



## THE EFFECT OF INSTRUCTIONAL GUIDELINES ON WOMEN THAT SUFFER FROM GENITAL PROLAPSE

Mervat Saad Fathy Saad<sup>1\*</sup>, Entesar Fatouh Abdel Moniem<sup>2</sup>, Rania Abd El-hak Eid Farrag<sup>3</sup>, Haitham Mohannad Badran<sup>4</sup>

<sup>1</sup>Technical Institute of Nursing, Ministry of Health, Egypt

<sup>2</sup>Maternal and Newborn Health Nursing Department, Faculty of Nursing, Helwan University, Egypt

<sup>3</sup>Maternity and Neonatal Health Nursing Department, Faculty of Nursing, Fayoum University, Egypt

<sup>4</sup>Obstetrics and Gynecology Department, Faculty of Medicine, Fayoum University, Egypt

\*[metvatsaadfathy@yahoo.com](mailto:metvatsaadfathy@yahoo.com)

### ABSTRACT

Genital prolapse is one of the most frequent causes of gynecological morbidities among women in the world. The symptoms of genital prolapse can be extremely debilitating and have an appreciable impact on quality of life. The present study aimed to evaluate the effect of instructional guidelines on women that suffer from genital prolapse. Quasi experimental design was conducted at the out-patient's clinics of Fayoum University hospital and General hospital (obstetrics and gynecology clinic). Purposive sample 73 women was included in the study. Data were collected through four types of tools (structured interviewing questionnaire sheet, Pelvic Organ Prolapse Quantification system (POP-Q). It was used to assess genital prolapse, Pelvic organ prolapse-symptoms score (POP-ss), it was used to assess symptoms of genital prolapse and Instructional guidelines follow up sheet was designed to assess the manifestations. The results of this study revealed that there were a statistically no significant differences between the women with satisfactory level of knowledge and genital prolapsed symptoms, and its stages before instructional guidelines. While the result is almost statistically significant between the women with satisfactory level of knowledge and symptoms and stages after instructional guidelines, there were a statistically significant differences between the genital prolapsed symptoms and its stages before and after instructional guidelines. The study concluded that instructional guidelines was effective in improving women' knowledge and stages regarding genital prolapse. As well a reduction in prolapse symptoms which lead to better quality of life at follow-up periods.

Keywords: instructional guidelines; prolapse; symptoms

### INTRODUCTION

Genital Prolapse is the descent of one or more of pelvic structures from normal anatomic location toward or through the vaginal opening; women of all ages may be affected. The cause is a loss of pelvic support from multiple factors, including direct injury to the levator ani, as well as neurologic injury from stretching of the pudendal nerves that may occur with vaginal childbirth (Kuncharapu *et al.*, 2018). Genital Prolapse is common and is seen in 50% of parous women. Risk factors include pregnancy, vaginal childbirth, congenital or acquired connective tissue abnormalities, weakness of the pelvic floor, aging, menopause and factors associated with chronically raised intra-abdominal pressure from chronic coughing, straining with constipation, and repeated heavy lifting (Hagen and Stark, 2017).

Genital Prolapse prolapse is categorized in four stages, ranging from mild to severe. In mild cases, women may be totally unaware that something has shifted until their gynecologist discovers it during a routine pelvic examination. In addition, Pelvic Organ Prolapse Quantification System graded POP as follows; stage (0) no prolapse is demonstrated, stage (I) the most distal portion of the prolapse is more than 1 cm above the level of the hymen, stage (II) the most distal portion of the prolapse is 1 cm or less proximal or distal to the hymen, stage (III) the most distal portion of the prolapse protrudes

more than 1 cm below the hymen but no farther than 2 cm less than the total vaginal length, and stage (IV) vaginal eversion is essentially complete (Persu et al., 2015).

World Health Organization estimates that approximately 33 % of the total global burden of disease is related to reproductive health. The global prevalence of genital prolapse is 2 to 20 % under age 45 years. POP is seen in up to 43 to 76% of women presenting for routine gynecological care, and 3 to 6% involve descent beyond the hymen (Eleje et al., 2019). Women with genital prolapse commonly have a variety of symptoms including pelvic heaviness, dragging sensation in the vagina, protrusion coming down from the vagina, and backache. Bladder and bowel symptoms, discomfort during sexual intercourse are also frequently present. Women who exhibit just mild or moderate POP do not experience any of these symptoms until any aspect of the vaginal wall actually protrudes beyond the opening of the vagina (Culligan, 2017). Additionally, genital prolapse is not responsible for any severe morbidity or mortality, but it may have a marked functional impact on quality of life, self-esteem, and sexuality (Letouzey et al., 2014).

