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A Study To Assess The Effectiveness Of A Planned Teaching Programmed On Knowledge Regarding Management Of Icu Psychosis Among Staff Nurses Working In A Selected Hospital In Kashmir

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ABSTRACT

Despite advice from professional organizations and patient safety groups, most ICU patients are not routinely examined for delirium. As a result, early detection and treatment are hampered. The purpose of this systematic review is to highlight the many implementation tactics that have been tried to improve the ability of ICU clinicians to correctly recognize and treat delirium and to assess the clinical outcomes of these strategies. What's the point of this? A study was done to examine the effectiveness of a planned training programme for Kashmiri staff nurses on ICU psychosis care. Patient delirium in critical care units is exacerbated by co-morbidity, severe illness, and iatrogenesis (ICUs). The elderly are more vulnerable to this medical consequence, which is associated with prolonged hospitalizations. Although this is the case, ICU staff and physicians are often unaware of hypoactive delirium and only recognize it in patients who are visibly distressed (hyperactive delirium). Staff nurses in intensive care units (ICUs) were surveyed to see how much they had learnt about ICU-related delirium via a structured education programme. assessment of a single group was used in the study's Pretest/Posttest methodology. Non-probability purposive sampling was used to collect 40 samples from selected hospitals. The collected data was examined using descriptive and inferential statistics.

Key words: Knowledge, structured teaching program (STP), risk of unplanned extubation, Effectiveness planned teaching, knowledge of staff nurses and mechanical ventilation protocol.

INTRODUCTION

Over half a century ago, two medical heavyweights published this sentence, which seems to be a call to action for those who must care for the ill. 'They appear to have little interest in and indeed frequently entirely neglect delirium,' wrote Engel and Romano on the approach adopted by healthcare professionals in treating delirium elsewhere in the famous paper. There are many doctors who are unable to recognize delirium because of their lack of knowledge, they say. ' Preventing and treating delirium in critical care units is a challenge for many medical teams that lacks training (ICUs). There is still a need to change the culture and concentrate on human aspects that are normally outside the ability of most medical teams, despite this amount of information PAD in Adult ICU Patients: Clinical Practice Guidelines, newly released by the Society of Critical Care Medicine (SCCM), In a detailed evaluation of existing research, pain, agitation, sedation, and delirium are all addressed. Several aspects of this study, such as a combination of sedatives, delirium monitoring and treatment, and early movement, might be included into the PAD recommendations (ABCDE). Reduce sedation, promote early ventilator release, enhance delirium assessment and treatment, and allow early mobility in the critical care unit are the goals of the ABCDE Bundle. The Confusion Assessment Method for the Intensive Care Unit (CAM-ICU) was incorporated in the protocol of the landmark RCT that demonstrated the advantages of early mobilization in critically sick patients, and there was a substantial decrease in delirium occurrence. Clinical effectiveness of ABC and E necessitates a validated tool for assessing delirium, while delirium prevention requires an integrated multidisciplinary approach with standardized care processes, including early mobilization, which is linked to a strategy to minimize sedation through "awake (nine) and spontaneous breathing coordination." Consequently, "brain failure," or delirium and coma (i.e., an intermediate state on the way to death and a lengthy stay in the ICU), may be regarded avoidable and constitute an intermediate step on the path to negative outcomes, such as death. Recommendations that incorporate integrated care involving many providers and covering numerous domains are particularly challenging for health care practitioners to execute. The ABCDE bundle and the PAD guidelines clearly state what should be the goal of clinical practice. There are several ways to assess, prevent, or treat delirium in the critically sick; this literature review summaries implementation methods and their efficacy.

LITERATURE REVIEW

Gulafshan (2021) Intensive care treatment relies heavily on mechanical ventilation (MV). Complication rates in emergency airway care may vary across ICUs and nations due to differences in technique and practise. After definitive tracheal intubation for

