Effectiveness of educational program on nurses practice about ovarian cancer in Baghdad City Hospitals

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Abstract---Background: The most severe gynecologic cancer with the greatest fatality rate is ovarian cancer (Zohre, M., et al., 2019). Therefore enriching nurses knowledge about ovarian cancer very essential in order to improve nurses services for women with this dangerously diffused type of cancer. Objectives: To evaluate nurse’s practice about ovarian cancer in Baghdad city hospitals, To determine the effectiveness of Educational program on nurses practices about ovarian cancer. To identify the relationship between the nurses knowledge and their demographic characteristics (age, educational level, socioeconomic status, years of experience). Methods: A quasi-experimental, (two groups pretest–posttest) control group and study design is carried out in order to achieve objectives of the study by using the evaluation approach and implementation of education program at (Baghdad teaching hospital, oncology teaching hospital, Alyarmok teaching hospital). from 7 September to 18 December, Non-probability a purposive of (72) of nurses (36) study group and (36) control group has been selected for the present study from three teaching Hospitals in Baghdad City from 7 September to 18 December. The data collection tool contains (57) multiple-choice questions of nurses practice about ovarian cancer. Results: The study showed a clear improvement after educational program in the information of nurses, according to the results. Conclusion: The study concluded that the nurses working in the field that deals with ovarian cancer have insufficient knowledge about ovarian cancer. The program has effect on nurses level of knowledge and practice about ovarian cancer during the two period of test, the study sample have low level of knowledge (pretest) implementation of educational
program and the level of ascend to high level (posttest) implementation of educational program.

**Keywords**---ovarian cancer, educational program, nurses, practice.

**Introduction**

Ovarian carcinoma is one of the most common cancers in women, and it is one of the primary causes of morbidity and mortality. It is a heterogeneous group of neoplasms that is the world’s seventh most fatal malignancy in women, and it is the leading cause of mortality from gynecological cancer. (Yogita L., et al., 2016). The prognosis for ovarian cancer is one of the worst among carcinomas. (Kazumasa Mogi, et al., 2021).

Ovarian cancer is the most fatal gynecological tumor, and the molecular processes behind its growth and metastasis are unknown. (Caglar B. & Ercan C., 2021). Epithelial ovarian cancer (EOC) is one of the deadliest cancers in women, resulting from malignant transformation of the ovarian epithelium, peritoneum, or fallopian tube. Because of the non-specificity of early indications of EOC and the lack of appropriate screening procedures, most patients' tumors are discovered at an advanced stage of development, which not only worsens the clinical result but also narrows the treatment options. (Ewelina P., et al., 2021).

The most common cause of death from gynecological cancer has been identified as epithelial ovarian cancer (EOC). (Zhou Y., et al., 2018) Furthermore, because of their ambiguous symptoms, the majority of EOC cases were identified as advanced. (Maringe C., et al., 2012). Despite advances in surgery and other treatments, the therapeutic efficacy and prognosis of EOC patients in advanced stages continue to deteriorate due to a lack of early and effective diagnosis tools. (La Vecchiala C., 2017).

Women are cared for by NPs who work in a variety of healthcare locations. Many NPs work in primary care and are the guardians of women's health. They have the potential to discover ovarian cancer risk factors and early signs in their women. Initial diagnosis is linked to better outcomes. (Slatnik & Duff, 2015). NPs are well-known for their health-education services. (American Association of Nurse Practitioners, 2017). They have the chance to educate women about ovarian cancer incidence and mortality and manifestations. NPs have the chance to improve the health outcomes of women with ovarian cancer as providers, educators, and activists. (Elizabeth M. H., 2017). With reference to ovarian cancer, more study and efforts should be concentrated on training initiatives and program creation for nursing professionals NPs. To satisfy this requirement, in addition to traditional educational materials, there are prospects for the creation of social media platforms or web-based learning. (Carol L. G., et al., 2017). To improve nursing practice in ovarian cancer care, educators should establish targeted instructional activities in genetics as part of continuing educational programs. (Memnun S., et al., 2017).
Methods

Study design, sample and setting

A quasi-experimental, (two groups pretest –posttest) control group and study design was carried out a Non- probability a purposive of (72) of nurses (36) study group and (36) control group has been selected during data collection period from 7 September to 18 December and implementation of education program at (Baghdad teaching hospital, oncology teaching hospital and Alyarmok teaching hospital).

