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RESEARCH PAPER

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### The Concept and Performance of Nurses Regarding Pre and Postoperative Nursing Care of Patient Undergoing Hemarroidectomy, in Elmak Nimer University Hospital, August- 2016

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#### ABSTRACT

*This descriptive cross-sectional hospital based study, aimed to assess concepts and performance of nurses regarding nursing care of hemorrhoidectomy in Elmak Nimer university hospital, Shendi city, Sudan, august 2016. All nurses available during the time of the study, (70) were included in the study. Closed questionnaire was used to collect the data, witch analyzed by (spss) program. The study shows, near half of study group had Knowledge about concept of hemorrhoidectomy, (47%). (28%) teaching the patient before the operation, but their performance before the operation is very good, about patient fasting (64%), check the vital signs (74%), preparation of patient file (71%), were gown (74%), and transfer patient to theater (94%). Also the performance and knowledge is very good after the operation, about (75%) assess the level of consciousness, check vital signs (76%), check site of operation (67%), and start diet (62%).*

***Finally, this study recommended the directors of the hospital and health sector, to design training program about nursing care before and after the hemorrhoidectomy operation, so to increase effectiveness of the nurses in the hospital about the knowledge and skills of hemorrhoidectomy.***

***Keywords: Hemorrhoidectomy, Pre and Postoperative Nursing Care and Cross-sectional.***

## INTRODUCTION

Hemorrhoids are common health condition but not too many people are willing to discuss or admit to having them openly. The good news is that hemorrhoids are totally treatable if proper treatment is administered at an early stage. Hemorrhoidectomy is third-fourth degree of internal hemorrhoids with or without external hemorrhoids (Forlini et al., 2009).

Hemorrhoids are varicose vein in the anal canal. They are caused by an increase in the pressure in the veins often from increased intra-abdominal pressure (Linda et al., 2007).

Hemorrhoids develop when venous return from the anal canal is impaired. Straining to defecate increase venous pressure and it the most common cause of distended hemorrhoids, (Priscilla Lemone 2008). Physicians use grading system to describe the severity of hemorrhoids, first, second, third, & four degree.

There are several types of non-surgical treatments for hemorrhoids. Infrared photocoagulation, bipolar diathermy, and laser therapy are newer techniques that are used to affix the mucosa to the underlying muscle. Injecting sclerosing solutions is also effective for small, bleeding hemorrhoids. These procedures help prevent prolapsed (Martha and Manning, 2007).

The incidence of hemorrhoidal disease is difficult to quantify due to difference in health care access, and it is more common in white patient than in black patients in US with presentation peaking between the age of 45 years since the second half of the 20<sup>th</sup> century there appears to be an unexplained decreases in the prevalence of symptomatic hemorrhoidal disease in both the US and England, <sup>(1)</sup>. The prevalence of hemorrhoids has been estimated at (4.4%) US adults with the highest. Prevalence in those between 45-65 years of age factors that intra-abdominal pressure and prolapsed of hemorrhoidal vascular tissue.

Five hundred and seventy tow patients with hemorrhoid seen in the rectal clinic Khartoum teaching hospital. Pure internal piles were found in (39.86%) of patients. Both internal and external component were found in (33.22%), only external component was found in 5.07% and there was miscellaneous group of 125, (20%) patients. Constipation was noted in (21%) of patients suffering from hemorrhoids. Patient with pure internal piles were best treated conservatively (89%) responded to local ointment, injection or rubber band ligation and 11% required surgery (Johanson and Sonnen Berg, 2006).

Your doctor may be able to see if you have external hemorrhoids simply by looking. Tests and procedures to diagnose internal hemorrhoids may include examination of your anal canal and rectum.

Open excisional hemorrhoidectomy under local anesthesia is feasible, safe and well tolerated in our environment and may encourage early presentation of patients with piles to hospital.

There is no need for the patient to stay in hospital until the bowels have moved but if they have not by the third day the patient should report back for an enema. Antibiotic cover is not required unless there is a particular predisposition to sepsis (Peter et al., 2005).

The nursing role include education of client of all ages, maintain adequate intake of dietary fiber. Aiberal fluids intake and regular exercise to maintain stool bulk, teach appropriate constipation management including the use of bulk foaming laxative and packing may be in place for the first 24 hours, following procedure when removed, observe client bleeding, pain also sits bath usually are ordered.

Stapled hemorrhoidectomy is an effective treatment for third and fourth degree hem-Orchids with significant advantages for patients compared with traditional hemorrhoidectomy. Most patients return to work within 10 days. Heavy lifting should be avoided for 2 to 3 weeks. Avoiding Straining and holding the breath when trying to pass a stool creates greater to hemorrhoids.

### **Objective of the study**

To assess the concept and performance of nurses, regarding pre and postoperative nursing care of patient undergoing heamorrhoidectomy.

