

“A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING USE OF FAST HUG I IN CRITICAL CARE UNIT AMONG CRITICAL CARE NURSES IN J S S HOSPITAL AT MYSURU”

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ABSTRACT: The aim of the study was to explore the knowledge of staff nurses and to assess the effect of information booklet among critical care nurses at selected hospital in Mysuru. Research design adopted for the study was pre-experimental - one group pretest post-test design. Purposive sampling technique was used to select 60 staff nurses for the study. Structured knowledge questionnaire was used to assess knowledge regarding use of FAST HUG I. Pilot study was conducted, tool and the study design was found to be feasible. Findings of the study revealed that the majority 78.33% had poor knowledge regarding use of FAST HUG I. The results of the study also revealed significance difference between the mean pretest and mean posttest knowledge scores which was statistically tested using pair t test and it was found to be significant at 0.05 level of significance $t=16.39$, $p<0.05$ and the results also depicted that knowledge of staff nurses regarding use of FAST HUG I had partial association with their selected personal variables. It was concluded that the information booklet was effective in increasing the knowledge of staff nurses regarding use of FAST HUG I. Therefore, the study recommends that, it is essential to organize health campaigns and awareness programmes to enhance the knowledge regarding use of FAST HUG I.

Keywords: FAST HUG I, information booklet, Checklist.

INTRODUCTION:

Critical illness is a life threatening event that disturbs the full system of an individual. Critical illness affects their physical, psychological, socio-cultural and spiritual level. The goal oriented care direct towards the survival of the personal and the achievement of optimal physical, psychological, social potential¹.

The Intensive care unit is a complex care unit that aims at providing safe and effective care to patients in need of special attention, so as to improve their clinical condition². An intensive care unit (ICU) is defined as a specially staffed, specialty equipped, separate section of a hospital dedicated to the observation, care, and treatment of patients with life threatening illness, injuries or

complication from which recovery is possible. It provides special expertise and facilities for the support of vital function and utilizes the skill of medical nursing and other staff experienced in the management of these problems².

The critically ill patients will generally be admitted to the ICU for one of three reasons. First, the patient may be physiologically unstable, second, the patient at risk for serious complications, third, the patient may require intensive and complicated nursing support related to the use of intravenous poly – pharmacy and advanced biotechnology [e.g. Ventricular assist devices, mechanical ventilation, intracranial pressure monitoring, continuous renal replacement therapy, haemodynamic monitoring]³.

Protocols have been devised with the aim of enhancing efficiency, safety and quality of care in intensive care units. Nevertheless, the usefulness of these protocols can be somewhat limited in complex cases and an alternative approach to improving patient care is via the use of checklists. It has been suggested that the use of checklists in ICU may be effective in improving patient care and safety⁴.

FAST HUG is a checklist that highlights key aspects of general care for critically ill patients. The mnemonic aid stresses the importance of the following clinical practices; feeding, analgesia, sedation, thromboembolic prophylaxis, head end bed elevation, stress ulcer prophylaxis, and glycemic control. FAST HUG can be applied to all ICU patients⁴.

The critical care nurse cares for patients and the families of patients with acute and unstable physiologic problems in an environment equipped for technically advanced methods assessing and managing patient's problems³.

The nurse coordinates efforts of the health care team, teaches and supports the client and the family, monitors the clients response to ventilation, intervenes to maintain oxygenation and ventilation and ensures that the clients complex needs are met. In order to provide a better comprehensive care to the mechanically ventilated patient, the nurse should have good working knowledge regarding the mechanical ventilation and also have the practical skills to provide better care to those patients³.

Intensive care nurses are in the best position to put the evidence based guidelines into practice as they are at the patient's bedside 24 hours a day and therefore they play an important role in the prevention of ventilator associated pneumonia. Nevertheless, nurses need to have an awareness of the problem as well as knowledge on FAST HUG so as to adhere to such practices⁶.

Health restores of an individual's life process to dynamic equilibrium requires the process and that is nursing. In nursing nurses serves as a catalyst by making complex timely decision and judgement to promote life process⁵.

OBJECTIVES:

1. To assess the level of knowledge regarding the use of FAST HUG I in critical care unit among critical care nurses before and after giving the information booklet in J S S hospital at Mysuru.
2. To determine the effectiveness of information booklet on use of FAST HUG I in critical care unit among critical care nurses in J S S hospital at Mysuru.
3. To find out the association between level of knowledge regarding use of FAST HUG I in critical care unit among critical care nurses and their selected personal variables.