Data Collection and Tool

Data are collected by using the study instrument questionnaire, which consisting of four main axes (demographic and occupational data, and 5 domains for evaluating nurses’ practices about ovarian cancer) , this is to assess nurses practice and the need to the educational program based on lecturing , group discussion and role playing ,which filled by the researcher by observing there practice .scoring system for questionnaire score, 1 for not done practice and 2 for done practice for assessing their practice ,practice was classified in to three categories low level (1-1.33) , moderate level (1.34-1.66), high level (1.67-2), the person correlation coefficient was used to measure the reliability of the tool ,the results of this calculation indicate that the correlation confection is acceptable (0.70). the validity of the questionnaire is tested by presenting it to 15 experts in the field of health and education, the questionnaire was modified in some elements according to the experts recommendations .the results of this calculation indicate that the degree of practice is acceptable for the experts.

Ethical consideration

old that participation was optional and that they had the right to read the study protocol and discussion the benefits and risks of participation with the researcher.

Statistical analysis

The primary data collected was encoded and analyzed using SPSS version 21, then the data was subjected to descriptive analysis in the form of frequencies and percentage. Quantitative data were expressed by calculating the mean and standard deviation. The one-way ANOVA analysis was also used to find out the significance of the statistical differences between the variables of current study at the significance level of 0.05.

Results

Table (1) Distribution of the sample by their demographic characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Control group</th>
<th>Study group</th>
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<td></td>
<td>F</td>
<td>%</td>
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</table>

The finding in table (1) indicated that in the control group, 47.2% of nurses at age (20-less than 30) years, 50% of them are married, 41.7% Nursing high school graduate, In the study group, 52.8% of nurses at age (20-less than 30) years, 63.9% of them are married, 47.2% Nursing high school graduate.

Table (2): Significant Differences in Nurses practice overall with regard to Pre-test among Study and Control Group

<table>
<thead>
<tr>
<th>Domain</th>
<th>Group</th>
<th>Pretest</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>Mean</td>
<td>SD</td>
<td>T</td>
<td>df</td>
<td>P value</td>
<td>Sig</td>
</tr>
<tr>
<td>Overall</td>
<td>Control</td>
<td>1.22</td>
<td>.103</td>
<td>.460</td>
<td>70</td>
<td>.647</td>
<td>NS</td>
</tr>
<tr>
<td>Overall</td>
<td>Study</td>
<td>2.46</td>
<td>.169</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

P: probability value, NS: No. significant, T: t test, d.f.: degree of freedom, L=low level (1-1.33), M=moderate level (1.34-1.66), H=high level (1.67-2).

This table show non-significant deference between the overall practice of nurses in control and study groups at pretest period.

Table (3): Significant Differences in Nurses practice overall with regard to Posttest among Study and Control Group

<table>
<thead>
<tr>
<th>Domain</th>
<th>Groups</th>
<th>Posttest</th>
<th></th>
<th></th>
<th></th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>T</td>
<td>df</td>
<td>P value</td>
<td>Sig</td>
</tr>
<tr>
<td>Overall</td>
<td>Control</td>
<td>1.19</td>
<td>.104</td>
<td>38.05</td>
<td>70</td>
<td>.000</td>
<td>HS</td>
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<tr>
<td>Overall</td>
<td>Study</td>
<td>2.46</td>
<td>.169</td>
<td></td>
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</tbody>
</table>
P: probability value, T: t test, d.f.: degree of freedom, HS: high significant, L=low level (1-1.66), M=moderate level (1.67-2.33), H=high level (2.34-3).

This table show high significant deference between the overall practice of nurses in control and study groups at posttest period.

![Figure (1): overall Practice for the control and study group (pretest and posttest).](image)

**Discussion**

The analysis of Nurses of control group socio-demographic characteristics depicts that the majority of the nurses of control group were the majority of them within the age (20-less than 30) years old was (47.2%) and (20-less than 30) of the study group (52.8%). As shown in table (1), halve of sample was married of control group was (50%) and about (63.9%) were married for the study group, and about highest proportion of educational level was within the Nursing high school graduate for both control and study group was (47.2%).