Treatment options for prolapse depend on the severity of the symptoms; mild to moderate prolapse is usually treated with conservative methods such as electrical stimulation, pelvic floor muscle training, and biofeedback. More severe prolapse often needs surgery. Various types of surgery are used to repair the prolapse. The efficacy of various intervention in repairing prolapse is measured by reducing genital prolapse symptoms, prolapse recurrence rate, and improvement in quality of life (Hoffman et al., 2016). Instructional Guidelines is essential in both prevention and detection of prolapse, also help women to become more comfortable in opening up about prolapse symptoms and complaints. Therefore, close communication with the women, gynecologist, and nurse is essential for optimal understanding, informed consent, and management. These steps include performing regular kegel exercise and maya massage to strengthen the muscles of the pelvic organs, and providing with health education about maintaining a healthy weight, eating a high fiber diet to avoid bowel problems, and avoiding heavy lifting and prolonged standing (Gonzalez, 2018).

In Egypt, the incidence of genital prolapse is 25.75% of 2000 females in the first year following delivery from different Governates (health centers, hospitals, and family planning centers). The symptoms of prolapse can be extremely debilitating and have an appreciable impact on quality of life, women with symptomatic genital prolapse experience discomfort, as well as interference with daily activities. The researchers observed from clinical experience that women with genital prolapse have deficient knowledge, and compliance with healthy measure is sparse. Meanwhile, instructional guidelines has a crucial role in mangening genital prolapse symptoms. Therefore, the researchers conducted this study to improve women' knowledge and reduce genital prolapse symptoms, degree and its impact on quality of life. This study aims to evaluate the effect of instructional guidelines on women that suffer from genital prolapsed.

## **METHOD**

Research Design: A quasi-experimental design. Setting: study was carried at the outpatient's clinic of Fayoum University hospital and Fayoum general hospital (obstetrics and gynecology clinic). Sampling: purposive sample (73 women) was selected according to inclusion and exclusion criteria. Tools of Data Collection four tools were used for data collection 1- Structured interviewing questionnaire:- It was divided in to four parts. This tool was developed by the researcher used to assess the studied women regard the following: Part. First part: This was designed to collect the personal data of the study sample as age, educational level, residence, marital status). Second part: This was designed to obtain women's medical and surgical history e.g. chronic disease as D.M, ascites, respiratory disorders and previous abdominal or pelvic surgery, etc. Third part: It was designed to obtain women's obstetric and gynecological history, e.g. gravidity, parity and mode of delivery etc. Fourth part: This was designed to assess women's knowledge regarding genital prolapse as its effect on women's life, signs and symptoms and its management.

2-Pelvic Organ Prolapse Quantification system (POP-Q): This scale modified from (BordanR & TelnerD and Jackson 2015) quantification staging was used to rule out the clinical staging 0, 1, 2, 3 and 4 genital prolapse through vaginal examination before and after instructional guidelines. 3-Pelvic organ prolapsed-symptoms score (POP-ss): This scale modified from (Dang& Lee and Tran 2014) questionnaire was designed to assess the manifestations of genital prolapse This score was used before and after instruction guidelines for constant 12 weeks. 4-Follow up sheet: Instructional guidelines follow up sheet was designed to assess the manifestations. Validity of tool was tested through jury of expertise (5 professors from faculty of Nursing, faculty of medicine) Ain shams university , Helwan university and Fayuom university to test the content, knowledge, accuracy & relevance of questions for tools.

### **The ethical research considerations in this study included the following**

Obtaining approval from the Scientific Research Ethical Committee in the Faculty of Nursing at Helwan University before starting the study. Clarifying the objective and aim of the study to the women that were to be included in the study then oral consent obtained. Ensuring and maintaining anonymity and confidentiality of the subject data. Giving women the right to withdraw from the study at any time. Guaranteeing that no harm would occur to women.

### **Pilot study**

Pilot study was carried out for 3 weeks in the period from the beginning of June to the end of July on 10% of the total study sample (seven women) to evaluate the applicability, efficiency, clarity of tools, assessment of feasibility of field work and identification of suitable place for interviewing women, beside to detect any possible obstacles that might face the researcher and interfere with data collection. 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.

### **Fieldwork**

The data was collected through a period of six months from the start of August 2020 till the end of January 2021. The researcher attended at Fayoum general hospital (gynecology outpatient clinic) 2 days per week from 9am to 2pm and 2 day per week in Fayoum University maternity hospital (gynecology outpatient clinic) from 9am to 2pm. 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 data collection tools (interviewing schedule, check list, follow up card) to assess women's personal data, reproductive history, present medical history, surgical history, their knowledge about genital prolapse, and its instructional guidelines for the study sample in a time ranged from 20-30 minutes.

