Effect of Evidence Based Guideline Regarding Genital Prolapse Post-operative Care on Women's Knowledge and Self- Care Practices

Hagar k. Masaud(1), Nevin S. Metwaly (2), Amal F. Mohammed(2), Hanaa K. Helmy(1)

(1) Maternity & Neonatal Health Nursing, Faculty of Nursing –Beni -suef University, Maternity & gynecological Nursing, Faculty of Nursing –Ain Shams University (2).

Abstract

Women with genital prolapse experience group of medical, psychological and social problems that affect their quality of life and their sexual activity. The present study **aimed to** evaluate effect of evidence based guide line regarding genital prolapse postoperative care on women's knowledge and self- care practices. **An intervention study design** (quazi experimental design) was conducted at Beni-suef general Hospital & Ain shames maternity hospital. **A purposive sample** of 60 women was included in the study. They were divided into two groups (study & control).Data were collected tools; structured interviewing questionnaire sheet, checklist, visual analog scale (VAS)and follow up card. In addition as a supportive material guide line was given to study group. The **results of the study revealed** that there was a highly statistical significant difference p (< 0.001)between the study and control group total score of knowledge and self - care practices of women at pre-intervention, post and follow up in which the study group had higher score than the control group p (< 0.001). The study **concluded** that evidence based guide line proved to have a positive effect on knowledge and self-care practices of women undergoing surgery for genital prolapse, so study **recommended** that disseminate the application of multidisciplinary collaboration approach for postoperative evidence based guide line on women with genital prolapse surgery, further researches regarding nurse's perception and practices about evidence based guideline for genital prolapsed nursing care.

Key words: Genital prolapsed, postoperative care, evidence based guide line, self –care practices.

Introduction

Genital organ prolapse is the descent of pelvic organs from its normal position through the vagina. Often causing abnormal pressure in the pelvic region, vaginal prolapse might often cause problems with urination and bowel movements. In severe cases, the organs may actually drop out of the vaginal opening and protrude beyond the vagina. The pelvic floor keeps the uterus, bladder, urethra, rectum and vagina in place. Occasionally, the muscles, ligaments and tissues of the pelvic floor become weak and stretched. When this occurs, the pelvic organs are no longer supported properly and may fall out of place***(Harding, 2017).***

Genital prolapse occurs due to the failure of a fibromuscular structures to maintain the pelvic organs inside the pelvic cavity. Although the most severe consequence of the failure is prolapse of the uterus and vagina outside the introitus, mild degree of genital prolapse exist which may or may not be symptomatic. So the exact number of women affected by pelvic organ prolapse is difficult to estimate because symptoms vary widely, and some women may be embarrassed to discuss it with health care providers ***(Magowon, Owen, Thomson, 2018)***

Pelvic organ prolapse is multifactorial condition. A genetic disorder is regarded as the attributable factor for almost 40%of the prolapse and the rest are contributed by various factors as ageing, hormonal status, birth and surgical trauma, pudendal neuropathy, stretching of the pelvic floor support and myopathy ***(Bø et al., 2013)***

Risk factors for prolapse can be classified into confirmed risk factors and possible risk factors. confirmed risk factors include the: followingincreasing age, vaginal delivery, increasing parity, obesity, or previous hysterectomy. Possible risk factors include obstetrical factors such as prolonged second stage of labor, increased birth weight, pregnancy itself (as opposed to delivery factors) and use of forceps during delivery. Age more than 25 years at first delivery ,shape of pelvis, family history of prolapse, constipation, pulmonary diseases, connective tissue disorders eg, Marfan's syndrome, Ehlers-Danlos syndrome and occupations involving heavy lifting ***(Neels, 2018).***

Symptoms of genital prolapse include sensation of vaginal fullness, pressure in the vaginal area. Also, women may experience of soft mass bulging that may increase with coughing and straining. Back pain and pelvic pain are often associated with prolapse. Also associated with urinary symptoms as sensation of incomplete emptying of bladder and need to push the bladder up to complete voiding. Women with advanced degree of prolapse may have stress incontinence, urinary frequency. Other non- specific symptoms as dyspareunia, low back pain, fecal and gas incontinence may be reported ***(Vergeldt et al., 2015).***

Pelvic organ prolapse is diagnosed through; 1) medical history, a standardized questionnaire should be used to record the women specific medical history of pelvic floor symptoms and life style.2) Clinical examination, in addition to standard inspection of the external genitalia, the evaluation must include coughing, pushing or standing.3) Ultrasonography for an in-depth discussion, Pelvic floor sonography can be a useful diagnostic tool in addition to vaginal and rectal examination. 4) Magnetic resonance imaging can be used to obtain images during pressing, and during contractions of the pelvic floor and 5) Cystourethroscopy ***(Aigmullar et al., 2016).***

Pelvic organ prolapse can be treated according to the severity of symptoms. They may be treated with conservative measures as (changes in diet and fitness, Kegel exercises, etc) or with surgery such as colpocleisis. Surgery for prolapse is used to treat symptoms such as bowel or urinary problems, pain, or mass sensation, including the use of transvaginal surgical mesh devices, in the form of a patch or sling. However, the use of a transvaginal mesh in treating vaginal prolapses is associated with side effects including pain, infection, and organ perforation***(Glazener et al., 2014).***

