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EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING EARLY AMBULATION AMONG STAFF NURSE.

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ABSTRACT

Introduction: Surgery is a vital component of the health care system. Above 230 million major surgeries are done globally each year. Early ambulation is procedure characterized by a shorter period of hospitalization or recumbency or by more rapid of mobilization than the normal practice. The present study was conducted with aim to assess effectiveness of self instructional module on knowledge regarding early ambulation among staff nurse. **Methods and materials:** An evaluative approach with one group pre test- post test design was used to assess the knowledge of 50 nursing staff early ambulation post operative recovery among who have undergone hysterectomy. The data collection was done with help of demographic profile and self administered knowledge questionnaire. The knowledge score range was 0-30. The knowledge scores were categorized as inadequate knowledge (<50%), moderate (50-75%) and adequate knowledge (>75%). **Results**: In present study, majority of participants 23(46%) were in the age group 26-30 years. In terms of gender, 38(76%) participants were male and 12(24%) participants were female. In the pre-test majority of the respondents 32 (64%) had moderate knowledge followed by 24% had inadequateknowledge while in posttest, 78% respondents had adequate knowledge and 22% had moderate knowledge. The mean pretest and post-test knowledge scores were 9.14 and 17.34 respectively. Paired t test knowledge score was 17.697 which indicated that the SIM was significantly effective ($p<0.0001$) in increasing the knowledge of the nurses. **Conclusion**: The study concluded that the SIM was significantly effective in increasing the knowledge of the nurses. The administrators and nurse managers may adopt this intervention for continue nursing education program.

KEYWORDS: Effectiveness, Self instructional module, Knowledge, Early ambulation, staff nurse.

INTRODUCTION

Surgery is a vital component of the health care system. Above 230 million major surgeries are done globally each year. Even though the overall risk of complication is low; there are high risk groups who tend to develop postoperative complications.[1] Prolonged immobility is associated with significant short- and long-term morbidities in critically ill adults and children.[2] Early ambulation is procedure characterized by a shorter period of hospitalization or recumbency or by more rapid of mobilization than the normal practice.[3] Common indications for performing hysterectomy for benign disease include the following: uterine fibroids, menstrual disorders, adenomyosis of the uterus endometrium and the cervix.[4] Early ambulation of the patients as soon as possible after surgery is thought to reduce many complications. The other mechanical method of prophylaxis act on the same principle as early mobilization in that they stimulate calf muscles and put pressure on calf and leg veins, thus discouraging stasis and pooling of blood in the lower extremities. This intermittent pneumatic leg compression enhances blood flow in deep veins of extremities. This method is virtually free of side effects.[5] Early ambulation after hysterectomy has been encourage to prevent complications such as Pneumonia, pulmonary embolism, atelectasis, deep vein thrombosis, bladder dysfunctions and other morbidity related complications, along with nosocomial infections. Early ambulation increases ventilation and reduces bronchial secretions in the lungs.[6] Commonest indication for hysterectomy was dysfunctional uterine bleeding (DUB) (30%), fibroid (23%) and prolapse (20%). Abdominal hysterectomy (63%) was performed more commonly than vaginal hysterectomy (37%). Complications are more common in abdominal hysterectomy than vaginal hysterectomy.[7] Infectious, venous thromboembolic, genitourinary (GU) and gastrointestinal (GI) tract damage, haemorrhage, nerve injury, and vaginal cuff dehiscence are the most

frequent hysterectomy complications. Infectious problems are the most prevalent following hysterectomy, with 10.5 percent for abdominal hysterectomy, 13.0 percent for vaginal hysterectomy, and 9.0 percent for laparoscopic hysterectomy. Venous thromboembolism is less prevalent, with rates ranging from 1% in clinical diagnosis to up to 12% in episodes discovered by more sensitive laboratory approaches.[8] Therefore, present study was conducted with aim to assess the effectiveness of Scheduled Ambulation on early post-operative outcome among patients who had undergone hysterectomy.

METHODOLOGY

An evaluative approach was used to assess the knowledge nursing staff early ambulation post operative recovery among who have undergone hysterectomy. Research design used for the present study was one group pre test- post test design. In this study, the population was 50 nursing staff in Apollo hospital, Jaipur. The data collection was done with help of demographic profile and self administered knowledge questionnaire. The self administered knowledge questionnaire consisting of 30 items. The score range was 0-30. The knowledge scores were categorized in three levels. The score less than 50% were considered as inadequate knowledge. The scores between 50-75% and above 75% were considered as moderate and adequate knowledge respectively. Written permission obtained from administrator of Institution. Procedures, Purposes were explained to all participants. Consent was taken from each respondent who had participated in the study. Confidentiality of the respondents was maintained.

