

## Knowledge of Nurses on Care of Patients on Mechanical Ventilator with a View to Develop a Nursing Intervention Protocol

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### Abstract

Caring for a patient on Mechanical Ventilation requires team work, knowledge of care, goals and interventions based on best practices, patient needs and response to therapy. The health care providers and patients face many challenges, where new treatment modalities and technology interfere with the continuing effort to strive for quality care expected outcomes. The present study was conducted to assess the level of knowledge regarding care of patients on ventilator among intensive care unit nurses working in government general hospital in Puducherry. The researchers selected Indira Gandhi Government General Hospital and Post Graduate Institute (IGGGH & PGI), Indira Gandhi Medical College and Research Institute (IGMC & RI) and Rajiv Gandhi Government Women and Child Hospital (RGGW & CH) as their study area. The findings showed that out of 75 nursing officers the majority 44 (33%) of them had good knowledge, 14 (10.5%) of them had very good knowledge, 13 (9.75%) of them had average knowledge 4 (3%) of them had poor knowledge on care of patient on ventilator.

**Keywords:** knowledge; ICU nursing officers; ventilator; nursing intervention protocol.

### Introduction

Mechanical ventilation is a process by which gases are moved in to and out of the lungs by means of a ventilator, a machine that delivers a flow of gas to a patient's airway. The indication for mechanical ventilation includes respiratory arrest, acute lung injury, critical illness and respiratory support. A critically ill patient presents a major challenge and consequent reward to nursing. The nurse coordinates efforts of the health care team, teachers and supports the client and the family, monitors the client's response to ventilation, intervenes to maintain oxygenation and ventilation ensures that the client's 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 patients.

#### *Statement of the Problem*

A study to evaluate the knowledge of intensive care unit nurses on the care of patients on ventilator with a view to develop a nursing intervention protocol.

#### *Objectives of the Study*

- To assess the knowledge of nursing officers regarding care of patients on ventilator.
- To associate the knowledge of nursing officers regarding care of patients on ventilator with the selected demographic variable.
- To develop a nursing intervention protocol for care of patient on mechanical ventilator

#### *Research Approach*

Quantitative research approach.

#### *Research Design*

Descriptive research design.

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*Research Study Setting*

The present study was conducted among ICU nursing officers. The researchers selected Indra Gandhi Government General Hospital and Post Graduate Institute (IGGGH & PGI), Indra Gandhi Medical College and Research Institute (IGMC & RI) and Rajiv Gandhi Government Women and Child Hospital (RGGW & CH) as their study area.

*Population*

In this study, population comprises of the nursing officers those who were working in selected hospitals at Puducherry.

*Sample size*

The sample size is 75.

*Sampling technique*

Non-probability sampling technique (convenience sampling technique).

**Table 1:** Frequency Distribution & Percentage of the levels of Knowledge level of Nursing Officers

Nursing Officers	Knowledge Score			
	Very Good Knowledge	Good Knowledge	Average Knowledge	Poor Knowledge
75	14(10.5%)	44(33%)	13(9.75%)	4(3%)

- The findings showed that out of 75 nursing officers the majority 44 (33%) of them had good knowledge, 14 (10.5%) of them had very good knowledge, 13 (9.75%) of them had average knowledge 4 (3%) of them had poor knowledge on care of patient on ventilator.
- The findings showed that the level of knowledge on care of patient on ventilator is associated with place of working at  $p > 0.001$ .
- This study found that the level of knowledge on ventilator care is higher in nursing officers those who were working in RGGW & CH than others.

**Discussion**

The first objective of this study to evaluate the knowledge of nursing officers regarding care of patients on ventilator. The findings showed that out of 75 nursing officers the majority 44 (33%) of them had good knowledge, 14 (10.5%) of them had very good knowledge, 13 (9.75%) of them had average

knowledge 4 (3%) of them had poor knowledge on care of patient on ventilator.

The second objective of this study to associate the knowledge of nursing officers regarding care of patients on ventilator with the selected demographic variables. The findings showed that the level of knowledge on care of patient on ventilator is associated with place of working at  $p > 0.001$ . This study found that the level of knowledge on ventilator care is higher in nursing officers those who were working in RGGW & CH than others.

**Conclusion**

Critical care had more questions about life and survival. The nurses are the angels from the heaven. They have the miracle hand which gives rebirth to the patients and give them to their relatives. Practically they should have appropriate knowledge and skill to bring that miracle. This study clearly identified that there was a good level of knowledge among Nursing Officers.

*Recommendation*

On the basis of present study, the following recommendations are formed for future study.

1. Similar study can be conducted in other parts of the country with a large sample.
2. Similar study can be conducted in different settings.

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