### **Implementation phase**

The researcher met each woman separately, who medically diagnosed with genital prolapse to explain the aim of the study, and oral consent was obtained to be included in the study and fill interviewing schedule sheet, This session was taken 10 minutes. Then researcher conducted orientation training session in a private room at gynecology outpatient clinic unit on the technique of kegal exercise and Maya massage in which the researcher used woman herself as a model for application of Maya manage and Kegel exercise. This session was taken approximately 15 minutes. With regard to , follow precautionary regulation to protect the study sample and the researcher from covide 19. The researcher ensures that each woman practiced this technique correctly with re-demonstration in front the researcher after that the researcher supplied each woman with supported material Arabic leaflet. This session was taken approximately 10 minutes.

The researcher done telephone contact to determine another meeting through the first month after training session for each woman to ensure that woman practiced instructional guidelines correctly. The researcher conduct another meeting session with each woman separately through next two week after re-demonstration after telephone contact with woman to determine suitable time.

**Evaluating phase**

Then the researcher had regular telephone contact with the women every week to ensure continuity of instructional guidelines. Application and recorded women weekly evaluation in genital prolapse manifestation follow up sheet consistently for three months. At the end of three months the researcher met the women to assess degree of genital prolapse and effect of instructional guidelines on relieving accompanied manifestations with genital prolapse and any problems arising this step done with assistance of physician in Urogenital Unit.

**Administrative design**

An official approval was obtained from the Dean of Faculty of Nursing, Helwan University to conduct this study, and another one from the Director of Fayoum university hospital to collect data through written letter clarifying the title, aim and sitting of the study.

**Statistical design**

The Statistical Package for the Social Sciences (SPSS, version 17.0) was used for data analysis. Descriptive statistics were employed to summarize the demographic data, which was presented using frequency tables and expressed as percentages, mean and standard deviation. Chi-square test was used to test the associations among the under studied qualitative variables. Statistical significance was considered at P-value < 0.05 and highly significance at P-value < 0.001.

**RESULTS AND DISCUSSION**

Table 1 shows that the mean age of the women was 51.63 (9.87) and there were over -weight 45.2%, while 35.6% of women were obese . In relation to residence 52% of the women were living in urban area. While 48% were living in rural area. and 90% of women were carried heavy objects. 38% of women’s were housewife while 18% of women’s were crafts and 11% of women’s were heavy work. (53%) of the women’s were had ability to read and write, while (14%) of women’s had got high education.

Table 1.  
 Number & Percentage distribution of the study sample according to Socio-demographic characteristics (n=73)

Demographic characteristics	Value	
Age (Years)	f %	
Mean age +SD	51.63 (9.87)	
Occupation		
Housewife	28	38%
Office employee	24	33%
Crafts	11	18%
Heavy work	8	11%
Education		
Read& write	39	53%
Primary education	15	21%
Secondary education	9	12%
High education	10	14%

Value	Demographic characteristics	Value
Number of family member		
Five	14	19.2%
More than five	59	80.8%
Monthly income		
Enough	24	32.9%
Not enough	49	67.1%
Residence		
Urban	38	52.1%
Rural	35	47.9%
BMI		
Normal	14	19.2%
Under weight	0	0 %
Over weight	33	45.2%
Obese	26	35.6%
Carrying heavy objects		
Yes	63	90.0%
No	10	10.0%

