



**EFFECTIVENESS OF SCHEDULED PROTOCOL ON KNOWLEDGE REGARDING
EARLY AMBULATION OF POST OPERATIVE PATIENTS AMONG STAFF
NURSES WORKING IN SURGERY RELATED WARDS OF SELECTED
HOSPITALS AT JAIPUR**

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ABSTRACT-

Introduction- The present study aims at evaluating the effectiveness of scheduled protocol on knowledge regarding early ambulation of post operative patients among staff nurses working in surgery related wards of selected hospital at Jaipur. The framework, of the present study is based on Kurt Lewin's Theory of Change (1951) The conceptual framework is consisting of three steps: unfreezing, changing and refreezing.

Material & Methods- The Research design used was two-group post test quasi-Experimental design; Convenient Sampling technique was used. The Sample was selected from the selected pre-operative, intra-operative, post-operative, ICU of hospitals. The samples consisted of 150 in control and 150 in experimental group that was selected as per criteria. A structured knowledge questionnaires regarding early ambulation of post operative patients was prepared to assess the knowledge of staff nurses working in surgery related wards.

Results- In the pre-test, knowledge among staff nurses depicts that, majority of respondents (77.33%) had excellent knowledge scores, (22.67%) had good knowledge scores, (00.00%) had poor and average knowledge scores. The finding of the study in post-test are same as pre-test in control group staff nurses regarding early ambulation of post-operative patients in surgery related wards.



At another, the pre-test knowledge among staff nurses depicts that, majority of respondents (70.67%) had poor knowledge scores, (29.33%) had average knowledge scores and none of the sample had not good and excellent knowledge score. The finding of the study in post-test are majority of respondents (59.33%) had good knowledge score, (40.67%) had excellent knowledge score and none of the respondents had not average and poor knowledge score in experimental group staff nurses regarding early ambulation of post-operative patients in surgery related wards.

Conclusion- The knowledge scores of staff nurses regarding early ambulation of post-Operative patients in surgery related ward had revealed that, post-test mean knowledge score was found higher 14.61(81.17%) and SD of 1.65 when compared with pre-test mean knowledge score which was 10.74 (59.67%) with SD of 4.70. The mean effectiveness score was 't' test value 33.03, Z test value 94.79 and F test value 8.12. The results of the study indicates the effectiveness of Schedule Protocol in improving knowledge of the staff nurses.

Key word- Scheduled protocol, Early Ambulation, Post operative patie

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INTRODUCTION-

Early ambulation is the most significant general nursing measure to prevent postoperative complications". The commonly accepted postoperative benefits include a decrease in venous stasis, stimulation of circulation, prevention of deep venous thrombosis/pulmonary embolism, increases in muscle tone, coordination and independence, and improved gastrointestinal, genitourinary and pulmonary functions.

(Lewis, Heitkemper, & Dirksen, 2004)(15)

Early ambulation post abdominal surgery is a widely practiced and much supported part of postoperative care following abdominal surgery. Benefits include prevention of post operative pulmonary complications have been sustained in research literature however little exists relating early mobilisation to length of stay post op. This study aims to assess the effect of early mobilisation using a clinical indicator on the effect on length of stay

Early ambulation is a logical step in the progress of surgery and offers an excellent perspective. There are definite anatomic, physiologic, psychologic and economic

advantages to the practice of early ambulation. Review of 6,130 cases indicates that respiratory and circulatory complications have been reduced by early ambulation and voluntary and involuntary coughing.

The present shortage of hospital beds, the increasing economic dislocation (negative factors), improved quality and rate of healing, the absence of post-operative complications and elimination of hospital costs (positive factors), have favored the development of early ambulation.

OBJECTIVES OF THE STUDY

1. To determine the knowledge among staff nurses working in surgery related wards regarding early ambulation of post operative patients.
2. To evaluate the effectiveness of scheduled protocol on knowledge regarding early ambulation post operative patients among staff nurses working in surgery related wards
3. To find out the association between levels of knowledge regarding early ambulation post operative



patients among staff nurses working in surgery related wards with their selected demographic variables such as gender, age, educational qualification, marital status, nursing experience, department, hospital type, participation in any special training programme related to early ambulation.

RESEARCH METHODOLOGY

Research Method- Descriptive evaluative approach as the study aimed at describe the effectiveness of scheduled protocol on knowledge regarding early ambulation of post operative patients among staff nurses working in surgery related wards.

Research Design- Quasi-experimental approach, two group post-test design, keeping in the view the objectives of the study. The investigator observed the experimental and control groups after intervention (Post test).

Dependent variable- level of knowledge among the staff nurses working in surgery related wards.

Independent variable- scheduled protocol regarding early ambulation of post operative patients

HYPOTHESIS

H₀: There will be no significant difference in the level of knowledge among the staff nurses working in surgery related wards of selected hospitals of Jaipur by scheduled protocol related early ambulation of post operative patients.