Postoperative care is the management of a patient after surgery. This includes care given during the immediate postoperative period, both in the operating room and post anesthesia care unit, as well as during the days following surgery. The goal of postoperative care is to prevent complications such as infection, to promote healing of the surgical incision, and to return the patient to

a state of health. Patients when discharged to home are given prescriptions for their pain medications, and are responsible for their own pain control and exercises. Their families should be included in postoperative teaching so that they can assist the patient at home ***(Rodts, 2017).***

Nurses as educator are responsible for ensuring that patients are able to understand their health, illnesses, medications, and treatments to the best of their ability. This is of essence when patients are discharged from hospital and will need to take control of their own treatments. The nurse should take the time to explain for the patient and their family or caregiver what to do and what to expect when they leave the hospital or medical clinic. They should also make sure that the patient feels supported and knows where to seek additional information ***(Smith, 2016).***

Nurse provide health education about life style modification which is the first line of treatment it include losing weight especially abdominal fat (if the patient is overweight), correcting poor posture, maintain normal bowels using correct bowel emptying technique such as avoiding constipation, managing of chronic chest conditions that cause chronic coughing, modifying adverse lifestyle factors (e.g. using safe lifting techniques) and Staying strong and fit with pelvic floor safe exercises***(Kenway, 2015).***

Effective evidence based guide line supports the continuity of quality of health care between the health-care setting and the community; it is described as "the critical link between treatment received in hospital by the patient, and post-discharge care provided in the community." The purpose of evidence based guide line is to ensure continuity of quality care between the hospital and the community. In addition to reduce hospital length of stay and unplanned readmission to hospital, as well as to improve the coordination of services following discharge from hospital ***(Jung lin et al., 2012).***

Justification of the problem;

World Health Organization estimates reproductive ill health accounts for33% of global disease burden in women. Globally the global prevalence of genital prolapse is estimated to be 2-20%in women under age 45 years the prevalence in Egypt was 56, 3%.***(Hassan, M, (2013).***

Women with genital prolapse have many physical, psychological and social problems that affect their quality of life and their sexual activity. Most women who undergo prolapse surgery have knowledge deficiency about appropriate self-care activities after discharge from hospital that include pain management, wound care activity, diet, hygienic measures and life style modification.

So this study will be held to investigate the effect of application for evidence based guide line on knowledge and self- care practices of postoperative women with genital prolapse

Aim of The study

This study aimed to investigate the effect of application for evidence based guide line regarding genital prolapse postoperative care on women's knowledge and self- care practices through ;

-Design to evidence based guide line regarding genital prolapse postoperative care.

-Evaluate the effect of evidence based guide line on women's knowledge post and follow up.

-Investigate the effect of evidence based guide line on women's self -care practices.

Hypothesis;

-There is an improving in knowledge and self- care practices regarding postoperative care among women with genital prolapse for intervention group rather than control group.

Subjects and methods:

Research design:

The study followed an intervention study design (quazi experimental design).

Setting:

-The current study was conducted at Beni-suef general Hospital (gynecological ward) & Ain shames maternity hospital (gynecological ward), the researcher conducted the study at two sittings because the number of women who conduct prolapse repairing surgery was limited in one place.

Sampling;

Sample type:

A Purposive sample was used.

Sample criteria:

-The sample was collected based on the following criteria;

* Women that were hospitalized for undergoing surgery for any type of genital prolapse.

* Women that were being at least able to read and write.

* Women haven't engaged in similar researches about postoperative care of genital prolapse.

Sample size:

Sixty women were included in the study, all women with postoperative genital prolapse repairing surgery attending at the previously mentioned setting through 6 months from March 2017 until August 2017.

Sampling technique:

The sample was divided in to 2 groups;Group 1 (study group) consists of (30)women with genital prolapse attending at Beni-suef general Hospital (gynecological ward) for 6 months, evidence based guide line was applied for this group.Group 2 control group consists of (30) women with genital prolapse attending at Ain shames maternity hospital (gynecological ward) for 6 months. This group was left to receive routine hospital care.

Tools of data collection:

Three types of tools were used for data collection;

1-Structured interviewing questionnaire sheet:

To assess women's personal data, and knowledge about genital prolapse. It was designed by the researcher based on review of literature considering the aim of the study and data needed to be collected. It was divided in two parts.

FirstPart: was designed to assess the personal data of the study sample as age, educational level, residence, marital status.

Second part: it was designed to assess women's knowledge regarding genital prolapse as concept of prolapse, symptoms of prolapse predisposing factors of prolapse.

With utilization for scoring system depend on the answer of the women was distributed to three categories (complete correct, incomplete correct and incorrect) .The researcher considered the incomplete correct as incorrect, and then distributed the answer to complete correct and incorrect.

Correct answer was scored "2", correct incomplete (1) while incorrect answer was scored "0", Total score =18.All items were summed up and a mean knowledge score was calculated. Mean % Score= Mean Score/No. of Items*100.

Knowledge score was further divided into:

-Low (< 60.0%)

-Average (60 %-75%)

-High (>75.0%)

2- Check list of postoperative self-care practices regarding genital Prolapse surgery;

Checklist of self- care practices included wound care, prevention of infection, dealing with pain, diet, daily activities, personal hygienic measures and sexual activity.

2-Scoring system for check list of postoperative self-care practices regarding genital Prolapse surgery:

If done by correct practice was scored "1", while if not done it was scored as "0", Total score = 28.All items were summed up and a mean Practice score was calculated.