### **Methodology**

**Study design:** This was descriptive cross sectional, hospital based study done to assess the concepts and performance of nurses regarding nursing care of hemorrhoidectomy in Elmak Nimer university hospital, from august to December, 2016.

**Study area:** The study in Shendi town, Sudan, which is located 172k to north Khartoum city. Most of the people in Shendi working agriculture and some in industrial works and other work. Shendi has two big hospital, Shendi teaching hospital and Elmek Nimer university hospital, Elmek Nimer hospital was establish in 2002, and there are (121) nurses work in the hospital, and consist of general units of medicine, pediatric, obstetric, cardiac unit, dialysis units, and surgery.

**Study settings:** This study was done in AlMak Nimer University hospital, surgical unit.

**Study population:** Including all nurses in Elmak Nimer hospital during 3 shift work for one year, so the study excludes nurses, those were work less than one year, and those were absent during collecting the study data.

**Sampling:** The sample was including all nurses, those were work more than one year.

**Sample size:** (70) nurses.

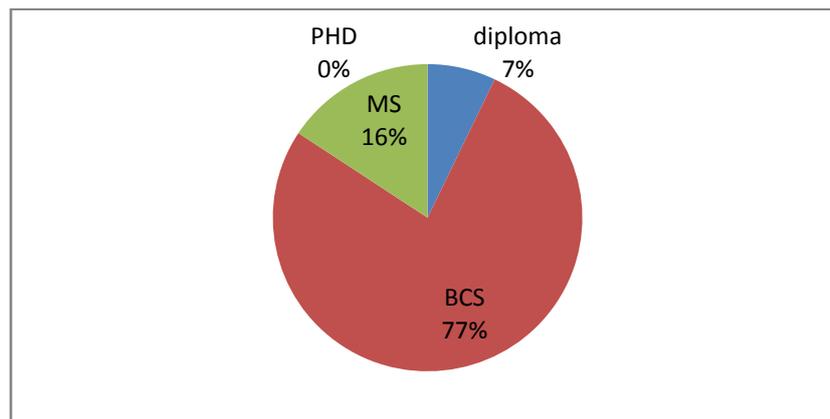
**Data collection tools:** By using designed questionnaire, composed of 41 closed questions.

**Data collection technique:** Data was collected during the morning shift and afternoon night shift, every nurse was filled the questionnaire, there were no refusing. And scoring system is "to identify the knowledge and performance of the nurses the researcher used the following score, (good, fair, poor), the researcher give the nurses good, if they know or answer three points or more, also give the nurses fair, if they know or answer two points, and give the nurses poor, if they know or answer one points".

**Data analysis:** The data was analyzed by SPSS, statistical program and the results presented in form of tables and figures.

**Ethical consideration:** The study was approved to by the conducted by the research institute board of the Shendi University. Permission has been taken after explanation clearly and verbally to the responder and the information should be used only of the purpose of study.

## RESULTS



**Figure 1. Distribution of study group according to their academic qualifications.**

The above figure Shows 7% of study group had diploma, 77% of study group had bachelor and 16% study group had master.

**Table 1. Distribution of study group according to their years of experiences.**

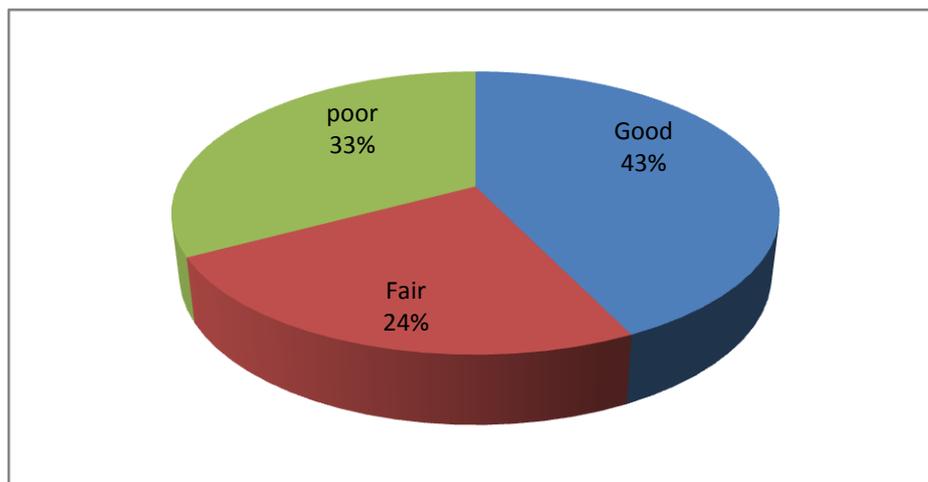
Years of experiences	Frequency	Percent
1 – 3 years	43	61%
4 – 7 years	19	27%
8 – 11 years	8	12%
Total	70	100%

The above table Shows that 61% of study group their years of experiences range between (1-3) years, 27% of study group their years of experiences rang between (4-7) years and only 12% of study group their years of experiences rang between (8-11)years

**Table 2. Distribution of study group according to their knowledge about definition of hemorrhoid.**

Definition of hemorrhoid	Frequency	Percent
Varicose vein in the anal canal	42	60%
Develop when venous ...	11	16%
Varicose vein in the anal canal+ develop when venous	17	24%
Total	70	100%

The above table shows that 60% of study group their knowledge about definition of hemorrhoid is varicose vein in anal canal.



