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Effectiveness of Instructional Program on Women`s Knowledge Referred to Colposcopic Examination in Baghdad City Hospitals, Comparative Study.

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Abstract:
Background: *Colposcopy examination is one of the clinical gynecological procedure to examine, illuminate, magnified view of the cervix for evaluating cervical cytological abnormalities, vagina and vulva. It's widely used for early diagnosis of pre-invasive and invasive cervical cancer cells.*
Objectives: *To assess the women's knowledge referred to colposcopic examination before and after applying an instructional program and to find out the relationship between socio-demographic, gynecologic and obstetric variables with their level of knowledge.*
Methodology: *A quasi- experimental study design was carried out in Baghdad Teaching Hospital. A non-probability (purposive) study sample of* ***(60)*** *women, (30) for the study group and (30) for the control group referred to colposcopic examination in outpatient clinic of early detection of cancer for the period from 27/January to 20/March/2017. A questionnaire designed by researcher to measure the variable underlying the present study, the questionnaire consisted of four parts: Socio-demographic characteristics, gynecologic and obstetric characteristics, women`s knowledge toward colposcopic examination, while the four part contains A. Measure the pain intensity by visual analog scale and B. Discomfort during the colposcopy procedure. Validity and Reliability: Validity of the instrument was established through a panel of (10) experts, and reliability by calculating split half approach. The data were analyzed using descriptive and inferential statistical procedure for data analysis.*
Results: *Results of the study reveal that the level of knowledge toward colposcopy examination showed (70%) of the study group, while (73.%) of the control group were unacceptable in pre-test. After implementation the instructional program the level of knowledge showed (93%) of the study group, while (27%) of the control group were acceptable in post-test.*
Conclusion: *The study concluded that the knowledge of the study group were higher than it were pre the instructional program regarding to colposcopy examination.*
Recommendations: *Provide suitable setting and comfortable place before colposcopy examination for women to explain the colposcopy procedure with given instructions that related before, during and after the procedure, intensification of medical and nursing lecture related to colposcopy examination to nursing personnel and midwives through continuous education program.*
Keywords: *Colposcopy examination, cervical cancer, knowledge*

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I. Introduction

Colposcopy examination is one of the clinical gynecological procedures for medical diagnostic to examine, illuminated, magnified view of the cervix for evaluating cervical cytological abnormalities and the tissues of the vagina and vulva, it's widely used for early diagnosis of pre-invasive and invasive cervical lesions [(1).] The goal of a screening and treatment of cervical cancer is reduce cervical cancer mortality. Common screening tests that are widely and can be used as a single test or in a sequence include: Tests for human papillomavirus (HPV), cytology (Pap test), visual inspection with acetic acid (VIA) and colposcopy examination [(2)]. During a colposcopy examination the health care provider may present knowledge regarding colposcopy procedure or the cervical dysplasia, may discuss future screening and treatment plans or take the opportunity to solicit and answer the woman's questions [(3)]. Knowledge about the utility and purpose of screening and diagnostic methods such as the Pap smear and colposcopy is typically low, even among women undergoing

these procedures[4]. Women tend to demonstrate very little understanding of the meaning of an abnormal cervical smear result or the reason for colposcopy and many women do not have a clear understanding of the meaning of an abnormal cervical smear or the concept of precancer[5]. Many women believe the purpose of the smear test to detection of existing cervical cancer. This misconception may explain the high numbers of women who on receiving notification of an abnormal smear result believe they have cancer. The lack of understanding persists in women referred for colposcopy with many women unaware of the main reason for colposcopy [6].

II. Methodology

A quasi- experimental study design was carried out in Baghdad Teaching Hospital. A non- probability (purposive) study sample of **(60)** women, (30) for the study group and (30) for the control group referred to colposcopic examination in outpatient clinic of early detection of cancer. **Data collection:** Was done through by interview the questionnaire underlying the present study, Questionnaire was consisted of four parts: Socio-demographic characteristics, gynecologic and obstetric characteristics, women`s knowledge toward colposcopic examination, while the four part contains the A. Measure the pain intensity by visual analog scale and B. Discomfort during the colposcopy procedure. Validity of the instrument was established through a panel of **(10)** experts, and reliability by calculating the split half approach**.** The data were analyzed approach by using (SPSS 20) using descriptive and inferential statistical test for data analysis.

