Effect of Nonverbal Communication versus Traditional Methods towards Expressing Complains for Patient on Mechanical Ventilator

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Submitted for Partial Fulfillment of the Requirement Master

Degree Nursing Science(Medical Surgical Nursing)

By

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2017

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First and for most, thank "ALLAH" to Whom I relate any success in achieving any work in my life.

I would like to express my deep appreciation to Assistant Prof. Dr. Hanan Sobeih Sobeih Assistant Professor of Medical Surgical Nursing Department Faculty of Nursing - Ain Shams University, for her precious help, moral support, fruitful advice, kind attitude and her valuable remarks that gave me the confidence and encouragement to fulfill this work.

I am immensely indebted and deeply grateful to Dr. Dalia Ali Ameen, Lecturer of Medical Surgical Nursing Department Faculty of Nursing - Ain Shams University for her great encouragement, excellent guidance, powerful support, valuable constructive advices and generous help throughout this work.

I wish to convey my thanks to all the nurse teachers who shared in this study.



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List of abbreviations

| Abbreviation | Meaning |
|--------------|-------------------------------------------------|
| I.C.U. | intensive care unit |
| M.V. | mechanical ventilation |
| A.A.C | augmentative and alternative communication |
| E.T.T. | endotracheal tube |
| P.E.E. | personal protective equipment |
| N.P.O. | nothing per oral |
| R.N. | registered nurse |
| E.C.G. | electro-cardio graph |
| B.M.V. | bag mask ventilation |
| A/C | assist control |
| S.I.M.V. | synchronized intermittent mandatory ventilation |
| P.E.E.P. | positive end expiratory pressure |
| C.P.A.P. | constant positive airway pressure |
| I.P.S.Q. | interviewing patient satisfaction questionnaire |
| N.S.N.S. | Newsactle satisfaction with nursing scale |
| S.P.S.S. | statistical package for social science |
| N.S. | non significant |
| S | Significant |
| H.S. | highly significant |
| C.A.B.G. | coronary artery bypass graft |
| M.V.R. | mitral valve replacement |
| A.V.R. | aortic valve replacement |

Effect of Nonverbal Communication versus Traditional Methods towards Expressing Complains for Patient on Mechanical Ventilator

ABSTRACT

Background: conscious patient's on mechanical ventilation had communication difficulties with nurses , physicians, family members due to placement of endotracheal tube between vocal cords . Inability of these patient's to express their needs , produce medical errors , so communication board one of methods that enhances patient care givers communication.

Aim: to evaluate effect of communication board versus traditional methods in decreasing anxiety, pain and increase satisfaction.

Subjects and methods: quasi experimental study was conducted at open heart surgery unit. Ain Shams university hospital, were 80 patients divided into study and control group 40 for each group. Control group had traditional methods of communication on mechanical ventilation, study group utilized communication board. Anxiety scale, pain scale, patient satisfaction questionnaire (PSQ) were adopted and modified.

Results: based on (PSQ), 15% of study group were unsatisfied compared to 80% of control group the difference was statically highly significantly. On the other hand 85% of study group were satisfied compared to 8% of control group which was statically highly significantly.

Conclusion: communication board improve level of satisfaction and decrease anxiety and pain .

Recommendations: communication boards should be provide with more pictures that show all things patients need or feel it.

Keywords: nonverbal communication, traditional methods and patient on mechanical ventilator.

Introduction

Communication is the imparting or interchange of thoughts, opinions or information by speech, writing or signs. (Kanakalkshmi., 2004)

Verbal communication: is the ability to explain and present your ideas. Oral communication requires the background skills of presenting audience awareness, critical listening and body language.