SETTING OF THE STUDY

The study was conducted in selected hospitals of Jaipur.

POPULATION

The population of the present study comprises selected staff nurses working in surgery related wards of selected hospitals of Jaipur.

SAMPLE SIZE AND SAMPLING

TECHNIQUE

The sample selected for the present study comprised of 300 staff nurses working in surgery related wards of selected hospitals of Jaipur. Non-probability convenient sampling approach uses participants who are convenient to the researcher and who meet the criteria of the study.

In the present study, staff nurses working in surgery related wards i.e pre operative, intra



operative, post operative and ICU of selected hospitals of Jaipur are selected by convenient sampling technique by the investigator. It is suitable keeping in view the time provided for data collection and the study.

DATA COLLECTION TECHNIQUE AND TOOL

A semi structured questionnaire was developed for demographic variables and knowledge questionnaire as pre and post test were developed for assessing the effectiveness of scheduled protocol on knowledge regarding early ambulation among the staff nurses working in surgery related wards of selected hospitals at Jaipur.

DESCRIPTION OF THE TOOL

Section A: This section is the first section seeking information on demographics data of client i.e. gender of sample, age, educational qualification, marital status, nursing working experience, department, participation in any special training programme regarding early ambulation protocol and language of communication with patient.

Section B: This section knowledge based questionnaires, is the second part of tool,

which consist of 18 knowledge based questionnaires for assessing the effect of scheduled protocol regarding early ambulation and will conducted as pre as well as post test.

Section C: Scheduled protocol regarding early ambulation

SCORING

There were two options given for each observation. The scoring for normal measures is '1' and '0' for the deviation in normal measure. The scores range from a minimum of 0 to a maximum score of 18. The effectiveness of scheduled protocol on knowledge regarding early ambulation of post operative patients has been classified as:

Poor	(0-6)
Average	(7-10)
Good	(11-14)
Excellent	(15-18)

RESULT

Table 1: Frequency and percentage distribution of demographic variables of staff nurses.

N=300 (Control Group-150; Experimental Group-150)



Table of Demographic Data regarding early ambulation of post-operative patients among staff nurses							
S.No	Demographic Variables	Frequency	Percentage	Control Group		Experimental Group	
				Frequency	Percentage	Frequency	Percentage
1	Gender						
	Male	140	46.67	54	36.00	86	57.33
	Female	160	53.33	96	64.00	64	42.67
2	Age						
	20-30 Year	80	26.67	38	25.33	42	28.00
	31-40 Year	80	26.67	40	26.67	40	26.67
	41-50 Year	124	41.33	60	40.00	64	42.67
	51-60 Year	16	05.33	12	08.00	4	02.67
3	Educational Qualification						
	GNM	52	17.33	29	19.33	23	15.33
	P.B.B.Sc. Nursing	100	33.33	45	30.00	55	36.67
	B.Sc. Nursing g	120	40.00	60	40.00	60	40.00
	M.Sc. Nursing	28	09.33	16	10.67	12	08.00
4	Marital Status						
	Married	204	68.00	100	66.67	104	69.33
	Unmarried	96	32.00	50	33.33	46	30.67
5	Experience in Year						
	1-2 Year	80	26.67	38	25.33	42	28.00
	2-3 Year	80	26.67	40	26.67	40	26.67
	4-5 Year	108	36.00	56	37.33	52	34.67
	> 5 Year	32	10.67	16	10.67	16	10.67
	Department						
6	Pre- Operative Wad	80	26.67	38	25.33	42	28.00
	Intra- Operative Ward	72	24.00	32	21.33	40	26.67
	Post- Operative Wad	124	41.33	60	40.00	64	42.67
	ICU	24	08.00	20	13.33	04	02.67
7	Special Training						
	Yes	225	75.00	121	80.67	104	69.33
	No	75	25.00	29	19.33	46	30.67
8	Language for Communication						
	Local	24	08.00	08	05.33	16	10.67
	Hindi	84	28.00	46	30.67	38	25.33
	English	64	21.33	52	34.67	12	08.00
	According to Patients	128	42.67	44	29.33	84	56.00



Table 2: Assessment of Pre-test and Post-test knowledge of control group staff Nurses regarding early ambulation of post-operative patients in surgery related wards.

N=150

Knowl edge level	Pre-Test		Post-Test	
	Freq uency	Perce ntage	Freq uency	Percenta ge
Poor	00	00.00 %	00	00.00 %
Average	00	00.00 %	00	00.00 %
Good	34	22.67 %	34	22.67 %
Excellent	116	77.33 %	116	77.33 %

Maximum score = 18

Table 3: Assessment of Pre-test and Post-test knowledge of experimental group staff nurses regarding early ambulation of post-operative patients in surgery related wards.