Ethical consideration:

The researcher was explained the purpose of the study for every woman before participation, oral consent was obtained from every woman prior to data collection. Women were assured that the study maneuver will cause no actual or potential harm to study sample.

III. Results

Table (1): Distribution of study sample according to women's Socio-demographic data characteristics (N=60).

Socio-Demographic Variables	Study group (n=30)		Control group (n=30)		χ^2	df	P-value	Sig
Age/years	**No.**	**%**	**No.**	**%**				
20-29	7	23.3	3	10.0	8.101	3	0.524	NS
30-39	11	**36.7**	13	**43.3**				
40-49	9	30.0	10	33.3				
≥50	3	10.0	4	13.3				
$\bar{x} \mp SD$	37.6 ± 10.52		39.97 ± 9.682					
Level of Education of the study sample								
Read & Write	1	3.3	1	3.3	25.533	5	0.433	NS
Primary school graduate	9	**30.0**	11	**36.7**				
Intermediate school graduate	5	16.7	5	16.7				
Secondary school graduate	4	13.3	5	16.7				
Institution graduate	6	20.0	6	20.0				
College and above graduate	5	16.7	2	6.7				
Occupation Status for the Study Sample								
Housewife	22	**73.3**	27	**90.0**	1.212	2	0.545	NS
Government Employee	8	26.7	2	6.7				
Retired	0	0.0	1	3.3				

χ^2: chi-square, df: degree of freedom, P-value, Sig: Significant

Table (1) Show that highest percentage (36.7%) of the study group with ($\bar{\chi}$= 37.6, SD =10.52, Min age =23, Max age =66) and (43.3%) of the control group with ($\bar{\chi}$= 39.97, SD= 9.78, Min age = 22, Max age =68), women age group was (30–39) years old for both the study and control groups. Level of education of the study sample the highest percentage (30%) of the study group and (36.7%) of the control group were primary school graduate. Occupation status of the study sample the highest percentage (73.3%) of the study group and (90%) of the control group were housewives.

Table (2): Distribution of Gynecological and Obstetric Characteristics of Study Sample for both Study & Control Groups.

gynecological and obstetric characteristics	Study group (n=30)		Control group (n=30)		χ^2	df	P-value	Sig
Gravidity (Number of Pregnancy)	**No.**	**%**	**No.**	**%**				
Nulligravida	2	6.7	1	3.3	18.13	4	0.112	NS

Primigravida	2	6.7	0	0.0				
Multigravida	12	**40.0**	13	**43.3**				
Grandmultigravida	10	33.3	11	36.7				
Great multigravida	4	13.3	5	16.7				
Number of Delivery								
Nullipara	2	6.7	1	3.3				
Primipara	2	6.7	3	10.0				
Multipara	15	**50.0**	14	**46.7**	19.18	4	0.260	NS
Grandmultipara	9	30.0	10	33.3				
Great multipara	2	6.7	2	6.7				
Number of Abortion								
None	17	**56.7**	19	**63.3**				
1-2 abortion	13	43.3	6	20.0	0.14	2	0.931	NS
3-4 abortion	0	0.0	5	16.7				
Age at Marriage/years								
13 – 18	17	**56.7**	23	**76.7**				
19 – 24	11	36.7	1	3.3	3.01	3	0.807	NS
25 - 30	2	6.7	5	16.7				
31 - 36	0	0.0	1	3.3				
Type of Contraception								
Condom	8	**26.7**	0	0.0				
Oral contraceptive pills	4	13.3	2	6.7	2.00	1	0.157	NS
IUCD	1	3.3	4	**13.3**				
History of Cancer								
Yes	8	26.7	7	23.3	1.08	1	0.299	NS
No	22	**73.3**	23	**76.7**				

χ^2: chi-square, df: degree of freedom, P-value, Sig: Significant

The Obstetric Characteristics Include:

Gravidity (Number of Pregnancy) showed the highest percentage (40%) of the study group and (43.3%) of the control group were multigravida. Regarding the number of delivery the highest percentage (50%) of the study group and (46.7%) of the control group were multipara**.** Number of abortion showed the highest percentage (56.7%) of the study group and (63.3%) of the control group were none abortion.