respiratory assistance in critically sick patients, unplanned extubation is a common occurrence and is related with an increased risk of death and morbidity. Incubated patients are reported to have a 0.3 percent to 1.4 percent rate of unplanned escapation. 10% of all reintubations are caused by unintentional extubations. Patients are more likely to be hospitalised for a longer amount of time as a consequence of an Unplanned Estuation. To assess the knowledge of clinical nurses at the Kempegowda institute of medical science and research Hospital, Kashmir, Karnataka, on the danger of unexpected escapation of patients on mechanical ventilation. Listed below are the materials and processes that were employed: To accomplish the specified objectives, a quantitative pre-experimental one-group pretest post-test research was used. A random sample of fifty nurses from KIM's hospital were selected and questioned by the investigator. The data were acquired using a self-administered structured knowledge questionnaire. Following a pre-test, audiovisual aids were used to give the scheduled lesson. To conduct inferential and descriptive statistical analysis, SPSS-IBM 20 was employed. To arrive at our conclusions, we employed a 0.05 p value. A statistically significant difference was seen between the pre- and post-test results, with 80% of the nurses reporting inadequate knowledge in the pre-test and 82% reporting enough knowledge in the post-test. After the intervention, nurses' awareness of the danger of sudden departure was considerably improved.

Kingsley Ufuoma Tobi (2017) Ventilator support is one of the most common causes for ICU admission (ICU). Despite the fact that research has proved that mechanical ventilation is damaging to the lungs, this practise continues. During the period from November 2013 to April 2014, all mechanically ventilated patients admitted to our ICU were included in the study For each ventilated patient, a non-ventilated counterpart was employed as a reference. During the six-month period, 128 patients were admitted to the ICU, with 44 (or 34.4%) requiring mechanical ventilation. Approximately 12.30 10.10 days were spent on mechanical ventilation on average. Anatomical blood gas monitoring, weaning off mechanical ventilation with help from ion tropics and arterial blood gas monitoring, and duration of mechanical ventilation were all strongly associated with each other. More than four times as many patients died as those who were not mechanically ventilated. Increased mortality risk is associated with the use of mechanical ventilation in intensive care units (ICUs). As the duration of ventilation, ABG usage, and requirement for ion tropic support were assessed, successful weaning off the ventilator was achieved. You may want to do the

following risk-benefit analysis: Considering the advantages and disadvantages of mechanical ventilation in the critical care unit is an important first step.

Sulekha Shrestha (2017) The delirium that occurs in critical care units is well-known to Nepali hospital nurses. Delirium in intensive care units is on the rise as the number of units and patients in these institutions grows. Consciousness and cognition are both disrupted in this prevalent case of acute organic brain malfunction. It is a treatable and possibly reversible illness that is often found in severely unwell individuals. The study's goal was to determine how well critical care nurses at Tribhuvan University Teaching Hospital in Kathmandu knew about intensive care unit delirium. The Teaching Hospital (TUTH) in Kathmandu, Nepal, used this methodologically descriptive cross-sectional study. Two months were spent collecting data. A self-administered questionnaire and a non-probability, purposive sampling approach were employed to gather data from 85 critical care unit nurses. Over half (65.9%) of the 85 respondents had intermediate knowledge, more than one-quarter (34.1%) had low knowledge, and none of the respondents had strong knowledge. P=0.010 and p=0.001 showed a strong connection between job experience and expertise. However, there was no correlation between the respondents' age, education level, or expertise. Intensive care unit delirium knowledge was found to be moderate to poor among the nurses studied. Work experience, in-service education, and understanding of ICU delirium were shown to have a statistically significant correlation. Nurses, critically sick patients, ICU delirium, and knowledge are some of the most important concepts in this article.

Usha Singh (2017) Before and after the administration of a planned instruction programme on the treatment of patients on ventilators in intensive care units (ICUs) of the chosen government medical college connected hospital of Kashmir, this research was conducted to examine staff nurses' knowledge and practise. One group pre-test-post-test design was employed in the ICUs of the chosen government medical college associated hospitals of Kashmir to perform a quasi-experimental research. The ICUs and the nurses who worked in them were chosen using a purposeful technique. Staff nurses were taught how to care for patients on a ventilator in a scheduled programme; a standardised knowledge questionnaire and observational checklist were established to measure their understanding and practise of the procedures. November and December of 2011 were the months in which the data was gathered. The majority of the participants were between the ages of 31 and 40, were female, and had GNM degrees as well as 6–10 years of experience in the ICU. At the 0.05 level of significance, the computed t value (23) was higher than the tabulated t

value (1.68) for pre-test knowledge, with an average difference of 11.93 points. With a mean difference of 12.1, the mean pre-test practise score was 23.22, while the mean post-test practise score was 35.35. It was statistically proven and showed that a planned instruction programme on care of patients on ventilator was beneficial in terms of knowledge and practise among the staff nurses since the calculated 't' (36.26) was bigger than the tabulated 't' (1.68).