N=150

Knowl edge level	Pre-Test		Post-Test	
	Frequ ency	Perce ntage	Frequ ency	Percentag e
Poor	106	70.67 %	00	00.00 %
Average	44	29.33 %	00	00.00 %
Good	00	00.00 %	89	59.33 %
Excellent	00	00.00 %	61	40.67 %

Maximum score = 18

Table 4: Mean, Mean%, Mean Difference, Standard Deviation and

Effectiveness of Schedule Protocol by Paired 't' test, Z test and F test correct response of respondents in Pre-test and Post-Test regarding early ambulation of post-Operative patients in surgery related wards.

N=300

Test	Pre-test	Post- Test
Mean	10.74	14.61
Mean %	59.67	81.17
Mean Difference	3.87	
Standard Deviation	4.70	1.65
Paired 't' Test	33.03	
P value of t test	<1.1777	
Z test	94.79	
P value of Z test	1.9599	
F test	8.12	
P value of F test	0.028	

Table 5: Association level of pre-test knowledge regarding early ambulation post-operative patients among staff nurses working in surgery related wards with their demographic variables.

(N =300)



S. No.	Demographic Variables	Chi-Square Value	Degree of Freedom	Tabulated Value	Level of Significance
1	Gender	20.66	3	7.82	Significant
2	Age	24.34	9	16.91	Significant
3	Educational Qualification	40.32	9	16.91	Significant
4	Marital Status	1.48	3	7.82	Not Significant
5	Nursing Experience	11.32	9	16.91	Not Significant
6.	Departments	24.79	9	16.91	Significant
7.	Special Training Programme	7.73	3	7.82	Not Significant
8.	Language of Communication	53.42	9	16.91	Significant

Table 6: Association of the pre-test knowledge scores with selected demographic variables
(N =300)

S. No.	Demographic Variables	Chi-Square Value	Degree of Freedom	Tabulated Value	Level of Significance
1	Gender	20.66	3	7.82	Significant
2	Age	24.34	9	16.91	Significant
3	Educational Qualification	40.32	9	16.91	Significant
4	Marital Status	1.48	3	7.82	Not Significant
5	Nursing Experience	11.32	9	16.91	Not Significant
6.	Departments	24.79	9	16.91	Significant
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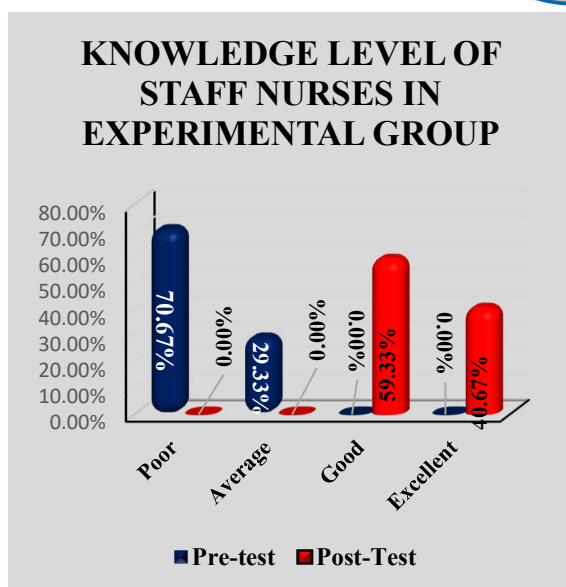


Figure 3-D Column diagram showing the knowledge level of staff nurses in experimental group.

MAJOR FINDING OF THE STUDY

The knowledge scores of staff nurses regarding early ambulation of post-Operative patients in surgery related ward had revealed that, post-test mean knowledge score was found higher 14.61(81.17%) and SD of 1.65 when compared with pre-test mean knowledge score which was 10.74 (59.67%) with SD of 4.70. The mean effectiveness score was 't' test value 33.03, Z test value 94.79 and F test value 8.12. The results of the study indicates the effectiveness of Schedule Protocol in improving knowledge of the staff nurses.

The chi square values of all demographic variables, Gender, Age, Educational Qualification, Departments and Language of Communication of was Significant at 0.05 level of significance and remaining variables Marital Status, Nursing Experience and Special Training Programme was Not Significant at 0.05 level of Significance. Hence the null hypothesis H_0 is rejected and research hypothesis H_2 is accepted for Selected the demographic variables. Thus, it is concluded that there was significant association of pre-test knowledge score of staff nurses regarding early ambulation post-operative patients among staff nurses working in surgery related wards with their demographic variables.

RECOMMENDATIONS

Following study can be undertaken in relation to present study;

- ✓ A similar study can be conducted on a larger sample which may help to draw more definite conclusions and make generalizations.
- ✓ A follow-up study of the scheduled protocol on knowledge regarding early ambulation could be carried out to find the effectiveness in terms of retention of knowledge.



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