The Gynecological Characteristics Include:

Age at marriage showed the highest percentage (56.7%) of the study group and (76.7%) of the control group were (13-18) years. Regarding the type of contraception the women showed highest percentage (26.7%) of the study group were using barrier method (male condom), while (13.3%) of the control group were having IUCD. Family history of cancer showed the highest percentage (73.3%) of the study group and (76.7%) of the control group were not having.

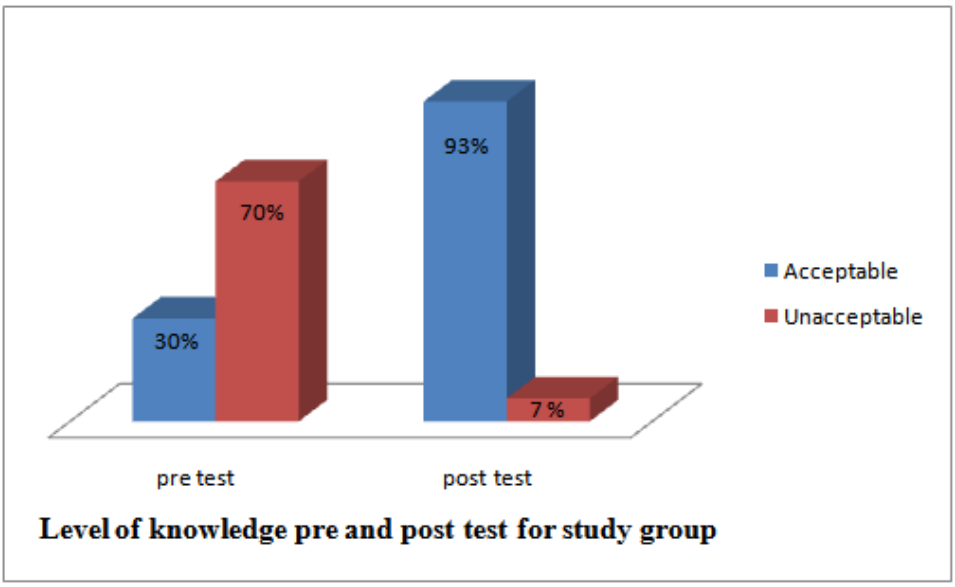

Figure (1): Level of Overall Knowledge Toward Colposcopic Examination for Study Group in Pre and Post-test

This figure show the highest percentage (70%) was unacceptable in pre-test, while the highest percentage (93%) was acceptable in post-test for the study group.

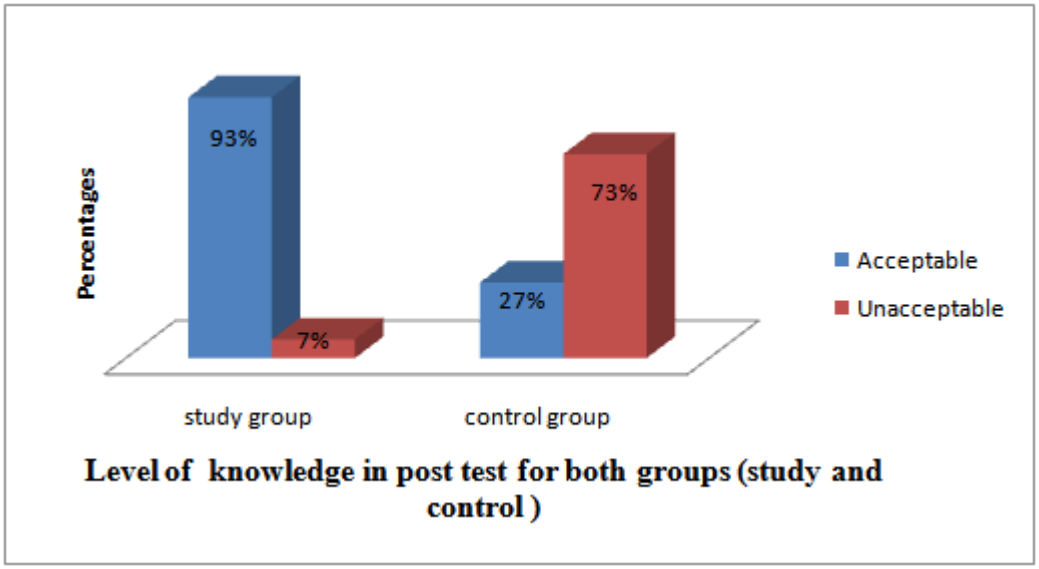

Figure (2): Level of Overall Knowledge Toward Colposcopic Examination for Study and Control Groups in Post-Test.