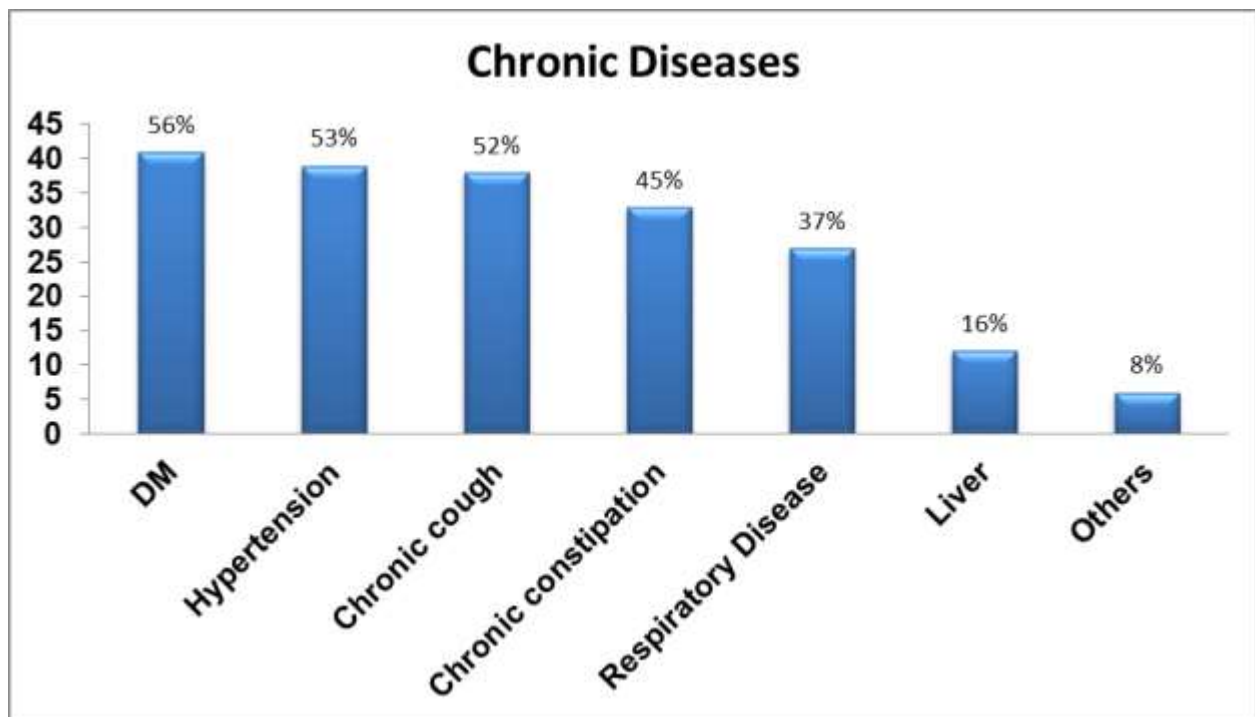


Figure 1: Percentage distribution of the study sample according to medical history (n=73)

Figure 1 shows that the study sample (100%) of the women having chronic diseases, distributed as this. 56%) had diabetes, 53% hypertension, liver 16% and 37% respiratory diseases, and 8% other disease.

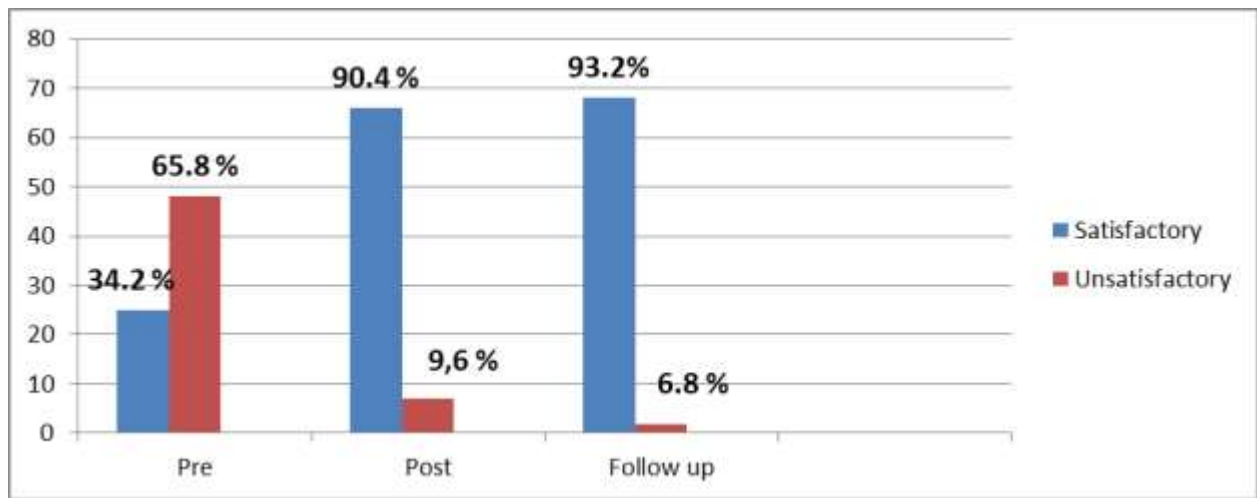


Figure (2): Percentage distribution for Total Score of knowledge regarding genital prolapse before and after performing instructional guidelines (n = 73)

Figure 2, illustrates that there were (34.2%) satisfactory knowledge about the genital prolapsed and its management before performing instructional guidelines, while (93%) satisfactory knowledge after performing instructional guidelines .

