



ASSESS THE EFFECTIVENESS OF TEACHING PROGRAMME ON KNOWLEDGE OF STAFF NURSES REGARDING EARLY IDENTIFICATION AND MANAGEMENT OF SELECTED COMPLICATIONS OF PATIENTS ADMITTED IN ICUS AT SELECTED HOSPITALS, KOLLAM

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ABSTRACT

A pre experimental study was done to assess the effectiveness of teaching programme on knowledge of staff nurses regarding early identification and management of selected complications of patients admitted in ICUS at selected hospital in Kollam. The objectives of the study were to assess the effectiveness of teaching programme on knowledge of staff nurses regarding early identification and management of selected complications of patients admitted in ICUs at selected hospitals, Kollam and to find out the association between pretest knowledge score of staff nurses regarding early identification and management of selected complication of patient admitted in ICUs with their selected demographic variables including age, gender, qualification, total years of experience as staff nurses, years of experience in ICU and source of information. Quantitative research approach was used with pre experimental one group pretest posttest research design. Purposive sampling technique was used to select 50 intensive care unit staff nurses who meet the inclusion criteria. Pretest was done on the first day followed by teaching programme (Day 1) and posttest was done on 7th day. The findings of the study revealed that there was a significant increase in mean posttest knowledge score of the samples ($P < 0.05$) regarding early identification and management of selected complications of patients admitted in ICUs among staff nurses at selected hospital in Kollam after teaching programme.

KEYWORDS: Knowledge, Practice, Teaching Programme, Staff Nurses, Selected Complications of Patients Admitted In ICUs; Selected Hospital; Intensive Care Units.

INTRODUCTION

In today's health care environment, there is heightened awareness of the importance of infection control and prevention. This concern is partly in response to the high number of nosocomial infection acquired each year especially in intensive care units of hospitals, posing serious problem in terms of morbidity, mortality and overall costs for health care system.

Intensive care units are the special areas of hospital that provides care to patients with severe and life threatening illnesses and injuries which require constant close monitoring and support from special equipment and medications in order to ensure normal bodily functions.^[1]

Nursing is the core activity of any hospital which plays the most important role in bringing quality care. Commonly tracked indicators are pressure sores, patient

falls, intravenous line infection, hand hygiene practices, blood stream infections, urinary tract infections, medication error and ventilator associated pneumonia.^[3] Patients in intensive care units (ICU) are usually at high risk of mortality not only from their critical illness but also from secondary complication. For example nosocomial pneumonia, a common ICU infection, affects 27% of all critically ill patients, where 86% of it is associated with mechanical ventilation. Ventilator associated pneumonia occurs in 28% of patients who receive mechanical ventilation, where its rate of occurrence varies with the duration of mechanical ventilation. Estimated rates are 3% per day for the first 5 days, 2% per day for days 6–10, and 1% per day after day 10. Central catheter-associated bloodstream infections, ventilator-associated pneumonia and urinary tract infections account for 25.6 percent of all hospital

acquired infections. Pressure ulcers are very common in bedridden patients.^[2]

Objectives

1. To assess the effectiveness of teaching programme on knowledge of staff nurses regarding early identification and management of selected complications of patients admitted in ICUs at selected hospitals, Kollam.
2. To find out the association between pretest knowledge score of staff nurses regarding early identification and management of selected complication of patient admitted in ICUs with their selected demographic variables including age, gender, qualification, total years of experience as staff nurses, years of experience in ICU and source of information.

MATERIALS AND METHODS

In the view of nature of problem selected and the objectives to be accomplished, a quantitative approach was adopted to assess the effectiveness of teaching programme on knowledge of staff nurses regarding early identification and management of selected complications of patients admitted in ICUs.

Research design

A pre experimental, one group pretest posttest research design.

Inclusion criteria

- Staff nurses who hold RN/RM registration
- Nurses those who work in ICU
- Nurses who are willing to participate for the study
- Staff nurses who are involved in direct patient care

Exclusion Criteria

- Nurse incharge of ICUs.

Data collection process

The study was conducted in intensive care units of Bishop Benziger Hospital, Kollam. The data collection period was from 03/12/2018 to 29/12/2018. Clearance certificate was obtained from the institutional ethics committee of Bishop Benziger College Of Nursing, Kollam. A formal permission was obtained from the administrator of the selected hospital before data collection. Samples were selected by using purposive sampling method. The researcher introduced herself to the sample and gave a brief introduction about the study and a written informed consent was obtained from the staff nurses. Baseline data was collected from the participants. The knowledge was assessed by using structured questionnaire. After the pretest, the researcher provided teaching programme for a period of 30 minutes on the same day. On the 7th day of intervention posttest knowledge was assessed by using same knowledge questionnaire. The data collection was terminated by thanking the participants for their co-operation. The data collected was then compiled for analysis.

Statistical analysis

Data collected were analyzed according to objectives. Data were analyzed using descriptive and inferential statistics.

RESULTS

Section A: Sample characteristics.

Section B: Effectiveness of teaching program on knowledge of staff nurses regarding early identification and management of selected complications of patients admitted in ICUs.

Section C: Association between knowledge with selected demographic variables like age, gender, qualification, total years of experience as staff nurse, total years of experience in ICU and source of information.