Data collection process

Data collection was done after written permission from center head and nursing superintendent of Apollo Hospital, Jaipur. The final data collection was done from 10/09/18 to 09/10/18. The purpose of the study was explained to the group and confidentiality of their responses was assured. After obtaining the permission and consent, pre-test was taken before administration of the intervention. The SIM was administered and post test knowledge was assessed after 7 days. The data collection was based on the objectives of the study and organized, tabulated, analyzed and interpreted by using descriptive and inferentialstatistics and described with help of tables and graphs.

RESULTS

The findings in table-1revealed that 13(26%) participants were in the age group 20-25 years, 23(46%) participants were in the age group 26 – 30 years,8(16%) participants were in the age group 31 - 35 years and6 (12%) participants were in the age group 35 years and above. In terms of gender, 38(76%) participants were male and 12(24%) participants were female. Distribution of educational status of staff nurse revealed that 21(42%) participants were having G.N.M. education, 17(34%) participants were having B.Sc. education and 12(24%) were Post B.sc. nursing. Distribution by working experience, that majority 28(56%) participants were having 5-10 years experience, 10(20%) participants were having 10-15 years experience and 12(24%) participants were having the monthly income of above 15 years experience. As per source of information, 19(38%) participants obtained information from health professionals, 20(40%) participants from mass media and 11(22%) participants obtained from peer groups/ friends.

The data presented in table-2 highlighted that in the pre-test majority of the respondents 32 (64%) had moderate knowledge, 12(24%) had inadequateknowledge and only 6(12%) had adequate knowledge on effectiveness of early ambulation after hysterectomy (78%) respondents had adequate knowledge, 11(22%) had moderate knowledge and none of the respondent had inadequate knowledge on effectiveness of SIM (Figure-1). The mean post-test knowledge score 17.34 with meanpercentage of (57.8%) was greater than the mean pre-test score 9.14 with mean percentage (30.47%). The mean difference between pre-test and post test score was (8.2).Paired t test knowledge score is 17.697 which is more than the table value, which was significant at 0.05% level (Table-3). In terms of association, the findings revealed that variables like age (p-value= 0.038), education (p-value= 0.032), years of experience (p-value= 0.01) and previous knowledge (p-value= 0.044) were significantly associated with pretest knowledge scores (table-4). While, gender (p-value= 0.105) and source of information (p-value= 0.072) were not significantly associated with pretest knowledge scores.

Table 1: Frequency and percentage distribution of the nurses. N=50.

Demographic variables		Frequency	Percentage
Age in years	20-25yrs	13	26%
	26-30yrs	23	46%
	31-35yrs	08	16%
	Above 35yrs	06	12%
Gender	Male	38	76%
	Female	12	24%
Educational Qualification	G.N.M	21	42%
	B.SC. Nursing	17	34%
	Post B.Sc. Nursing	12	24%
	M.sc. Nursing	00	00%

Experience	Below 5 years	00	00%
	5-10 years	28	56%
	11-15 years	10	20%
	Above 15 years	12	24%
Source of information	Health professional	19	38%
	Mass media	20	40%
	Peer group/friends	11	22%
	Family members	00	0%

Table 2: Levels of knowledge among the staff nurses. N=50.

Levels of Knowledge	Pre-test		Post-test	
	Frequency	Percentage (%)	Frequency (F)	Percentage (%)
Adequate	06	12%	39	78%
Moderate	32	64%	11	22%
Inadequate	12	24%	00	00%