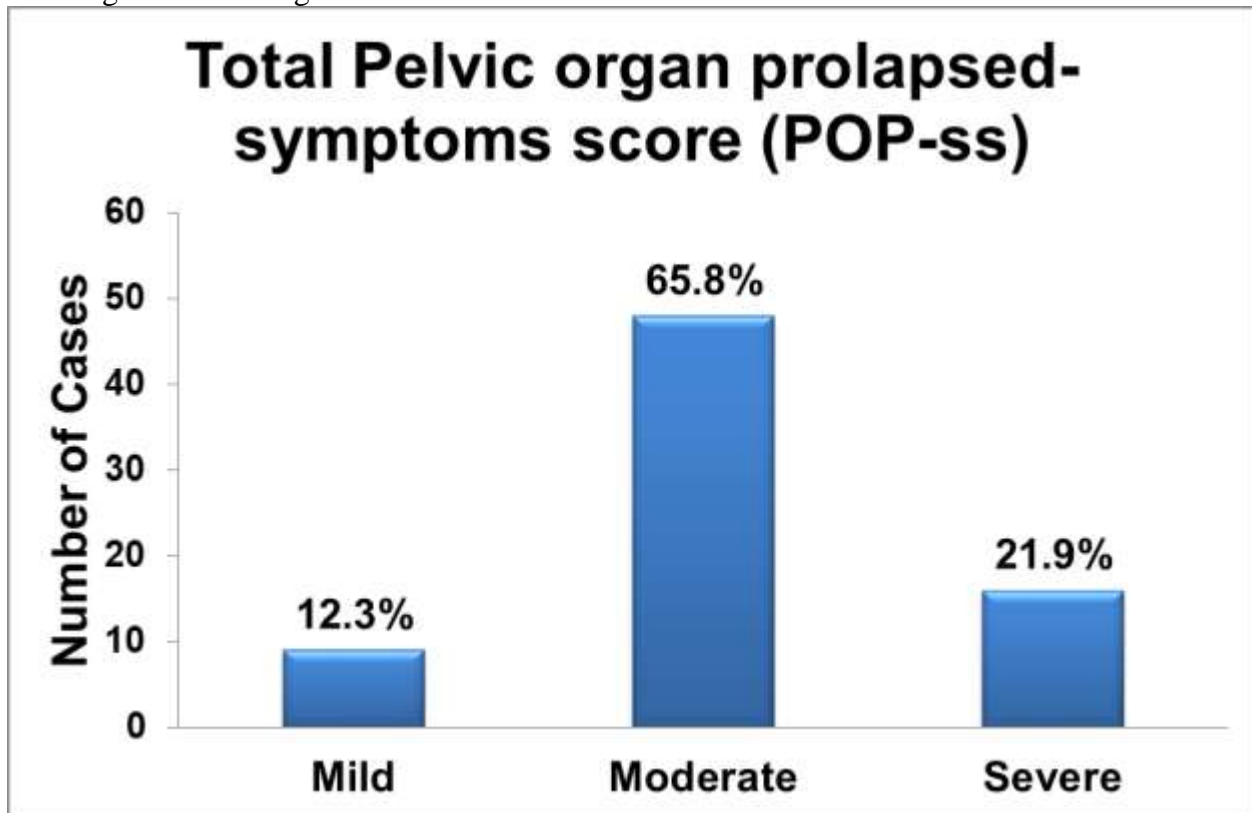


Figure 3. Distribution of the study sample according to Total genital prolapse symptoms.(N=73)

Figure 3 illustrates that there were (48%),(16%),(9%),moderate, severe and mild of genital prolapse respectively before instructional guidelines.

Table 2.

Number and Percentage distribution of the study sample according to the degree of genital prolapsed before and after performing instructional guidelines (n=73)

Stages genital prolapsed		Before Instructional Guidelines	After 1month Instructional Guidelines	After 2month Instructional Guidelines	After 3 month Instructional Guidelines
Items		No /Percent	No /Percent	No /Percent	No /Percent
Stage 0- no prolapse is demonstrated		0 (0%)	5 (6.8%)	21(28.8%)	35 (47.95%)
Stage1- the most distal portion of the prolapse is more than 1 cm above the level of the hymen		28(38.4%)	26 (35. 6%)	19(26.1%)	18(24.7%)
Stage 2- the most distal portion of the prolapse is 1 cm or less proximal or distal to the hymenal plane		35(47.9%)	32(43.8%)	23(31.5%)	10(13.70%)
Stage 3- the most distal portion of the prolapse protrudes more than 1 cm below the hymen but protrudes no farther than 2 cm less than the total vaginal length (for example., not all of the vagina has prolapsed)		10 (13.7%)	10 (13.70%)	10 (13.70%)	10 (13.70%)
Stage 4-vaginal eversion is essentially complete		0	(0%)	0	(0%)

Table 2 Illustrates that 0% of women had stage 0 of prolapsed and 47.95% of them had stage 2 of prolapsed before Instructional Guidelines. while (47.95%) of women had stage 0 of prolapsed and (13.70%) of them had stage 2 of prolapsed after 3 months from application of Instructional Guidelines

Table 3.

