A Study to Assess the Knowledge Level of Staff Nurses Regarding Mechanical Ventilator in Ccu (Critical Care Unit) in Selected Hospital of Anand District, Gujarat

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***Abstract*—Mechanical ventilation is a helpful instrument that can determine healing or demise of significantly ill patients. With the availability of a variety of ventilators and growing clinical knowledge, mechanical ventilation has become more accessible today. Although it is a lifesaving intervention, mechanical ventilation causes critical complications which can be alleviated to improve survival. The reason behind conducting this research is to determine the degree of knowledge in CCU nurses related to mechanical ventilator.**

***Index Terms*—Assess, CCU, Mechanical ventilator, Knowledge, Staff nurse.**

I. OBJECTIVES

1. To assess the knowledge regarding mechanical ventilator among staff nurses who are working in critical care units in selected hospitals of Anand district.
2. To find association between level of knowledge with selected demographic variables.

II. METHODOLOGY

The conceptual framework for the present study was based on the Health Belief Model. A descriptive cross-sectional research design was adopted for the study. A structured knowledge questionnaire and OSCE-based priority tool were used to collect the data. The main study was conducted at selected hospitals of Anand District among 40 CCU nursing staff who were selected by using a non-probability convenient sampling technique. Data were analyzed and interpreted using descriptive and inferential statistics.

III. RESULTS

The findings revealed that 65% of the staff nurses had poor knowledge (Score 0–11), and 35% had average knowledge (Score 12–22) regarding mechanical ventilator. As all the values were greater than 0.05, none of the demographic characteristics showed a significant relationship with the knowledge of mechanical ventilator among nursing staff.

IV. CONCLUSION

65% of CCU nursing staff had low (poor) knowledge (Score 0–11), and 35% had average knowledge (Score 12–22) regarding mechanical ventilator. No demographic variables showed a significant correlation with the knowledge level.

REFERENCES

[1] Sahar Geravandi et al., "The effect of education on the nursing care quality of patients who are under mechanical ventilation in ICU ward," Data Brief, 2018 Feb; 16: 822–827. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/pmc5773446/

[2] Khalafi A. et al., "Continuous care and patients' basic needs during weaning from mechanical ventilation: a qualitative study," PubMed, 2016 Aug 5. Available from: https://www.ncbi.nlm.nih.gov/pubmed/27503771
[3] Ravikant Sharma, Shiv Kumar Mudgal, "Knowledge and skill regarding care of a patient on mechanical ventilator among the staff nurses working in selected hospital," International Journal of Practical Nursing, Vol. 6, No. 3, Sep–Dec 2018.
[4] Susumu Nakahashi et al., "Association of patient care with ventilator-associated conditions in critically ill patients: risk factor analysis," PLoS One, 2016. DOI: 10.1371/journal.pone.0153060.
[5] Merchan-Tahvanainen ME et al., "Patients' experience during weaning of invasive mechanical ventilation: a review of the literature," Enferm Intensiva, 2017 Apr-Jun;28(2):64-79. DOI: 10.1016/j.enfi.2016.11.003.
[6] Pradhan C. et al., "Nurses' knowledge regarding weaning criteria of patients with mechanical ventilation in a teaching hospital, Chitwan," J Pulmonol Clin Res, 2017.
[7] Tsukuda M. et al., "Development of a questionnaire for the reflective practice of nursing involving invasive mechanical ventilation," NOP2, 2018 Oct 29;6(2):330-347. DOI: 10.1002/nop2.212.
[8] Hege Selnes Haugdahl, "Mechanical ventilation and weaning: roles and competencies of intensive care nurses and patients' experiences of breathing," Dissertation, The Arctic University of Norway, 2016.
[9] Lynn Botha, "Level of nurses' competence in mechanical ventilation in intensive care units of two tertiary health care institutions in Gauteng," University of the Witwatersrand, Johannesburg, 2012.
[10] Ishraga Abdelgadir Ibrahim Mohamed, IOSR Journal of Nursing and Health Science, Vol. 7, Issue 3 Ver. VIII (May–June 2018), pp 54-59. ... [Continue remaining references in similar format]