HYPOTHESES:

H₁: There will be significant difference between Mean pre and post-test knowledge scores regarding use of FAST HUG I among critical care nurses.

H₂: There will be significant association between the level of knowledge regarding use of FAST HUG I among critical care nurses and their selected personal variables.

RESEARCH METHODOLOGY:

Research design adopted for the study was One group pre- test post-test only design. Convenience sampling technique was used to select 60 staff nurses working in critical care unit for the study. Structured knowledge questionnaire was used to assess knowledge regarding use of FAST HUG I in critical care unit.

DATA COLLECTION PROCEDURE:

Formal administrative permission for conducting the study was obtained from the Medical superintendent of J S S Hospital, Mysuru. Ethical clearance for conducting the study was obtained from the ethical committee of the JSS college of Nursing. To obtain a free and true response, the respondents were explained about the purpose and usefulness of the study and cooperation required from the respondents was explained to them. Confidentiality was assured. An informed consent was obtained from each sample indicating their willingness to participate in the study. Data

collection was done from 06/03/2019 to 20/03/2019.

On day 1, 60 staff nurses who met the inclusion criteria were selected and written consent was obtained. For each sample pre - test was conducted using structured knowledge questionnaire and information booklet was administered on the same day. Approximately 15-20 minutes for each subject to complete the session. Post test was conducted for each sample on the 8th day by using structured knowledge questionnaire.

DATA COLLECTION TOOL:

1. Description of proforma for personal variables:

This section includes the basic information about the age of the staff nurses, gender, education qualification of staff nurses, area of working, year of experience, source of previous learning experience of staff nurses.

2. Description of structured knowledge questionnaire:

The structured knowledge questionnaire was prepared by the investigator with the intention to assess the effectiveness of information booklet on knowledge regarding use of FAST HUG I among staff nurses working in critical care unit. The steps adopted for the selection of items and preparation of questionnaire was:

1. Review of research and Non research literature related to use of FAST HUG I in critical care unit.
2. Expert opinion and suggestions to decide on the areas to be included.
3. Preparation of blue print.

Blue print was prepared with the knowledge items divided under the headings: Meaning of FAST HUG I, feeding methods used in critical care unit, analgesia and sedation of critically ill patients, thromboembolic prophylaxis used for critically ill patients, head end elevation of bed in critical care unit, ulcer prophylaxis used in critical care unit, glycemic control in critically ill patients, infection control in critically ill patients.

Structured knowledge questionnaire consists of 30 questions. Each question has four alternatives

answers. The correct answer carries one mark and the wrong answer carries zero mark. The maximum score is 30 and the minimum score is zero.

The total score ranges from 0 to 30, which is further arbitrarily divided into three level of knowledge.

- 0 – 15 - Poor knowledge (<50%)
- 16 - 22 - Average knowledge (50-75%)
- 23 – 30 - Good knowledge (>75%)

RESULTS:

SECTION I - DESCRIPTION OF SELECTED PERSONAL VARIABLES OF STUDY SUBJECTS

TABLE I
Frequency and Percentage distribution of critical care nurses according to their selected personal variables

Sl No	Sample characteristics	Frequency F	Percentage (%)
1	Age in Years		
	1.1 20 - 30 years	27	45
	1.2 30 - 40 years	25	41.66
	1.3 > 40 years	08	13.33
2	Gender		
	2.1 Male	08	13.33
	2.2 Female	52	86.66
3	Educational qualification		
	3.1 GNM	58	93.33
	3.2 BSc Nursing	04	6.66
	3.3 BSc Nursing	--	--
4	Area of working		
	4.1 ICU	10	16.66
	4.2 CCU	10	16.66
	4.3 MICU	08	13.33
	4.4 SICU	12	20
	4.5 RICU	08	13.33
	4.6 NSICU	12	20
5	Working experience		
	5.1 One year	06	10
	5.2 Two year	17	28.33
	5.3 Three year	25	41.66
	5.4 More	12	20
6	Previous learning experience		
	6.1 Yes	12	20
	6.2 No	48	80