Relation of Total genital prolapse Rating Scale (POPS) and Degree of genital prolapse before Instructional Guidelines table (13)

Stages genital prolapsed before Instructional Guidelines	Pelvic organ prolapsed-Symptoms before Instructional Guidelines			X <sup>2</sup>	P value
	Mild NO.= %	Moderate NO.= %	Severe NO.= %		
Stage1 (n=28)	9 (32.1%)	19 (67.9%)	0(0%)	X <sup>2</sup> =56.93	P=0.00000HS
Stage2 (n=35)	0 (0%)	29(82.9%)	6 (17.1%)		
Stage3 (n=10)	0 (0%)	0 (0%)	10( 100%)		
Total	9 (12.3%)	48(65.8%)	16 (21.9%)		

Table 3 shows that there were the difference is statistically high-significant between Stages genital prolapsed and Total genital prolapse Rating Scale (POPS) before Instructional Guidelines.

Table 3.  
 Relation of Total genital prolapse Rating Scale (POPS) and Degree of genital prolapse after Instructional Guidelines table (14)

Stages genital prolapsed month Instructional Guidelines	genital after3 Instructional	Pelvic organ prolapsed-Symptoms after Instructional Guidelines			X <sup>2</sup>	P value
		Mild NO.= %	Moderate NO.= %	Severe NO.= %		
Stage0 (n=35)		25 (71.4%)	10 (28.6%)	0(0%)	X <sup>2</sup> =71.31	P=0.00000HS
Stage1 (n=18)		9 (50%)	9(50%)	0(0%)		
Stage2(n=10)		0 (0%)	10 (100%)	0(0%)		
Stage3(n=10)		0 (0%)	3 (30%)	7 (70%)		

Table 3 shows that there were the difference is statistically high-significant between Stages genital prolapsed and Total genital prolapse Rating Scale (POPS) after Instructional Guidelines.

Regarding socio-demographic characteristics of the studied women, the results of the current study revealed that the main age of the women was (51.63). The current study findings are supported by (Asresie et al., 2016). That studied "Determinants of pelvic organ prolapse among gynecologic patients in Bahir Dar, North West Ethiopia: a case-control study" Found that the age of women with pelvic organ prolapse were over 50 years. Concerning other socio-demographic characteristics, the results of the present study showed that about half of the studied women were from rural area. Furthermore, about more than one thirds had obesity and ninety percent of them carried heavy objects,. On the other hand, more than half of them were able to read and write. Meanwhile, more than of one third were housewives.

The current study findings were in accordance with Puri's (2015) "Prevalence, Risk Factors and Traditional Treatments of Genital Prolapse in Manma, Kalikot District, Nepal: Acommunity Based Population Study" Puri found that a major common risk factor of genital prolapse with statistically significant prevalence was illiteracy among more than two thirds of the studied women; those women also lived in rural areas, were housewives and performed hard work like farming and load carrying with less rest time.

Regarding the medical history of the studied women, the result of the current study revealed that all of them had chronic diseases. This finding was agreed to Puri (2015) who studied "Prevalence, Risk Factors and Traditional Treatments of Genital Prolapse in Manma, Kalikot District, Nepal: and found that chronic constipation, and chronic cough had significant prevalence in two thirds of the studied women with these factors of genital prolapsed. Concerning women's knowledge about genital prolapse, the current study revealed that more than two third of the study sample had unsatisfactory knowledge regarding genital prolapse before performing instructional guidelines. This may be explained by the fact that these women didn't receive enough information about the disease and also may be due to lack of knowledge and awareness of women and low level of education.

This is consistent with (Divya, 2019). That conducted a study to evaluate the effectiveness of Educational Intervention Package on Utero-Vaginal Prolapse and its prevention among women in chennai Revealed that ;In the pre-test, majority of women had inadequate knowledge about genital prolapse, 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. Regarding women's genital prolapse symptoms before instructional guidelines, this study revealed that near to two third of women suffered from moderate symptoms while about one quarter

of women had severe symptoms and the remainder had none to mild symptoms. Regarding women's genital prolapse stages before instructional guidelines, this study revealed that near to half of women suffered from stage II while more than one third of women had stage I and the remainder had stage III pelvic organ prolapse .

The results of the current study were in accord with Kashyap (2017), who reported that near to two thirds of women suffered from stage II and more than one third of women had stage I and the remainder had stage III pelvic organ prolapse. According to women's genital prolapse manifestation after three month instructional guidelines, the results of the current study showed that the all of general symptom ,urinary symptom, bowel symptom and sexual symptom were improved more than ninety percent at the third month. This findings were in accord with Kashyap et al., (2013), who reported that greater significant improvements in prolapse symptoms were observed among most of the studied women and some of them had mild manifestation twelve weeks after intervention with pelvic floor muscle training on the clinical course of stage I—III pelvic organ prolapse.

Regarding to relation between Total genital prolapse Rating Scale (POPS) and Stages genital prolapsed before and after instructional guidelines the current study showed that there were the difference is statistically high-significant between Stages genital prolapsed and Total genital prolapse Rating Scale (POPS) . These findings are in agreement with Good et al., (2013) stated that there were the difference is statistically high-significant between Stages genital prolapsed and Total genital prolapse Rating Scale (POPS)

## **CONCLUSION**

Based on the finding of the present study, it can be concluded that: Instructional Guidelines was effective in improving women' knowledge and stages regarding genital prolapse. As well a reduction in prolapse symptoms and better quality of life at follow-up periods. Thus, the research aim are supported.