M. Thamizhilakkiya (2019) Prevalence rates of postpartum depression among postnatal moms will be assessed and correlated with demographic characteristics considered for this research. As part of the study, 30 women from Villianur PHC who had just given birth were recruited using a simple sampling approach, and a questionnaire of 10 items (the EPDS Tool) was used to measure postnatal depression. Descriptive statistics were used to evaluate the information. According to the results of the research, seven postnatal moms were found to be normal, 12 postnatal mothers had mild depression, 10 postnatal women were moderately depressed, and one postnatal mother had severe depression (21-27) There is a correlation between postpartum depression and many demographic characteristics such as age and education as well as income and religion. Postpartum depression is more common among primi moms who are young, uneducated, and have low incomes. To avoid postpartum depression, it is recommended that pregnant women get counselling.

MATERIALS AND METHODS:

A one-group pretest-posttest design was used to assess the effect of structured education programmes on ICU delirium knowledge among 40 ICU staff nurses working in a particular hospital. The samples were chosen by a planned process of sampling. A questionnaire (reliability r=0.79) was used to collect data from a sample of ICU delirium prevention knowledge. Structured education on avoiding delirium in the Intensive Care Unit was delivered once the pre-test knowledge score had been assessed. Eight days following the commencement of the therapy, researchers conducted a posttest to measure the knowledge level of the participants in the study. The collected data was analysed using descriptive and interventional statistics.

Design

Noise in the ICU was assessed using a modified multiple-choice questionnaire and a descriptive cross-sectional survey approach. An intensive care unit (ICU) nurse was able to offer information on their awareness of noise laws, the noise sources in their ICU, as well as the adverse effects of sound on patient health, using this method.

Sample

Samples were collected from 203 registered nurses working in public, private, and academic hospitals in Kashmir. Inclusion and exclusion criteria were applied to ensure that the final group was representative of the intended audience. An intensive care unit nurse must have at least one year of ICU experience and be a registered nurse in the target hospitals in Kashmir to be eligible to participate in the study. Aside from having the required training and understanding, all participants must also be acquainted with the usage of ICU equipment. To be eligible, hospitals must also have at least one adult ICU and an ICU equipped with life-saving equipment including cardiac monitors, IV pumps, and ventilators.

Settings

Intensive care unit nurses at big metropolitan hospitals in central Kashmir were the subjects of this research. These are the main hospitals in Kashmir's health care system.

Ethical consideration

Institutional review boards at participating hospitals (IRB 53/2017) were consulted before any data was collected (IRB 53/2017). The involvement of nurses was completely voluntary and anonymous, and they were told that the information they provided would be kept strictly secret at all times. All individuals who expressed an interest in participating in the research were given a consent form and a questionnaire. There was a short description of the research's objective, a statement that there were no risks or hazards to participating, and an explanation of how participant information would be protected and how much time the participants would spend engaging in the study. In addition, the permission form stated that participation in the research was entirely optional and that there would be no financial or other consequences for a subject who declined to participate.

Data collection procedure

After receiving ethical clearance, data gathering got underway. To get as many people as possible to fill out the survey, each researcher handed out questionnaires one at a time throughout each shift. In addition to the title of the study, its goal, and its relevance, each questionnaire included a cover letter alerting the participants that their privacy would be safeguarded throughout the research process. The willingness of the participants to complete and submit the questionnaire confirmed their

agreement. At the beginning of each shift, the majority of ICU head nurses recommended that the questionnaires be distributed, so as not to interfere with patient care. A questionnaire, which took the participants 15–20 minutes to complete depending on their free time, was sent to the participants, who were instructed to return it to a box positioned in each unit's head nurse's office.

The instruments

A modified multiple-choice questionnaire was used to collect data on nurses' awareness of the noise issue in ICUs based on previous research, published literature, and WHO criteria for community noise. The redesigned questionnaire has two primary sections: Participants' age, gender, years of experience, hospital type, and whether or not they'd previously completed a course on ICU or hospital noise were all addressed in the survey's initial section. Twenty-one multiple-choice questions are grouped into five key areas.

RESULT:

Characteristics of the sample Eighty-five percent of the ICU's staff nurses are between the ages of 21 and 25. Ninety percent of the participants in the research were women, and seventy-five percent of the staff nurses identified as Hindu. More than 85% of the staff nurses had worked in the field for a period of one to five years. 60 percent of the ICU nurses had at least one year of experience.