Practice score was further divided into:- Low management (<60.0%)

- Average management (60%-75%)

-High management(>75.0%)

3-Visual analog scale (VAS),it was developed by the researchers according to the literature. The VAS score is determined by measuring in centimeters from the left of the line with the range 0-10. The patient pointed marks on the scale and the numerical value obtained indicates the pain intensity. VAS is reported to be more sensitive and reliable in measuring pain intensity in comparison to other one-dimensional scales(***Eti Aslan F, Kan Öntürk Z.2014)***. Vertical form of VAS was used in this study. the researcher divided the responses of women for pain to:

- uncontrolled if the participant pointed more than 5cm
- Partly controlled from 2-5
- Well controlled if the mark less than 2 cm***. (P.S.Myles & et al ,2017).***

4-Follow up card:

It includes telephone number of women, nurse, and physician. The participants registered for any abnormalities or complications in the card.

Supportive material as (evidence based guide line):

It was designed to enhance women's knowledge after discharge from hospital. It was designed by the researchers with using for different illustrative pictures in order to facilitate understanding its content. Contained knowledge about genital prolapse as (complication management for genital prolapse surgery, postoperative danger sings) proper diet, wound care management of pain and hygienic measures to avoid wound infection.

Tools validity:

Validity of tools were tested through jury of expertise (3 professors from faculty of Nursing ,Ain shams university) to test the content, knowledge, accuracy & relevance of tools for research title.

Reliability Analysis;

Reliability analysis was measured using Cronbach's alpha coefficient and was found to be 0.973 for the knowledge part of the questionnaire and 0.947 for the checklist of self-care practice after genital Prolapse repairing surgery.

Ethical considerations;

- Oral consent was obtained from women after explaining the purposes of the study, no harmful methodology was used, each woman had the right to withdraw from the study at any time, confidentiality was maintained and human rights were used.

Field work;

Field work consisted of four phases:

(1) Preparatory phase:

A-It was included reviewing of local and international related literatures and theoretical knowledge about various aspects of the study problem. This helped the researcher to be acquainted with the magnitude of the problems, and guided the researcher to prepare the required data collection tools.

B-An official written approval letter clarifying the purpose of the study was obtained from the director of Ain shams university hospital & director of Beni-suef general hospital maternity and gynecological department as an approval for data collection to conduct this study.

C- Pilot study was carried out on approximately 10% of the total study sample (six women) to evaluate the applicability, efficiency, clarity of tools, assessment of feasibility of field work and identification of suitable place for interviewing women. Necessary modifications were done based on the pilot study findings such as (omission of some questions from tool) in order to strengthen their contents or for more simplicity and clarity. The pilot sample was excluded from the main study sample.

(2) Implementation phase;

-The data was collected through a six months from the beginning of March 2017 till the end of August 2017.

-The researcher attended atBeni-suef general Hospital (inpatient gynecological ward) 3days /week from 9am to 2pm and 1day
/week at Ain shames university maternity hospital (inpatient gynecological ward) from 9am to2pm.

- In the first the researcher introduced herself to the women and explained the aim of the study prior to data collection. Then oral consent of women was obtained.

-The researcher start to fill the interviewing questionnaire (at inpatient unit) to assess women's personal data, their knowledge about genital prolapse, and utilize to check list to assess their self-care practicesthen assess pain level through the utilization for visual analog scale (VAS) for both groups within 30 minutes for every session with each woman.

- Then the researcher started with orientation regarding to the contents of the evidence based guide line, its purpose and its impact on the women's condition, the researcher gave instructions based on the women's condition and health problems.

-Control group will receive the routine care only.

-The researcher obtain on women's via cellular phone number for instruction and reinforcement after discharge from hospital .

(3) Evaluation phase:

The researchers after one week of intervention(at outpatient unit)evaluate the effect of evidence based guide line on women's knowledge and self-care practices .In some cases telephone interview was conducted following discharge to determine the adequacy of discharge information received. Then compared between the control and study group by assessing their knowledge, their self-care practices. The researcher utilized to the second part of 1st tool related to knowledge with 2nd tool to assess self-care practices changes, Finally 3rd tool to assess pain level through the utilization for (VAS).

(4) Follow up phase:

After one month the researchers evaluate the effect of evidence based guide line on intervention group was done and comparing between the control and intervention groups by assessing their knowledge, their self-care practices and level of pain(at outpatient unit)with utilization to the 1st tool second part and the 2nd tool with(VAS)to assess any changes or promotion for studied women.

Limitations of the study:

-Limited number of women undergoing surgery for prolapse who accepted to participate in the study. In some cases telephone interview was conducted following discharge to determine the adequacy of discharge information received.

Data Management and Analysis:

The collected data was revised, coded, tabulated and introduced to a personal computer using statistical package for social sciences (IBM SPSS 20.0). Data was presented as the following;

1. Mean, Standard deviation (+ SD) and range for parametric numerical data.

2. Frequency and percentage of non-numerical data.

3- Chi square test was used to examine the relationship between two qualitative variables but when the expected count is less than 5 in more than 20% of the cells; Fisher's Exact Test was used.

4- Cochran's Q test is an extension to the Mcnemar test for related samples that provides a method for testing for differences between three or more frequencies or proportions.