## **REFERENCES**

- Adams, J., and Tovery, P., (2013): Complementary and alternative medicine in nursing and midwifery: Towards a critical social science. Routledge Publishing, London, England; 4(65): 45-67.
- Aigmullar, T. (2016): Diagnosis and therapy of female pelvic organ prolapse, available at; <https://www.ncbi.nlm.nih.gov>
- Alberta, A., (2016): Bladder irritants. *Urology Journal*; 25(9): 1-2.
- Alila, B., (2014): Anatomy of internal female reproductive organs; Shutterstock Publishing; 9(56): 27.
- Amy, A., (2015): Integrating complementary alternative medicine: A nurse's challenge. *Alternative and Complementary Medicine Journal*; 3(46): 898-903.
- Arias, B., Ridgeway, B., and Barber, M., (2018): Complications of neglected vaginal pessaries: case presentation and literature review. *Urogynaecology. Pelvic Floor Dysfunction Journal*; 6(2): 19,1173.
- Arvigo, R., and Belize, I., (2013): The Arvigo Techniques of Maya Abdominal Therapy. *Alternative and Complementary Medicine Journal*; 11(3): 1,3.
- Bacsu, C., and Zimmern, P., (2016): Complications and treatment of urinary incontinence and pelvic organ: prolapse surgical treatment. *Medical Journal*; 24(2) 6: 229-237.
- Bajracharya, A.R. (2011): Uterine prolapse a hidden for women, available at; [www.iimsph.com/?mno=184221](http://www.iimsph.com/?mno=184221).*
- Barsom, R. & Sitter, R. (2015): Uterine Prolapse in Emergency Medicine: Etiology,available at: [emedicine.medscape.com/article/797295-overview](http://emedicine.medscape.com/article/797295-overview).*
- Barsoom, R. (2015): Uterine Prolapse in Emergency Medicine, available at; [emedicine.medscape.com/article/797295-overview](http://emedicine.medscape.com/article/797295-overview).*

- Be, KHilde, G., Jensen, J., Siafarikas, F. and 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>.
- Betsy, M. (2017): *What Women Should Know about Uterine Prolapse* available at; [https://www.aurorahealthcare.na/patients-visitors/blog/what-women-should-know\\_](https://www.aurorahealthcare.na/patients-visitors/blog/what-women-should-know_): a hoi it-i i ten n e-prolapse.
- Braun, K. (2011): *Genital prolapse fact sheet | Women's Health Queensland ...available at; womhealth.org.au > Conditions & Treatments—Chen Xiaohui. 91 cases of laparoscopic hysterectomy with experience [J], Foreign Medical Research, 2013, 12 (07): 90.*
- Bruno, T., Bernardes, A., Paula, M., Liliana, S., Emerson, O., Rodrigo, A., Batista, C and Marair, A. (2012): *Efficacy of pelvic floor muscle exercises for treating organ prolapse in women, Department of Gynecology, Universidade Federal, Randomized controlled trial SaoPaulo Med J.*
- Bucher, L, Harding, H. & Roberts, K. (2017): *Medical surgical nursing, assessment and management of clinical problems, 10th edition, El sevier, USA, Section 10, PP 1262, available at; https://boovs.google.com.eg/books?isbn=0323371647.*
- Bugge, C., Adams, E., Gopinath, D. and Reid, F. (2013): *Pessaries (mechanical devices) for pelvic organ prolapse in women, Cochrane Database Systematic Review, available at; http://www.ncbi.nlm.nih.gov/pubmed.*
- Bureau, M. & Carlson, K. (2017): *Pelvic organ prolapse: A primer for urologists available at; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5461143*
- Glazener, A., Macarthur, C., Hagen, S., Elders, A., Lancashire, R., Herbison and 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.*
- Hoff, I., (2015): *Pelvic floor function and pelvic organ prolapse. Obstetrics Gynaecological Journal; 2 (115): 1- 28.*
- Hogston, R., (2014): *Managing Nursing Care, 4th ed.,Lippincott Williams Inc., USA, chapter 1; pp. 18-19.*
- Jelovsek, J, Maher, C., and Barber, M., (2014): *Pelvic organ prolapse. Lancet Medical Journal; 369 (9566): 1027-1038.*
- JIYI, E., DIKE, E., ANOLUE, F., NZEWUFFIE, A., and EJIKEM, C., (2013): *Uterovaginal prolapse at a university teaching hospital in south-east Nigeria; Orient Journal of Medicine; 25( 3-4): 107-110.*
- Johnson, D., Majeroni, B., and Kuncharapu, I. (2015): *Pelvic organ prolapse. Obstetrics and Gynaecology Journal; 81(9): 1111-1117.*
- Jones, K., and Harmanli, O., (2016): *Pessary use in pelvic organ prolapse and urinary incontinence. International Urogynaecology Journal; 3(1): 3-9.*
- Kashyap, R., (2013): *Uterus prolapse and its conservative management. International Journal of Obstetrics and Gynaecology; 3(17): 4-27.*
- Kashyap, R., Jain, V., and Singh, A., (2013): *Comparative effect of 2 packages of pelvic floor muscle training on the clinical course of stage I—III pelvic organ prolapse. International Journal of Gynaecology and Obstetrics; 121(1): 69-73.*
- Kay, L., (2010 ): *Nurse manager competencies. Canadian Journal of Nursing Management; 9 (1): 45-64.*