This figure show the level of knowledge toward colposcopy examination, the highest percentage (73%) of the control group was unacceptable, while the highest percentage (93%) of the study group was acceptable in post-test.

Table (3) The Relationship Between Level of Knowledge among Study Group Regarding the Colposcopy Examination and Socio-Demographic Variables.

Variables		Level of Knowledge		χ^2	df	P-value	Sig
		Acceptable	Unacceptable				
Age/ years	20-29	6	1	5.51	3	0.138	NS
	30-39	11	0				
	40-49	9	0				
	≥50	2	1				
Level of Education	Read & Write	0	1	17.14	5	0.004	**S**
	Primary school graduated	9	0				
	Secondary school graduated	4	1				
	High school graduated	4	0				
	Institution graduated	6	0				
	College and above graduated	5	0				
Occupation Status	Housewife	20	2	0.78	1	0.38	NS
	Government Employee	8	0				

χ^2: chi-square, df: degree of freedom, P-value, Sig: Significant

Table (3) shows that there was no statistical significant difference between level of knowledge and the socio-demographic variables (age group, occupation status), while There was a statistical significant difference between level of knowledge with the level of education for the study group.

Table (4) The Relationship Between Level of Knowledge among Study Group Regarding the Colposcopy Examination with Obstetric and Gynecological Variables.

Variables		Level of Knowledge		χ^2	df	P-value	Sig
		Acceptable	Unacceptable				
Gravidity	Nulligravida	1	1	7.5	4	0.112	NS
	Primigravida	2	0				
	Multigravida	12	0				
	Grandmultigravida	9	1				
	Great multigravida	4	0				

Number of Delivery	Nullipara	1	1	7.68	4	0.104	NS
	Primipara	2	0				
	Multipara	15	0				
	Grandmultipara	8	1				
	Great multipara	2	0				
Number of Abortion	None	15	2	1.64	1	0.201	NS
	1-2 abortion	13	0				
	3-4 abortion	0	0				
Age at marriage/years	13 - 18	15	2	1.639	2	0.441	NS
	19 - 24	11	0				
	25 - 30	2	0				
	31-36	0	0				
Type of Contraception	Condom	8	0	1.639	2	0.651	NS
	Contraceptive pills	4	0				
	IUCD	1	0				
history of cancer	Yes	8	0	0.779	1	0.377	NS
	No	20	2				

χ^2: chi-square, df: degree of freedom, P-value, Sig: Significant

Table (4) shows that there was no statistical significant difference between level of knowledge with the obstetric and gynecological variables such as (gravidity, parity, number of abortion, age at marriage, type of contraception and history of cancer)

IV. Discussion

The findings of the present study shows the both groups (study and control) in pre-test had low knowledge towards colposcopy examination. After implementation the instructional program for the study group the women's knowledge toward colposcopy examination increased, that demonstrated when the study group answering on the same questions which presented in pre-test, the answering of the questions were correctly. The percentage (30 %) acceptable for the level of knowledge in pre-test was increased to (93 %) in post-test. This indicated an important increased in the level of knowledge. The study shows there was a statistical association between level of education for the study group with the level of knowledge in post-test that is shown in table (3).

The statistical significant difference can be shows between pre and post-test for all knowledge items except in item no.1: (vagina and cervix are the parts of reproductive system, it's important in pregnancy and delivery) and item no.24: (successful colposcopy procedure needs follow up). That is shown no statistical significant difference.

This findings agree with the study conducted by Pruitt and Parker et al., (2005), in Houston, USA[(7)]. The results reported the women had low knowledge scores before the colposcopy examination, while their overall knowledge improved, the women demonstrated a significant increase in post-test. The study reported the level of education for the study group was a statistical association with the level of knowledge in post-test, that indicated the women with high educational level can be understood and benefit from the knowledge presented by the researcher before the colposcopy examination.