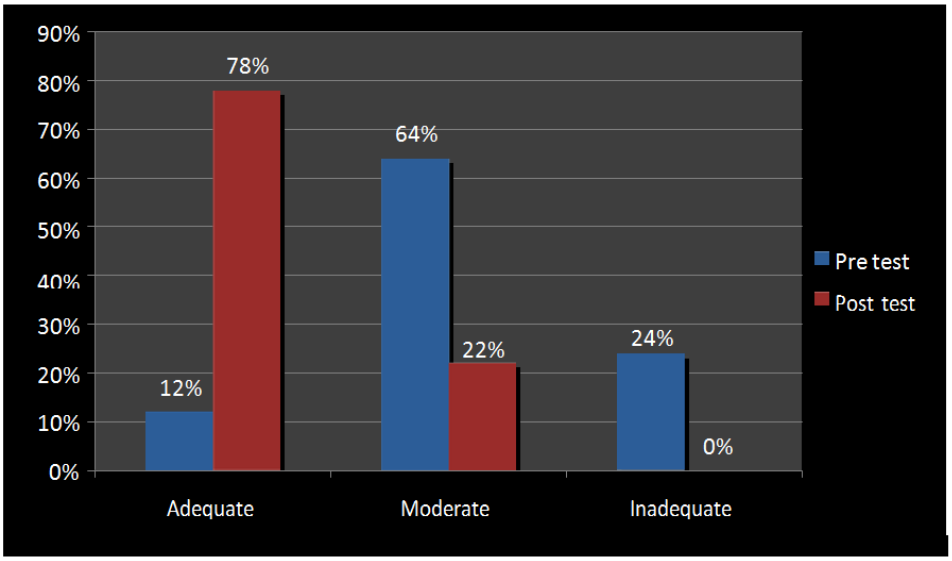

Figure 1: Comparison of pre test and post test levels of knowledge among staff nurses.

Table 3: Mean pretest and post test knowledge scores among staff nurses. N=50.

Knowledgeassessment	Mean±SD	Mean %	Mean difference	Paired 't'value	p-value
Pre test	09.14±3.57	30.47%	8.20	17.697*	<0.0001
Post test	17.34±4.21	57.8%			

*= Significant at 0.05 level.

Table-4: The association between pretest knowledge scores and selecteddemographic variables. N=50.

S. No.	Demographic variables	DF	Calculated χ^2 value	Tabulated χ^2 value	*p-value*
1	Age	6	13.32	12.59	0.038
2	Gender	2	4.50	5.99	0.105
3	Education	8	16.82	15.50	0.032
4	Year of experience	4	13.20	9.48	0.01
5	Previous knowledge	2	6.21	5.99	0.044
6	Source of information	6	11.56	12.59	0.072

Significant at p <0.05

DISCUSSION

The aim of the study was to find out the effectiveness of SIM on knowledge regarding early ambulation post operative recovery with hysterectomy among staff nurse who have work in Apollo hospital, Jaipur. The present study revealed that in the pre-test, majority of the respondents 32 (64%)had moderate knowledge, 12(24%) had inadequate knowledge and 6(12%) had adequate knowledge. While after administration of SIM, most of respondents 39(78%) had adequate knowledge followed by 11(22%) moderate knowledge and no one of the respondent had inadequate knowledge on women who have undergone post operative hysterectomy.

In reference to our findings, a study by Kiran N et al (2020) highlighted that in pretest in above one half of the samples 31 (51.7%) had adequate knowledge and less than one – half of the samples 29 (48.3%) had moderate knowledge and none of the samples had inadequate knowledge. In post – test an overwhelming majority of the samples 59 (98.3%) had adequate knowledge regarding post –operative care of caesarean section[9]. This finding was in support of our findings. The study explored that mean pre-test score and post test knowledge scores were 9.14 and 17.34 respectively. Paired t test value was 17.697 which was highly significant (p-value=<0.0001). It indicates that the SIM was significantly effective in increasing the knowledge and information towards early ambulation post-operative recovery among staff nurses. In this context, Elizabeth Rajan, Sabitha Nayak (2014) highlighted that calculated 't' value showed significant in the post test ('t' calculated value-18.000, p<0.001) which showed that self-instructional module was effective in improving the knowledge of mothers on post operative self care after caesarian section.[10] This finding was similar to our findings. A similar study by Sarkar M (2021) revealed that the learning package is effective to improve the knowledge and enhance the practice among the subjects[11]. Additionally, the findings communicated that variables like age (p-value= 0.038), education (p-value= 0.032), years of experience (p-value= 0.01) and previous knowledge (p-value= 0.044) were significantly associated with pretest knowledge scores (table-4). While, gender (p-value= 0.105) and source of information (p-value= 0.072) were not significantly associated with pretest knowledge scores. There was no study to support the present findings.

CONCLUSION

The present study was conducted to assess the effectiveness SIM informational and knowledge regarding effectiveness of early ambulation with hysterectomy in staff nurse. The study concluded that in pretest, the mostly nurses have moderate knowledge while in posttest, 78% respondents had adequate knowledge and 22% had moderate knowledge. The SIM was significantly effective (p<0.0001) in increasing the knowledge of the nurses. The SIM was significantly effective in increasing the knowledge of the nurses. The administrators and nurse managers may adopt this intervention for continue nursing education program.

Limitation of the study

1. The study was limited to assessment of knowledge of staff nurse regarding of early ambulation in post operative period.
2. Limited to small sample size (50 staff nurses).
3. The present study was conducted at single center.

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