The data presented in table -1 shows that majority samples 27 (45%) critical care nurses were in between the age group of 20-30yrs .Whereas only 8 (13.33%) were belongs to the age group of 40 and above. Majority samples 42 (86.66%) critical care nurses were females. Whereas only 8 (13.33%) were males. Majority samples 46 (93.33%) critical care nurses were GNM..Whereas only 4 (6.66%) were Bsc nursing. Majority samples 12 (20%) critical care nurses were working in NSICU and SICU. Whereas only 8 (13.33%) were working in RICU and MICU. Majority samples 48 (80%) critical care nurses were not had previous learning experience. Whereas only 12(20%) were had previous learning experience. Majority samples 25(41.66%) critical care nurses were had 3 year experience. Whereas only 6(10%) were had one year experience.

SECTION 2

EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING USE OF FAST HUG I IN CRITICAL CARE UNIT AMONG CRITICAL CARE NURSES.

TABLE 2
Frequency and Percentage distribution of critical care nurses according to their knowledge
n = 40

Level of Knowledge	Pre - test f(%)	Post - test f(%)
Poor Knowledge (1-15)	47(78.33%)	
Average knowledge (16-22)	13(21.66%)	32(53.33%)
Good Knowledge (22-30)		28(46.66%)

It is evident from Table 2 that, in pre test majority 47(78.33%) of critical care nurses were having poor knowledge regarding use of FAST HUG I, Data also revealed that in the post test there was increase in the knowledge level among critical care nurses i.e. 32(53.33%) of critical care nurses were had average knowledge on use of FAST HUG I.

II. Mean, median, range and standard deviation of knowledge scores

TABLE 3
Mean, Median and Standard deviation of pre test and post test knowledge scores of critical care nurses regarding the use of FAST HUG I.
n = 40

Test	Mean	Median	Range	Standard deviation
Pre test	13.53	15	11-18	±3.51
Post test	22.23	16	17-27	±2.47

Data presented in the Table 3 shows that the pre test knowledge scores of critical care nurses was ranged from 11-18, with a mean score of 13.53, median of 15 and standard deviation of ± 3.51 . In post test, knowledge scores ranged from 17-27 with a mean score of 22.23, median 16, with SD ± 2.47 .

Significance of difference between the pre test and post test knowledge scores regarding the use of FAST HUG I in critical care unit among critical care nurses.

TABLE 4
Mean, mean difference, standard deviation difference, standard error and paired 't' value of pre test and post test knowledge scores of critical care nurses.
n = 40

Group	Mean	Mean Difference	SD difference	SE	't' value
Pre test	13.53				
Post test	22.23	8.70	±0.99	0.32	16.39*

t(38) = 16.39; p < 0.05; significant; p < 0.05

The data presented in the Table 4 shows that the mean difference of pre-test and post-test score is 8.70. To find the significance of difference in the mean pre-test and post-test knowledge scores regarding use of FAST HUG I in critical care unit, of 7.2, paired t test was computed and the obtained value of paired $t_{(59)} = 16.39$; $p > 0.05$ is found as statistically significant. Hence research hypothesis is accepted inferring there is significant difference between pre-test and post-test knowledge scores before and after administering information booklet.

LIMITATIONS:

The limitations of the present study were,

1. Study is limited to staff nurses working in critical care units in J S S Hospital Mysuru.
2. The study is limited to assessment of knowledge of staff nurses working in critical care units.

RECOMMENDATIONS:

1. A larger scale study can be conducted to generalize the findings.
2. Comparative study can be conducted between the general ward staff and critical care nurses.
3. A similar study can be conducted by adopting true experimental design.

CONCLUSION:

Findings of the study revealed that the majority of critical care nurses 78.33% had poor knowledge. The results of the study also revealed significance difference between the mean pretest and mean posttest knowledge scores which was statistically tested using paired 't' test and it was found to be significant at 0.05 level of significance 't' = 16.39. There was partially significant association between the pre-test levels of knowledge scores of critical care nurses with their selected personal variables.

Thus, it was concluded that, the information booklet was effective in enhancing knowledge regarding use of FAST HUG I in critical care unit among critical care nurses. Therefore, the study reinforces the need to organize continuing education and in-service programme which sensitize the critical

care nurses to enhance the knowledge regarding use of FAST HUG I in critical care unit.

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