The other study conducted by Dawood, (2014). The study to explore the barriers and facilitators to colposcopy attendance following an abnormal Pap smear: patient and provider perspectives, in Cape Town, South Africa [(8)]. Results of the study showed that the majority of women displayed a lack of knowledge about the colposcopy procedure. A lack of women understanding about the procedure and the Pap smear result was reported due to an inadequate explanation or no explanation given by primary level providers. Misinformation about an abnormal Pap smear result and cervical cancer received from primary level providers resulted in women being fearful. A lack of women understanding about the result and the procedure was further influenced by difficulty comprehending the terminology used in the colposcopy letter.

V. Conclusion

The present study shows that the lowest level of overall women knowledge was unacceptable. Implementing of an instructional program was effective in changing their knowledge towards colposcopy examination. There was no statistical significant association between socio- demographic variables (women age and occupation status for the study sample), gynecological and obstetric characteristics which include: (gravidity, parity, number of abortion, age at marriage) with their knowledge regarding to colposcopy examination. There was a statistical significant association between level of education with the level of knowledge for the study group regarding to colposcopy examination.

VI. Recommendations

1. Provide suitable setting and comfortable place before colposcopy examination for women to explain the colposcopy procedure with given instructions that related to before, during and after the procedure.

2. Provide Teaching Hospitals affiliated to the Ministry of Health with instructional pamphlet that prepared by the researcher to increase the knowledge related to colposcopy examination.
3. Intensification of medical and nursing lecture related to colposcopy examination to nursing personnel and midwives through continuous education unit.
4. Focus on nursing role to take the responsibility on explaining and teaching the colposcopy examination.
5. Encourage the women about early detection of cervical cancer and explain the types of screening test such as Pap test, colposcopy examination and HPV- test with emphasis on the importance of further evaluation of an abnormal Pap smear by pamphlet, programs, internet, TVs and posters.

References:

[1]. American Cancer Society, **American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology screening guidelines for the prevention and early detection of cervical cancer**, (2014). Available in www.cancer.org, retrieved in 4-9-2016.

[2]. Castle PE, Fetterman B, Thomas Cox J, et al. The age-specific relationships of abnormal cytology and human papillomavirus DNA results to the risk of cervical precancer and cancer. ***Obstetric and Gynecologic Journal*** . 2010; vol (116) PP :76–84. Available in http://www.hpvcentre.net. Retrieved in 16-3-2016.

[3]. Hamed A.G. The Impact of Genital Hygiene Practices on the Occurrence of Vaginal Infection and the Development of a Nursing Fact Sheet as Prevention Massage for Vulnrable Women. ***Journal of Nursing and Health Science,*** 2015 *Vol (4); PP 55-64* Available in *www.iosrjournals.org*, retrieved in 8-4-2017.

[4]. WHO. Comprehensive cervical cancer control: a guide to essential practice Geneva, Switzerland: World Health Organization; 2006. Available in :http://whqlibdoc.who.int/publications. Retrieved in 6-4-2016.

[5]. Massad LS, Einstein MH, Huh WK, et al. Consensus Guidelines for the Management of Abnormal Cervical Cancer Screening Tests and Cancer Precursors. ***Journal of Lower Genital Tract Disease.*** 2013; vol (17) PP 1-27.

[6]. Ramesh G., Sudha R., Jayashree A.K., Padmini J. Colposcopic Evaluation of the Unhealthy Cervix, ***Journal of Clinical and Diagnostic Research.*** 2012, Vol-6(6): 1026-1028. Available in www.jcdr.net, retrieved in 4-10-2016.

[7]. Sandi L. Pruitta, Patricia A. Parkerb, Susan K. Petersonb, Tao Leb, Michele Follenc,d, Karen Basen-Engquistb, **Knowledge of cervical dysplasia and human papillomavirus among women seen in a colposcopy clinic. Msc Thesis in** The University of Texas , 2005. Available in www.Sciencedirect.com, retrieved in 4-3-2017.

[8]. Dawood S, **Barriers and Facilitators to Colposcopy Attendance Following an Abnormal Pap Smear: Patient and Provider Perspectives**. **Msc Thesis** in the University of Cape Town, 2014. Available in https://open.uct.ac.za. Retrieved in 21-9-2016.

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