Non-verbal communication: is the ability to explain the expression of ideas and concepts through the use of body language, gestures, facial expressions, tone of voice, also use of pictures, icons, and symbols. (Donnelly and Neville .,2008)

Communication between nurse and patient is a process that begins with the first contact, and lasts as long as the therapeutic relationship. Communication is assisting in the performance of accurate, consistent, easy nursing work and ensuring the satisfaction of the patient. Effective communication improves the quality of care provided to patients and helps vulnerable patients to cope with therapy and make better decisions about their care and treatment (Papagiannis A. 2010)

Communication is a vital element and basic component of nursing in all areas that renders it feasible to exercise all its interventions, including prevention, therapy, rehabilitation, education and health promotion. The nursing process as a scientific method of exercise and performance of nursing is achieved through dialog, in a climate of interpersonal and individual skills of verbal communication. Nursing assessment and diagnosis of the patient could be affected with many methods and complemented by interviews with team members and other health services. (Klisari A, Grossbach S,2012).

Critically ill patients experience communication problems, especially mechanically ventilated patients who experience many barriers to communicating their needs, because of placement of endotrecheal tube between vocal cords. Their inability to communicate results in unrecognized pain, anxiety, fear, distress, frustration and make patients at risk of medical error and poor outcome, because lifethreatening needs may not be met. (*Happ et al.*, 2009).

Ventilated conscious patient suffer from anxiety and frustration that build and contribute to the negative emotions and feelings of dependency, dehumanization, and futility. Patient on mechanical ventilation has pain along connecting on a machine. Pain is a symptom frequently experienced by critically ill patients. Pain can be experienced as a consequence of intubation and mechanical ventilation itself, or it can be a consequence of other routine clinical care (Puntillo . 2010& Carroll . 2011).

Non-verbal communication describe methods of communication which can be used to facilitate communication between patient, health care givers and family; like writing, gesture, head nodes, lip movement, arm signs, picture and charts. The use of the non-verbal communication in ICUs as an intervention helps to enhance communication and decrease the length of patient stay in the ICU. (Blackstone. 2007)

Communication board is an example of non-verbal communication methods and ranges from simple pencil and paper to alphabet, word, picture boards to computer keyboards, it includes basic needs (pain thirst, hunger), names of people (family, wife, doctor, friend), and pictures of body parts. (Patak, et al (a); 2009).

Significance of the Study

Critical care nurses receive little or no training in communication assessment or the use of augmentative and alternative communication (AAC) techniques with intubated patients. (Happ, et al; 2014)

According the latest statistics of two years in Ain Shams University Hospitals, the number of cases admitted to LC.Us in 2012 11762 and 2013were were in 12174(Statistical Center of Ain Shams University Hospitals, 2014). According to the observer in I.C.Us, most of cases connected to mechanical ventilator were conscious and the nurses can't communicate with these cases, although there are many complains on ventilator such as pain or difficulty of breathing. This study will be the first trial in Ain Shams University.

Aim of the Study

The aim of this study is to evaluate the effect of nonverbal communication versus traditional methods towards expressing complains for patients on mechanical ventilation through:

- 1. Teaching patients nonverbal communication prior to be ventilated.
- 2. Evaluate the nonverbal communication as a way as patient use to express his complains.
- 3. Compare between study group using nonverbal communication and control group using traditional methods in identifying their complains.

Research Hypotheses

- The level of patient's awareness about nonverbal communication will increase significantly after application of nonverbal communication.
- The level of patient's pain intensity will be significantly decreased as a study group more than control group.
- The level of patient's anxiety will be significantly decreased as a study group more than control group.
- The level of patient's satisfaction will be significantly increased as a study group more than control group.

Review of Literature

Anatomy and physiology of respiratory system

The respiratory system is composed of the upper and lower respiratory tracts. Together, the two tracts are responsible for ventilation (movement of air in and out of the airways) (refer to Fig. 2).

The upper tract, known as the upper airway, warms and filters inspired air so that the lower respiratory tract (the lungs) can accomplish gas exchange (refer to Fig. 1).

(Farquhar & Fantasia, 2009)

Gas exchange involves delivering oxygen to the tissues through the bloodstream and expelling waste gases, such as carbon dioxide, during expiration. The respiratory system works in concert with the cardiovascular system; the respiratory system is responsible for ventilation and diffusion, and the cardiovascular system is responsible for perfusion (*Farquhar & Fantasia*, 2009).