statistically significant relation between total knowledge regarding discharge plan with age, educational qualification, training, and years of experience, also there was a statistically non-significant relation between total knowledge regarding.

Recommendation:

In the light of the findings of this study, the following recommendations are suggested:

- Performing training courses regarding vesicular mole for the nurses to increase their knowledge regarding such serious problem.
- Adding educational program regarding role of nurse in the participation in discharge care plan for women diagnosed with vesicular mole.
- Increase nurses awareness regarding new technology used in patient education.

Further research:

- Effect of application of new technology in discharge planning process for women diagnosed with vesicular mole.
- Barriers for application of discharge planning process regarding women diagnosed with vesicular mole among maternity nurses.

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