P-value: Level of significance:

- $P>0.05$: Non significant (NS)

- $P<0.05$: Significant (S)

- $P<0.01$: Highly significant (HS)

Results

Table (1): comparison between intervention and control groups regaring their personal data:

Personal data		Group				Chi square	P-value
		Intervention Group No(30)		Control Group No(30)			
		No.	%	No.	%		
Age	20-<30	10	33.3%	5	16.7%	3.137	0.371
	30-<40	6	20.0%	11	36.7%		
	40-<50	8	26.7%	8	26.7%		
	50->60	6	20.0%	6	20.0%		
Residence	Rural	23	76.7%	17	56.7%	2.700	0.100
	Urban	7	23.3%	13	43.3%		
Marital status	Married	22	73.3%	27	90.0%	3.510	0.173
	Widowed	6	20.0%	3	10.0%		
	Separated	2	6.7%	0	0.0%		
	Single	0	0.0%	0	0.0%		
Educational level	Read and Write	14	46.7%	9	30.0%	1.887	0.596
	secondary	12	20.0%	15	25.0%		
	High Education	4	13.3%	6	20.0%		
Occupation	House wife	18	60.0%	19	63.3%	7.211 FE (#)	0.056
	Heavy manual worker	6	20.0%	5	6.7%		
	Administrative work	6	20.0%	6	13.3%		

Table (1)**:** reveals that approximately (33,3 %) of the intervention group their age ranged from (20-30) yeares old and (36,7 %) of the control group their age (30-40)years old,Regarding residenc (76,7%) and (56,7%) of intervention and control groupsrespectively came from rural areas , (73,3%) and (90%)of intervention control group were married.Regarding the level of education (46,7%) and (30%) of intervention and control groups were read and write, (60%) and (63,3%)of intervention and controul groups were house wifes. There is no statistical significant difference regarding personal data of the study sample. (P -value >0.05).

Table (2): Comparison between intervention and control groups regarding total score of knowledge about genital Prolapse pre, post and follow up after utilization for evidence based guideline (EBG):

Knowledge Level		Group				Chi square test	P-value
		Intervention Group No(30)		Control Group No(30)			
		No	%	No	%		
Pre	Low	26	86.7%	28	93.3%	1.825 FE (#)	0.548
	Average	2	6.7%	0	0.0%		
	High	2	6.7%	2	6.7%		
Post	Low	15	50.0%	30	100.0%	20.000	0.000**
	Average	0	0.0%	0	0.0%		
	High	15	50.0%	0	0.0%		
Follow up	Low	3	10.0%	28	93.3%	41.713	0.000**
	Average	0	0.0%	0	0.0%		
	High	27	90.0%	2	6.7%		

This table showed that there were similarity for high level of knowledge between intervention and control group at pre intervention (6.7%,6.7%) respectively ,but these percentages changed to (50,0%,0,0%) of the intervention and control group respectively post one week, then it converted to (90,0%,6,7%) of the intervention and control group respectively postone month .so there were a highly statistical significant difference is observed among both groups after week & one month post intervention.

Table (3): Comparison between control and intervention groups regarding Postoperative Complications management at Pre, Post, and Follow up :

Management of Postoperative complication		Control group No(30)				Intervention group No(30)			
		Pre	Post	Follow up	P-value	Pre	Post	Follow up	P-value
Hyperthermia	Low	82.4%	84.6%	80.0%	0.943	66.7%	20.0%	0.0%	0.000**
	Average	11.8%	15.4%	20.0%		33.3%	0.0%	0.0%	
	High	5.9%	0.0%	0.0%		0.0%	80.0%	100.0%	
Nausea/ Vomiting	Low	72.2%	92.9%	81.8%	0.572	61.1%	50.0%	0.0%	0.000**
	Average	22.2%	7.1%	9.1%		38.9%	0.0%	0.0%	
	High	5.6%	0.0%	9.1%		0.0%	50.0%	100.0%	
Constipation	Low	81.2%	84.6%	66.7%	0.779	50.0%	0.0%	0.0%	0.008**
	Average	12.5%	15.4%	22.2%		50.0%	0.0%	0.0%	
	High	6.2%	0.0%	11.1%		0.0%	100.0%	0.0%	
Pain	Low	75.9%	79.2%	65.0%	0.593	60.0%	28.6%	0.0%	0.000**
	Average	17.2%	20.8%	25.0%		33.3%	0.0%	0.0%	
	High	6.9%	0.0%	10.0%		6.7%	71.4%	100.0%	
Cough	Low	80.0%	100.0%	100.0%	1.000	57.1%	0.0%	0.0%	0.125
	Average	0.0%	0.0%	0.0%		42.9%	0.0%	0.0%	
	High	20.0%	0.0%	0.0%		0.0%	100.0%	0.0%	
Anorexia	Low	72.7%	77.8%	57.1%	0.856	55.6%	20.0%	0.0%	0.054
	Average	18.2%	22.2%	28.6%		33.3%	0.0%	0.0%	
	High	9.1%	0.0%	14.3%		11.1%	80.0%	100.0%	

This table indicates that there were no statistical significant differences in the women's management of postoperative complications at pre, post-intervention and follow up among the control group while there were highly statistically significant improvement for the women's postoperative complicationsmanagement from low level pre intervention to high level after application of evidence based guide line among the intervention group at post intervention and after one month during follow up.