SECTION A

Table I: Frequency and percentage distribution of demographic variables

N= 50

Sl no. Demographic variables Frequency Percentage			
1. Age in years			
a)	20-30	27	54%
b)	31-40	20	40%
c)	41-50	3	6%
2. Gender			
a)	Male	0	0
b)	Female	50	100%
3. Qualification			
a)	GNM	37	74%
b)	Basic BSc Nursing	10	20%
c)	Post basic BSc Nursing	3	6%
d)	MSc Nursing	0	0
4. Experience as staff nurses in years			
a)	<1	4	8%
b)	1-5	31	62%
c)	6-10	11	22%
d)	>11	4	8%
5. Years of experience in ICU			
a)	0-5	39	78%
b)	6-10	9	18%
c)	>11	2	4%
6. Source of information			
a.	CNE	0	0
b.	Medias	3	6%
c.	Co workers	6	12%
d.	CNE & Medias	10	20%
e.	Medias & co workers	25	50%
f.	CNE & co workers	1	2%
g.	CNE, medias & co-workers	5	10%
h.	No information	0	0

Table 2: Frequency and percentage distribution of knowledge score

N= 50

Level of Knowledge	Pre Test		Post Test	
	Frequency	Percentage	Frequency	Percentage
Poor (0-10)	11	22%	0	0
Average (11-20)	39	78%	21	42%
Good (21-30)	0	0	29	58%

Data in Table 2 shows that in pretest, majority (78%) belong to average level of knowledge and the remaining 22% have poor level of knowledge. In posttest majority

58% belong to good level of knowledge and the remaining 42% have an average level of knowledge.

Section B: Effect of Teaching Program on Knowledge Regarding Early Identification And Management of Selected Complications of Patients Admitted in ICUs.

Table 3: Mean, standard deviation and t value of pretest and posttest knowledge score after teaching program

N= 50

Group	Mean	Standard Deviation	t value	Level of significance
Pre Test	12.2	2.36	21.9	S*
Post Test	21.16	3.06		

*Significant at 0.05 level of significance

Table value t = 2.0096

The calculated paired 't' value is greater than the table value at 0.05 level of significance. So there is a significant difference between mean pretest and posttest knowledge scores regarding early identification and management of selected complications of patients admitted in ICUs after teaching programme.

Section C: Association Between Knowledge With Selected Demographic Variables Like Age, Gender, Qualification, Total Years Of Experience, Years Of Experience In ICU And Source Of Information

Association between pretest knowledge score with demographic variables like age in years, gender, qualification, total years of experience as staff nurse, years of ICU experience and source of information were computed using chi square test. As the calculated chi square value for age in years (9.42) was higher than the table value (5.99) at 0.05 level of significance, there was a statistically significant association between knowledge and age in years. As the calculated chi square value for qualification of staff nurses, total years of experience as staff nurse, years of ICU experience and source of information were less than the table value, there was no significant association between pretest knowledge and these demographic variables.

DISCUSSION

The findings of the present study were supported by another study meant to evaluate the effectiveness of planned teaching program on knowledge of staff nurses regarding ventilator associated pneumonia. In the reference study 60 Staff nurses working in Intensive care unit were selected by simple random sampling. In present study, 50 staff nurses were purposively selected. In both studies structured knowledge questionnaire was used to assess the knowledge of the staff nurses. In both the studies pre experimental one group pre-test posttest research design was used. Results of the both studies revealed that the mean post intervention knowledge score of staff nurses was significantly higher than the mean pre intervention knowledge score. The selected intervention was effective in enhancing the knowledge of staff nurses regarding prevention of complications of patients admitted in ICUs.^[4]

The findings of the present study were supported by a study conducted to assess knowledge of staff nurses regarding prevention of complications of patients admitted in ICU like ventilator associated pneumonia and to investigate if there is any relationship between the knowledge and demographic characteristics. The present study is pre experimental while the reference study was quasi experimental. In both the studies structured questionnaire was used for data collection. The referent study sample included 60 nurses from adult ICUs from 2 hospitals while in present study 50 staff nurses are selected from adult ICUs of one hospital. In the reference study the knowledge scores and years of experience found to be significant while in the present study

knowledge of staff nurse is statistically significant with age.^[5]

CONCLUSION

The present study aimed to assess effectiveness of teaching programme on knowledge of staff nurses regarding early identification and management of selected complications of patients admitted in ICUs at selected hospitals in Kollam. The study results showed that the mean posttest knowledge score of selected samples (21.16) was higher than the mean pretest knowledge score (12.12). The calculated t value (21.9) was greater than the table value (2.01) at a 0.05 level of significance. This indicated that there was a significant difference between mean pretest and posttest knowledge scores regarding early identification and management of selected complications of patients admitted in ICUs after teaching programme.

REFERENCES

1. Talban OC, Anderson LJ, Blesser R, Bridges C, Hajesh R. Guidelines for preventing health care associated pneumonia: recommendations of CDC and Health care Infection Control Advisory committee. MMWR Recommendations Rep., 2004; P 31-36.
2. Dudek MA, Horen TC, Peterson KD. National health care safety network report, Data summary for 2011. Device associated module. Available from <http://www.cdc.gov/nhsn/PDFs/data/stat/2012NHSNRreport.pdf>.
3. <https://www.wikipedia.org/wiki/>
4. Hamid K. Mulani, Dr. Sunita Tata, Shobha D. A Study to Assess the Effectiveness Planned Teaching Programme on Knowledge Regarding Ventilator Associated Pneumonia (VAP) among Staff Nurses Working in ICU "s at Tertiary Care Hospital Karad. International journal of science and research, 2017; 7(10): 415-8. Available from DOI: 10.21275/ART20191755
5. Akin K, Hakver YG, Parlar K S, Uzelli D. Knowledge levels of intensive care nurses on prevention of ventilator-associated pneumonia. Journal of nursing in critical care, 2014; 19: 26-33. Available from <https://www.ncbi.nlm.nih.gov/pubmed/24400606>