- KeLin, E., (2013): Urogynaecology and pelvic floor disorders treatments. *International Urogynaecology Journal*; 90 (603): 212.
- Kenny, T., and Wright, M., (2014): Pelvic organ prolapsed. *Obstetrics and Gynaecology Journal*; 36 (2): 127-138.
- Kuncharapu, I., Majeroni, B., and Johnson, D., (2013): Pelvic organ prolapse. *International Journal of Pelvic Floor Dysfunction*; 181(9): 1111-1117.
- Lambrou, P., Kontodimopoulos, N., and Niakas, D.,(2010): Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. *American Medical Nursing Association Journal*; (8) 26: 9-12.
- Lazarou, G., and Grigorescu, B., (2011): *Pelvic Organ Prolapse*, 7<sup>th</sup> edition, Pearson Education Publisher, chapter 7, USA; P201.
- Leia, C., (2013): Arvigo techniques of Maya abdominal therapy for reproductive, digestive, and pelvic health and healing. *Alternative and Complementary Medicine Journal*; 1(55): 165-180.
- Lentz , G., Linda, J., and Vorvick, M., (2012): *Anatomic Defects of the Abdominal Wall and Pelvic Floor, Diagnosis and Management*. *Comprehensive Gynaecology*, 6th ed., Philadelphia, PA: Mosby Elsevier, USA, chapter 20, pp. 116-217.
- Lewiky-Gaupp, C., and Sciarra, J.,(2015): Contemporary use of the pessary . *Obstetrics and Gynaecology Journal*; 6 (1): 75-128.
- Lewis, J., (2017): The Arvigo techniques of Maya abdominal therapy: self care handout for women and men clients; available at <http://www.mavanbellv.com>.
- Liddell, A., (2013): Foods that decrease the estrogen levels in women. *American College of Nutrition Journal*; 6(45): 28.
- Lochner, B., (2011): Communicating respect model: cornerstone coaching & training. *American Psychiatric Nurses Association Journal*; 5(39): 18-22.
- Toaf, M. (2011): Uterine Prolapse | OBGYN.Net, available at; [www.obgyn.net/incontinence/uterine-prolapse-](http://www.obgyn.net/incontinence/uterine-prolapse-)
- Walters, M. & Ridgeway, B. (2013): Surgical treatment of vaginal apex prolapse, available at: <https://www.ncbi.nlm.nih.gov/pubmed/23344287>.
- Williams, B. (2018): Supporting self-care of patients following general abdominal surgery, *Journal of Clinical Nursing*. 2008; 17(5):584-92, available at; <http://www.sciencedirect.com>
- Wilson, D. (2014): Twelve-year follow-up of conservative management of postnatal urinary and faecal incontinence and prolapse outcomes,
- Winters, J.C., Togamai, J.M. and Chermansky, C.J. (2012): *Vaginal and abdominal reconstructive surgery for pelvic organ prolapse*, 10th ed. Philadelphia, PA: Elsevier Saunders, chap 72, available at: [www.lutheranhealthcare.org/Main/AdamProducts/5764.aspxed=1](http://www.lutheranhealthcare.org/Main/AdamProducts/5764.aspxed=1).
- Wong LP, N. L. (2017). A survey of knowledge and perceptions of genital prolapsed among young to middle-aged women in federal territory. *JUMMEC*, 2-30.
- World Health Organization, (2019): global plan of action for maternal health and new born.
- Websites North American Maternal Society. Available at: [www.genitalprolapse.org](http://www.genitalprolapse.org). Accessed 13 Dec, 2016. <http://www.Womensguid.org>, Accessed 13 Dec, 2016.
- <http://www.genitalprolapseawarenessmonth.org/comedicrelief.htm>
- Zambito, T. (2018): Travel-RN-Post Operations, available at <https://www.travelnursesource.com/job/.../travel-m->