Table (4):Comparison between control and intervention groups for Self-Care Practice after Genital Prolapse Surgery at Pre, Post -intervention and Follow up

Self- care Practices related to:		Control group No(30)				Intervention group No(30)			
		Pre	Post	Follow up	P-value	Pre	Post	Follow up	P-value
Wound care	Low	96.7%	93.3%	90.0%	0.947	76.7%	6.7%	0.0%	0.000**
	Average	3.3%	3.3%	3.3%		0.0%	40.0%	3.3%	
	High	0.0%	3.3%	6.7%		23.3%	53.3%	96.7%	
pain management	Low	83.3%	80.0%	80.0%	0.064	90.0%	26.7%	3.3%	0.000**
	Average	0.0%	0.0%	13.3%		0.0%	20.0%	6.7%	
	High	16.7%	20.0%	6.7%		10.0%	53.3%	90.0%	
Diet habits	Low	93.3%	90.0%	90.0%	1.000	90.0%	6.7%	0.0%	0.000**
	Average	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	
	High	6.7%	10.0%	10.0%		10.0%	93.3%	100.0%	
daily physical activities	Low	83.3%	83.3%	86.7%	0.310	13.3%	13.3%	3.3%	0.031*
	Average	0.0%	0.0%	6.7%		23.3%	23.3%	3.3%	
	High	16.7%	16.7%	6.7%		63.3%	63.3%	93.3%	
hygienic measures	Low	93.3%	90.0%	86.7%	0.905	83.3%	0.0%	0.0%	0.000**
	Average	0.0%	0.0%	0.0%		10.0%	6.7%	3.3%	
	High	6.7%	10.0%	13.3%		6.7%	93.3%	96.7%	
sexual activity	Low	100.0%	96.7%	86.7%	0.122	83.3%	3.3%	3.3%	0.000**
	Average	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	
	High	0.0%	3.3%	13.3%		16.7%	96.7%	96.7%	

Table (4); Shows that there were no statistical difference in practice level as reported by women's among control group regarding wound care, diet habits, pain management, daily physical activities, hygienic measures and sexual activity among pre , post and follow up while there were high statistical difference in practice as reported by women's among intervention group at pre , post and follow up of the application of evidence based guide line among the intervention group.

Figure (1): the level of post- operative women's pain reaction for control group at pre, post and follow up of surgery:

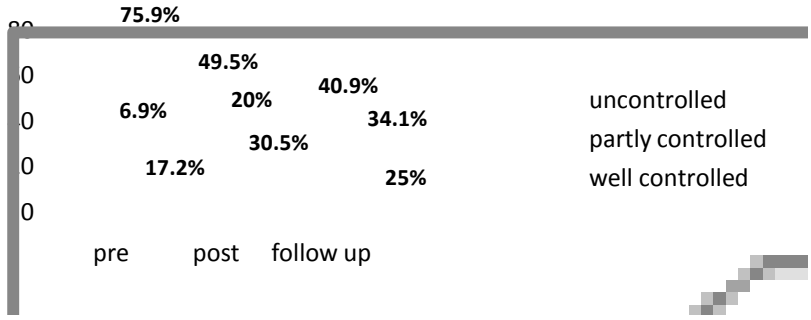

Figure (2): the level of post- operative women's pain reaction for intervention group at pre, post and follow upfor application of evidence based guidelines**;**

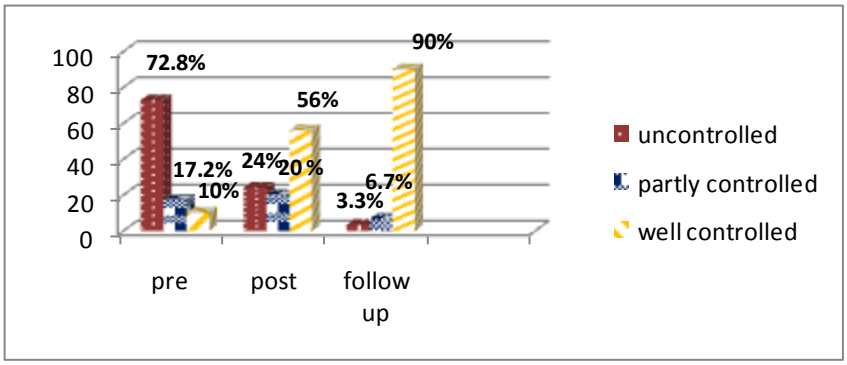

Table (5): Comparison between Intervention and Control Groups regarding Postoperative Total Score of Self-Care Practices after Genital Prolapse surgery at Pre, Post and Follow up after application of evidence based guide line:

Practice Level		Group				Chi square test	P-value
		Intervention Group No(30)		Control Group No(30)			
		No	%	No	%		
Pre	Low	27	90.0%	27	90.0%	0.366 FE (#)	1.000
	Average	2	6.7%	2	6.7%		
	High	1	3.3%	1	3.3%		
Post	Low	0	0.0%	26	86.7%	58.035 FE (#)	0.001**
	Average	2	6.7%	2	6.7%		
	High	28	93.3%	2	6.7%		
Follow up	Low	0	0.0%	26	86.7%	64.194 FE (#)	0.001**
	Average	1	3.3%	3	10.0%		
	High	29	96.7%	1	3.3%		

Table (5): illustrates that 3.3% of the intervention group had high total practices level at pre-intervention but it converted to 93.3% and 96.7% during post and follow up respectivelly . also there were a high statistical significant difference was observed among both groups during post and follow up of intervention p-value (< 0.001).