Table 1. "Frequency and percentage of pre test and post test knowledge scores groups of ICU staff nurses regarding ICU delirium."

Score range		Pretest score		Post test score	
		f	%	f	%
Good	(16-25)	3	7.5	40	100.0
Average	(8-16)	30	75.0	--	--
Poor	(0-8)	7	17.5	--	--

Maximum possible score= 25

It is clear from the statistics in Table 2 that 75% of participants came into the study with mediocre knowledge, but 100% of them left with excellent knowledge. ICU staff nurses' awareness of delirium in the ICU has been improved by structured teaching programmes, according to this study.

Table 2: "Comparison of mean pretest and posttest knowledge score of ICU delirium among ICU staff nurse. n=40"

Variance	Mean	Standard deviation	t- value	p-value
Pretest knowledge score	11.5	3.58		
Posttest knowledge score	23.92	1.43	23.95	0.0001

Pre- and post-test scores were compared using a paried 't' test, and the 't' value was 23.95, which indicates that there is a significant difference between mean pre- and post-test knowledge scores.

Despite a pre-test showed that 75% of nurses had poor or below-average knowledge, all participants attained adequate knowledge levels in the post-test. As a result, the critical care unit's staff now has a better grasp of delirium thanks to structured education programmes. A research was undertaken at New England Medical Center using 50 ICU staff nurses from two separate institutions (university medical and community teaching) to examine the effect of modest education interventions on ICU delirium. Dementia knowledge was greatly enhanced after nine educational sessions. Treatment and control groups were both shown to benefit from an educational strategy that employed online learning interventions to assist nurses better understand and recognise delirium in older patients. Differences in scores between the groups were statistically significant. Using this kind of instructional delivery platform is helpful in terms of adaptability, overcoming distance 10 barriers, cost efficiency, and active participation.

Descriptive statistics

A total of 267 nurses from three hospital departments were contacted and asked to participate in this study, which was conducted by the researchers. One hundred and thirty-three nurses took the survey and returned it, making the overall response rate of (76 percent). Those who took part in the study were mostly female and employed by government hospitals. Participants were between the ages of 22 and 49. 1.5% of those who participated said that they have taken a formal training session on the topic of noise in intensive care units.

Nurses' Knowledge About Noise

Participants' knowledge was measured by a mean score of 10.08 (SD = 2.69) out of 21. Their knowledge ranged from two to eighteen years. Less than one-fifth (40.4 percent) of the participants correctly answered all of the questions. There was no one who could accurately answer all of the questions concerning ICU noise. In, participants' knowledge scores were given in the form of descriptive statistics. A previously stated cut-off point for knowledge level has been revealed. Knowledge scores of 80 to 100 percent are regarded high, while scores of 59 percent or below are deemed to be low level. There were 54.1 percent of nurses from different institutions who had low awareness regarding the ICU noise issue, while just 1.6 percent of nurses had a strong knowledge level.

Descriptive analysis was used to calculate the percentage of correct responses for each question. Most people correctly identified questions 15 and 5 as being to the most frequent chronic physiological changes that may be seen in patients exposed to loud noise, as well as questions 11 relating to the component of the Autonomic Nervous System (ANS) that may be triggered by loud noise. Questions 10 and 3 on maximum equivalent sound levels in Jordanian hospitals and questions 2 and 3 on the WHO's allowed range of hospital noise levels were the only ones with the lowest number of correct answers.

CONCLUSION

Multifaceted delirium treatment strategies have been found to successfully alter patient compliance with delirium screening and knowledge. The success of implementation programmes may be increased if not only health care personnel but also organisational changes are targeted for behavioural change. According to the findings of the research, the vast majority of ICU nurses (75 percent) had just mediocre understanding of ICU delirium. They've gained a lot of new information after receiving the organised instruction programme. It may assist nurses in spotting ICU delirium in patients so that they can begin treatment sooner rather than later. ICU nurses' ability to do delirium assessments in a consistent way is rapidly enhanced by a basic educational intervention that integrates theory. The diagnosis of delirium in intensive care unit (ICU) patients should be taught to all critical care nurses in the same way. An examination of delirium in the ICU should be part of every endeavour to enhance patient care in the critical care unit (ICU).

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