**Figure 2. Distribution of study group according to their knowledge about causes of hemorrhoid.**

The above figure shows that 43% of study group had good knowledge about causes of hemorrhoid, 24% and 33% of study group had fair knowledge and poor knowledge about causes of hemorrhoid respectively.

**Table 3. Distribution of study group according to their knowledge about signs and symptoms of hemorrhoid.**

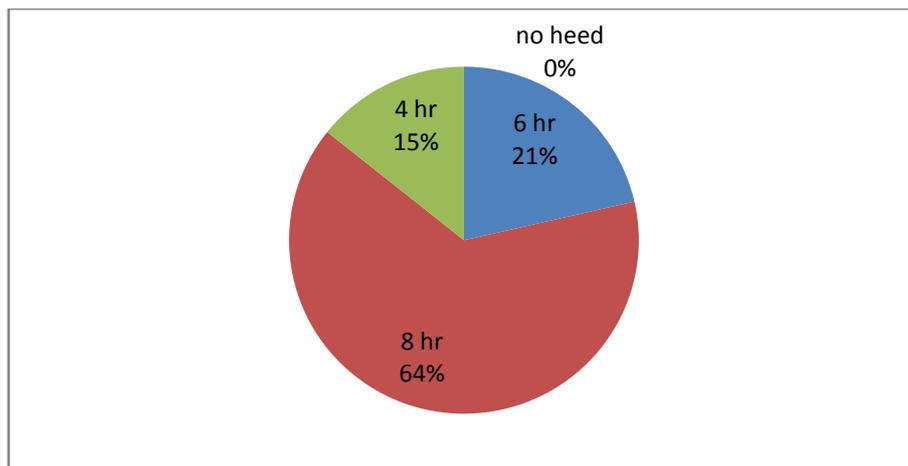
Sings and symptom of hemorrhoid	Frequency	Percent
Good	30	43%
Fair	22	31%
Poor	18	26%
Total	70	100%

The above table shows that 43% of study group had good knowledge about signs and symptoms of hemorrhoid, 31% of study group had fair knowledge and 26% of study group had poor knowledge about signs and symptoms of hemorrhoid.

**Table 4. Distribution of study group according to their knowledge about signs and symptoms of hemorrhoid that required surgical removal.**

Sing sand symptom require removal	Frequency	Percent
Good	26	37%
Fair	7	10%
Poor	37	53%
Total	70	100%

The above table shows that more than half 53% of study group had poor knowledge about signs and symptoms of hemorrhoid required removal.



**Figure 3. Distribution of study group according to their knowledge about a correct time of fasting.**

The above figure shows that 64% of study group had good knowledge about a correct time of fasting before surgery (8hrs).

**Table 5. Distribution of study according to their knowledge about bowel preparation:**

Bowel preparation	Frequency	Percent
Good	25	36%
Fair	7	10%
Poor	38	54%
Total	70	100%

The above table shows that more than half 54% of study group had poor knowledge about bowel preparation, and only one third 36% had good knowledge.

**Table 6. Distribution of study group according to their knowledge about preoperative teaching.**

Preoperative teaching	Frequency	Percent
Good	20	28%
Fair	15	22%
Poor	35	50%
Total	70	100%

The above table shows that half of study group had good knowledge and average knowledge about preoperative teaching.

**Table 7. Distribution of study group according to their knowledge about common investigation in preoperative period.**

Common investigation	Frequency	Percent
Good	14	20%
Fair	28	40%
Poor	28	40%
Total	70	100%

The above table showed that 60% of study group had good knowledge and average about common investigation, and 40% had poor knowledge.

**Table 8. Distribution of study group according to their knowledge about patient record.**

Patient file	Frequency	Percent
Good	50	71%
Fair	11	16%
Poor	9	13%
Total	70	100%

The above table shows that only 13% of study group had poor knowledge about preparation of patient record.

**Table 9. Distribution of study group according to their knowledge about assessing consciousness level.**

Assess level of consciousness	Frequency	Percent
Usually	52	75%
Sometime	12	17%
Often	3	4%
Never	3	4%
Total	70	100%

The above table shows that 75% of study group had good knowledge about assessment of level of consciousness, 8% had poor knowledge.