Table (6): Correlation between Women's Total Score of Knowledge and Self-Care Practices at Pre, Post & Follow up of intervention;

Correlation Matrix Knowledge scorePractice score		Practice score (Pre-intervention)	Practice score (post)	Practice score (follow up)
Knowledge score (Pre-intervention)	Pearson Correlation	.543	.398	.381
	Sig. (2-tailed)	.000**	.002**	.003**
Knowledge score (post)	Pearson Correlation	.280	.629	.687
	Sig. (2-tailed)	.030*	.000**	.000**
Knowledge score (follow up)	Pearson Correlation	.113	.724	.784
	Sig. (2-tailed)	.391	.000**	.000**

This table reveals that there was high statistical significance correlation between women's total score of self-care practices and total score of knowledge at pre-intervention, post and follows up for utilization of evidence based guide line.

Discussion

Nurses should provide care that is based on guidelines according to national and local contexts. Guidelines are essential for all healthcare professionals to ensure safe and high-quality care. It has been demonstrated that structured implementation material supported nurses in the guidance of patients with a complex treatment regimen. Guidelines have been found to support nurses' clinical decision-making skills with regard to assessment ,treatment and supplementary prescription, therefore contribute to evidence-based nursing and holistic care (Voorneveld H, Duymaer van Twist L, Veldhuizen C., (2018) . In the light of the previous, the researcher conducted this study for evaluating the effect of evidence based guide line on the women's knowledge and self- care practices regarding postoperative care for postoperative women with genital prolapse.

As regard to personal data of the study sample, the present study indicated that around one quarter of both groups there age ranged from(40 <50)years. Three quarters of the intervention group compared to above half of the control group came from rural areas and less than half of the intervention group and one third of the control group were read and write this finding agreed with those of ***Bruno et al., (2012).*** Found the women that had pelvic organ prolapse (POP) their age was more than 40 years. While, ***Maher et al., (2013).*** That studied "Surgical management of pelvic organ prolapse" revealed the incidence of prolapse affected by age and found that the most common age was (40-60) year old.

In the same context**,** ***Glazener et al. (2014).*** That explored when to follow up women with Pelvic Organ Prolapse (POP) for twelve years. Found that the mean age of women with genital prolapse was (52.1)

years, this indicate that the pelvic organ prolapse (POP) increases by age. In addition, ***(Asresie et al., 2016)*** who found that the age of women with pelvic organ prolapse were over 40 years. This highlights the importance of the screening women for genital prolapse and educating them about preventive measures and guidance regarding life style modification, prevention, early detection and treatment of genital prolapse.

The findings of this study showed that, the majority of the occupation both groups (the intervention and control groups) were house wives and more than one quarter of the intervention group was performed heavy manual work This may be due to lack of co-operation by husband and lack of family support resulting from increasing the burdens of life, and increasing of mother responsibilities. These findings agree with ***Puri, Admssu , Setegn, (2011):*** the study revealed that half of the study sample were house wives and uneducated. Less than one third of women were involved in hard work like farming, livestock rearing and load carrying. Furthermore, the current study findings were congruent with ***Glazener et al. (2014)*** who found that the significant factor associated with prolapse was heavy work and lifting heavy weight during postpartum period. They concluded that high prevalence of uterine prolapse was found among heavy workers.

Concerning women's knowledge about genital prolapse, the current study revealed that more than three quarters of the control and study groups had poor knowledge regarding genital prolapse at the base line assessment with no significant difference between them in both groups. This may be explained by the fact that these women didn't receive enough information about the disease from the medical team .Also may be due to lack of knowledge and awareness of women. But, there were a high statistical significant improvement in the women's knowledge about genital prolapse (complications management of post- operative of genital prolapse , Warning signs after surgery) at post and follow up time among intervention among the intervention group p (< 0.001). This may be due to increased awarness among the intervention group by application for the guide line.

The findings of current study agree with ***(Suman 2013)*** who mentioned that more than half of their studied women had fair and moderate level of knowledge related to genital prolapse post- operative caring after application of nursing intervention package. Also ,The current findings were consistent with ***Divya et al.,(2015)*** who conducted a study to evaluate the effectiveness of Educational Intervention on Utero-Vaginal Prolapse and its prevention among women in chennai. In the pre-test, majority of women had inadequate knowledge, slightly less than one quarter of women had moderately adequate knowledge and two women had adequate knowledge. In post-test, majority of mothers had adequate knowledge, less than one third of mothers had moderately adequate knowledge and none of them have inadequate knowledge.This may be due to the continous education and motivation of women by the researcher through using the evidence based guid line .

In the same line ***Mohamed, et al. (2016)***"Knowledge and Practices of women regarding Risk Factors of Uterine Prolapse" which conducted in Tanta university revealed that the majority of the studied women have poor level of knowledge regarding all items of uterine prolapse.The results may be due to lack of education of women.

The present study evaluated management of postoperative complications and follow up the researcher founded that approximately all both groups (the intervention and control group) had experienced postoperative health problems such as (pain, hyperthermia, nausea,

vomiting, cough, constipation, anorexia), the most common health problems were pain, nausea, vomiting and hyperthermia. Furthermore the current study indicates that there were no statistical significant differences in the women's management of postoperative complications at pre, post and during follow up among the control group while there were highly statistically significant differance for the women's postoperative complications management from low level pre intervention to high level after application of evidence based guide line among the intervention group at post intervention and after one month during follow up. This highlights the importance of nursing guideline in the management of postoperative period.