While a t-test was used to assess the knowledge, awareness, and counseling skills of Korean healthcare practitioners for patients at high risk of OC. Others include Jihyoun Lee (2013). They discovered that Demographic characteristics 25(5.8) was female age 30-39 was 27(81.8) had undergone prior genetic counseling education for nurses about ovarian cancer.

Significance for Nursing Oncology nurses can improve their clinical teaching by incorporating this information into their practice, according to Monica R. M. and others (2008). Nurses doing ovarian cancer research can utilize this framework to help them choose the right biomarker(s) for their study. Finally, nurse educators can use this framework when teaching students key concepts in the care of women with ovarian cancer.

Nurses’ Practices with Respect to Family History Assessment, according to Lockwood-Rayermann and others (2022). A little more than half of the nurses who took part in the study (52 percent) said they were aware of the family history of cancer patients. Furthermore, 63 percent said they inquired about the genetic history of cancer patients. Only 23% of nurses who took a family history also
inquired about the family histories of extended family members up to third-degree relations.

Bradley Monk (2021) was not re-elected. These findings show that students have a better awareness of niraripab dose, which could help them avoid side effects throughout therapeutic treatment. With 51 percent of oncology nurses aiming to change, learners expressed the most intent to modify their practice with proactively monitoring for adverse events. As a result of participation in this instructional session, 71% of learners intend to improve their practices. Sixty-six percent will be more proactive in monitoring for potential bad events, among other adjustments. Seventy-one percent of those who responded to the follow-up questionnaire said they had made one or more modifications to their practice.

Thus according Agnes Mansy and others (2003), there was a statistically significant increase in knowledge from pre to posttest. Collecting family histories and estimating cancer risk were both said to have improved. Those who reported current risk assessment practice after training were more likely to acquire required family history information and were more confident in their abilities. The research was carried out on two groups (experimental group; control group). After receiving academic training, all of the students participated in a six-scenario OB-GYN nursing simulation lab. Students in the experimental group started clinical practice after completing simulation training, whereas their counterparts in the control group started clinical practice without having completed simulation training. Nurses can play important roles in CRA with the right knowledge and practice.

The large numbers of patients comparing with numbers of oncology nurses brings load of responsibilities make it difficult for them to carry out their duties perfectly and correctly within the work of daily practice. The point of view of the researcher related to the present study considers that the educational program has a positive effect on the nurses level of practice and thus will improve nurses services to women with ovarian cancer. There is highly significant deference between mean of nurses practice at pretest with the age group. There is significant deference between mean of nurses practice at posttest with the marital status at p value (0.028). There is significant deference between mean of nurses practice at posttest with the education level at p value (0.000). In the pretest period ,the nurses practice highly deference papered in relation to the nurse age group because of the experience will be differ and reflect up on their practice.

According to Cynthia K. O. and researchers' (2011) study, 9 percent of nurses were married, although there were substantial differences in race and education, with the Low APN having fewer college-educated individuals than either of the other two groups (n 32) The attention control resulted in much less ambiguity than the Advanced Practice Nursing (APN) intervention. When the APN intervention sub-group was compared to the total attentiveness control group, the t-test revealed a significant difference in each health outcome between the advanced practice nurse APN intervention and control groups.

Respondents were asked to provide demographic information about their primary professional function by Elizabeth Marie Hodny (2017) in her study. The majority
of responses were undergraduate nursing students, which matched the study's findings. Graduate nursing students, registered nurses, and others were among the others who responded. The quantity and complexity of the information, evidence-based content, and content relevance to practice were all considered while rating the conference content. Dr. Brent Solseng had recently given a classroom lecture on ovarian cancer to undergraduate nursing students. The symposium included information about ovarian cancer, which could have affected the pretest and posttest outcomes. In general, the posttest had more accurate answers than the pretest.

Conclusion

In light of the results, the study concluded that the nurses working in the field that deals with ovarian cancer have insufficient knowledge about ovarian cancer. The program has effect on nurses level of knowledge and practice about ovarian cancer during the two period of test, the study sample have low level of knowledge (pretest) implementation of educational program and the level of ascend to high level (posttest) implementation of educational program. There is significant deference between the mean of nurses knowledge and practice pre and post implementation of the program. There is significant deference between nurses knowledge at pretest and posttest period with place of working (hospital) for the study group.

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References