**Table 10. Distribution of study group according to their knowledge about checking site of operation.**

Check site of operation	Frequency	Percent
Usually	46	67%
Sometime	17	24%
Often	5	7%
Never	1	2%
Total	70	100%

The above table shows that 24% of study group had average knowledge check site of operation.

**Table 11. Distribution of study group according to their knowledge about diet.**

Diet	Frequency	Percent
Good	12	17%
Fair	19	27%
Poor	39	56%
Total	70	100%

The above table shows that only 17% of study group had good knowledge about taking diet, and more than half had poor knowledge.

**Table 12. Distribution of study group according to their knowledge about warm sit bath should be done in postoperative period.**

Warm sit bath	Frequency	Percent
Good	6	9%
Fair	5	7%
Poor	59	84%
Total	70	100%

The above table shows that most (84%) of study group had poor knowledge about warm sit bath in postoperative period.

**Table 13. Distribution of study group according to their knowledge about exercise in postoperative period.**

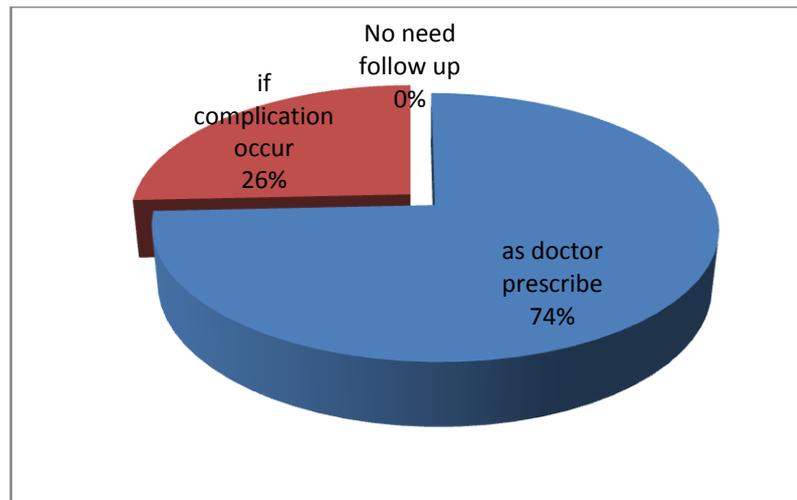
Exercise	Frequency	Percent
Usually	35	50%
Sometime	25	36%
Often	7	10%
Never	3	4%
Total	70	100%

The above table shows 50% of study group usually done the exercise in post operative period and 36% done it sometime.

**Table 14. Distribution of study group according to their knowledge about precautions of hemorrhoid.**

Precautions of hemorrhoid	Frequency	Percent
Good	45	64%
Fair	12	17%
Poor	13	19%
Total	70	100%

The above table shows that 45 of nurses had good knowledge about precautions of hemorrhoid with percent 64% and only 13 nurses included in the study had poor knowledge about this precaution.



**Figure 4. Distribution of study group according to their knowledge about Follow up.**

The above figure shows that 74% of study group their knowledge about follow up according to the doctor ordered, and only 25% according to complication occurrence.

## DISCUSSION

This study find that, majority of nurses had bachelor degree (77%), figure (1), more than half 61% of study group had 1-3 year of experience, table (1), neither the nurses knowledge about definition of hemorrhoid was near quarter (24%), table (2), agree with definition of hemorrhoid is "varicose vein in anal canal", (2).

This study also confirm the important of post-operative nursing care by three quarter (75%), table (17), of nurses had assess the level of consciousness. More than tow third (67%), table (10), had checking the operation site. Just half (50%), table (13), of study group had teaching the patient about post-operative exercise, this is agree with, (13), "exercise staying active helps to reduce pressure on veins which can occur with long periods of standing or sitting"

## CONCLUSION

This study was done throughout to assess the concept and performance of nurses regarding pre and postoperative nursing care of patient under going to hemorrhoidectomy in Elamk Nimer university hospital, this study found that:

- Most of study group had bachelor degree (77%).
- More than quarter of study group had knowledge about definition of hemorrhoid.
- More than tow third had good knowledge about preoperative nursing care (vital sing (74%), gown done (74%)).
- More than half (54%) had poor knowledge about bowel preparation.
- More than tow third had good knowledge about postoperative nursing care and performance (assess level of consciousness (75%)).

## RECOMMENDATIONS

Depend on the study results recommended the followings to the nurses:

- Identify degrees of hemorrhoid and degrees require removal (surgery).
- Identify preoperative teaching for the patient.
- Encourage patient about important of follow up.

- Nurses must be encouraged patient to done exercise usually.
- Finally to the directors of the hospital and health sector, to design training program about nursing care before and after the hemorrhoidectomy operation, so to increase effectiveness of the nurses in the hospital about the knowledge and skills of hemorrhoidectomy.

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