The current study findings were congruent with ***Rizalar, Baltaci & Kahraman, (2015)*** study "Investigation of post-operative pain levels and nursing ınterventions following gynecologic surgery". Which found that the most common applied nursing pain management intervention was effective as comfortable and quiet environment beside music . Also, this finding agreed with study done by ***Elgi et al. (2017).*** Who reported That effectiveness of self-instructional module on knowledge and selected outcome among women undergoing hysterectomy in a tertiary care hospital in South India, Found that Problems experienced by the women after hysterectomy namely pain, headache, fatigue, anxiety, insomnia and abdominal discomfort. The severity of anxiety, pain, insomnia, abdominal discomfort and fatigue was less in experimental group than the control group.

Regarding self-care practices related to postoperative care of genital prolapse the current study revealed that there was no statistical difference among control and intervention groups before intervention as the majority of them had low level regarding self care practice during postoperative period. this may be due to received inaccurate information or lack of knowledge and awarness about proper self-care measures to manage the postoperative period

Wherease after intervention there was a high statistical significant difference between the intervention and control group as majority of the intervention group had high practice level compared to the control group that receive the routine care during post and follow up of intervention. High statistical significant difference is observed among both groups during post and follow up of intervention p (< 0. 001). This may be due to continous education and support among study group utelize evidence based guide line that provided a great support and encouraging women to improve their self care practices regarding postoperative care of genital prolapse, and also enhancing women to participate in performing their care that increased their self-esteem and independency.

The current study findings are supported by ***Williams,(2008),*** shows that the importance of nurses providing specific and accurate verbal and printed discharge information to all patients following abdominal surgery was effective in the area of pain and wound management, activity and nutrition. The structured discharge planning was effective as the women can be able to perform self-care after return to home. On the same line ***Dhital et al., (2013).*** illustrated; self -care information for health and human body systems, life style, physical activity, or healthy eating, support for the capture, management and reporting of observations of daily living and the use of the resulting information as clues for self-care actions and decision making. Also, this finding agreed with study done by ***Nalini et al., (2015)***. That revealed that the implementation of structured discharge planning was effective

as indicating teaching enhanced ability scores in the area of physical activities, diet and sexual activities. Furthermore similar to the findings of

The present study findings revealed that in figure (2) there were a statistical significance difference between post-operative women's pain reactions for intervention group from 10% converted to 65% then to 90% pre, post and during follow up respectively about well controlled of pain post application of evidence based guidelines. The current study findings was congruent with ***(Rizalar, et al.(2015)*** who study" Investigation of post-operative pain levels and nursing interventions following gynecologic surgery". Found that the patients were experienced severe pain the early period after gynecologic surgery and that frequency of non-pharmacologic methods of nurses were very few in pain management. This highlights the importance of nursing management in the postoperative period. Evidence-based pain guidelines were effective in reducing the pain level of as well as improving women's knowledge of pain management.

The present study findings revealed that there were a highly statistical significance between the total score of women's knowledge and total score of self- care practices during post and follow up of the application of evidence based guide line this may be due to increasing knowledge of women about postoperative care and this reflected on women's self-care practices related to continuous instructions and follow up by the researcher.

In congruent with the current study findings, a study done by ***Nalini et al., (2015)***. Found that the discharge plan was not effective in the area of personal hygiene and exercise. This may be due to there was low level of high education in the study sample and increasing age of the women involved in the study.

Conclusion

Based on the findings of the present study, it can be concluded that:

Based on the finding of the present study, it can be concluded that:

The findings of this study supported the research hypotheses that, there was high statistical significant difference in the women's total score of knowledge and total score of self-care practices regarding postoperative care of genital prolapse for the intervention group at pre-intervention, post and follow up phase more than control group that receive the routine care.

Recommendations

On the light of the study's findings the researchers are recommended that:

1- Disseminate the application of multidisciplinary collaboration approach for postoperative evidence based guide line for women with genital prolapse surgery.

2- Integrate discharge teaching and self-care in undergraduate nursing curricula to promote their knowledge and awareness about genital prolapse postoperative nursing care.

3- Further researches regarding nurse's perception and practices about evidence based guide line for genital prolapse nursing care.

References

Aigmullar, T, (2016): Diagnosis and therapy of female pelvic organ prolapse, Available at; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5193153/**.**

Asresie, A., Admassu,E,.Setegn,T,. (2016): Determinants of pelvic organ prolapse among gynecologic patients in Bahir Dar, North West Ethiopia: a case–control study, International Journal of Women's Health, volume, issue, available at: Improved quality of life after surgery for pelvic organ prolapse in Nepalese women, BMC Women's Health, Volume, issue, available at: https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC5161336.

Bø, K, Hilde, G, Jensen, J, Siafarikas, F, Engh, M, (2013): Too tight to give birth? Assessment of pelvic floor muscle function in 277 nulliparous pregnant women. International Urogynecol J 24:2065–2070, Available at;https://www.ncbi.nlm.nih.gov/pubmed/23749241.

Bruno,T. ,Bernardes, A,. Paula, M., Liliana ,S., Emerson, O., Rodrigo, A., Batista, C., Marair,A., (2012): Efficacy of pelvic floor muscle exercises for treating organ prolapse in women, Department of Gynecology, Universidade Federal, Randomized controlled trial Sao Paulo Med J.

Dhital, R., Otsuka,K.,Poudel,K.,Yasuoka,J.,Dangal,G.,Jimba,M. (2013): Improved quality of life after surgery for pelvicorgan prolapse in Nepalese women, Article in BMC Women's Heath, 13;22, available at; http://www.biomedcentral.com/1472-6874/13/22.

Divya, M., Hemavathy, M. and Sarathy, S. (2015): A Study to Assess the Knowledge Regarding Utero-Vaginal Prolapse and the Effectiveness of Educational Intervention Package on Utero Vaginal Prolapse and Its Prevention Among Women In Sree Balaji Medical College and Hospital, Chennai. Journal of Nursing and Health Science; 4(1): 59-61. availble at . www.iosrjournals.org/iosr-jnhs/papers/ vol4...2/K04125961.

Elgi,M.&Viswanath,L. (2017): "To study the effectiveness of self-instructional module on knowledge and selected outcome among women undergoing hysterectomy in a tertiary care hospital in South India" International Journal of Reproduction, Contraception, Obstetrics and Gynecology, Volume 6· Issue1Page100, available At; www.ijrcog.org/index.php/ijrcog/article/download/645/593.

Eti Aslan F, Kan Öntürk Z. (2014) Measurement and evaluation of pain. In: Eti Aslan F, Editor. Natura and control of the pain. Ankara, Turkey: Özyurt Matbaacilik Hizm;. p. 83.

Giarenis , I. & Robinson, D., (2014): Prevention and management of pelvic organ prolapse, Available at;https://www.ncbi.nlm. nih.gov/pmc/articles/PMC4166938.

Glazener, A., Macarthur, C., Hagen, S., Elders, A., Lancashire, R., Herbison, Wilson, D. (2014): Twelve-year follow-up of conservative management of postnatal urinary and faecal incontinence and prolapse outcomes, Randomized controlled trial, BJOG. ; 121:112–20, available at;https://onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.12473.

Harding, M, (2017); Genitourinary Prolapse, available at: https://patient.info/health/genitourinary-prolapse-leaflet.

Hassan ,M,(2013): genital Prolapse: Def, Type, Cause, Treatment, ... available at :

www.easymbbs.org/genital-prolapse-def-type-cause-treatment-compl...

JungLin, C., JungCheng, S., ChuanShih, S., HsinChu, C. and JinTjung, J. (2012): Discharge Planning, International journal of gerontology, Volume 6 issue 4 Pages 237-240; available at; www.sciencedirect.com/ science/article/pii/S1873959812000695

Kenway, M. (2015): How to Reverse Pelvic Prolapse and Avoid Prolapse Surgery Available at: https://www. Pelvic exercises.com.au › Pelvic Floor Exercises.

Kinng,L. (2010); Uterine prolapse U.S. National Library of Medicine, National institutes of health, National Center for biotechnology Information.

Magwan,B, Owen,P, Thomson,A,(2018): Clinical obstetrics and gynecology ,3rd edition,ElSevier,China,PP121

Mohamed, F.,Hassan,M.,Abdalla,M.,Gaheen,A., 2016); Knowledge and Practices of women regarding Risk Factors of Uterine Prolapse,IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 5, Issue 6 Ver. III (Nov. - Dec. 2016), PP 60-67.

Nalini, K., Sheoran, P. and Sarin, J. (2015): Effect of structured discharge teaching after Hysterectomy, International Journal of Reproduction, Contraception, Obstetrics and Gynecology, Volume 4 · Issue 5 Page 1384, Available at; https://mafiadoc.com/effect-of-structured-discharge-teaching-after-hysterectomy_59bf6cdc1723dde00142bbc1.html.

Neels, H. (2018): Pelvic floor dysfunction in women: tackling barriers (Doctoral dissertation, University of Antwerp),Available at; https://repository.uantwerpen.be/docman/irua/889b1f/148356.pdf.

Puri,R,.Admssu ,.Setegn,T,. (2011): That study "prevalence, risk factors and traditional treatments of genital prolapse in Manama, Kalicot district, Nepal: a community based population study ".Available at ; https://munin.uit.no/handle/10037/4658

P.S.Myles, D.B. Myles,W Galagher,D Boyd,C Chew,N MacDonaldand A Dennis,(2017): Measuring acute postoperative pain using the visual analog scale: the minimal clinically important difference and patient acceptable symptom state .

Rizalar, S., Baltacı, N. and Kahraman, S. (2015): Investigation of post-operative pain levels and nursing ınterventions following gynecologic surgery Nursing Practice Today 2015. 2(2):62-68, available at; npt. tums.ac.ir/index.php/npt/article/view/50.

Rodet, M. (2017): What Is Post-operative Care?. Monitoring your vital signs includes managing postop pain; available at; https://www. spineuniverse. com › Treatments › Surgery.

Smith, Y. (2016): Roles of a Nurse - News Medical, Available at www.news-medical.net/health/Roles-of-a-Nurse.aspx.

Suman ,T.,(2013) : Effectiveness of nursing intervention package on prevention of utero-vaginal prolapse among mothers. Msc thesis. Mangalore, 2013.

Vergeldt, F, Weemhoff ,M, IntHout, J, Kluivers,B,(2015) : Risk factors for pelvic organ prolapse and its recurrence:

a systematic review.Int Urogynecol J. 26(11),available at;https://www.ncbi.nlm.nih.gov/pubmed/25966804.

Voorneveld H, Duymaer van Twist L, Veldhuizen C., (2018): Development of a guideline for rheumatology nurses in the Netherlands about supervision, education and administer biological agents. Ann Rheum Dis., 67: 670-681.

Williams, B. (2008): Supporting self-care of patients following general abdominal surgery, Journal of Clinical Nursing.17(5):584-92, available at; https://www.ncbi.nlm.nih.gov/pubmed/18279291.