THE EFFECT OF PROVIDING CONCRETE OBJECTIVE INFORMATION DURING THE PROCEDURE OF TURNING ICU PATIENTS IN BED

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Certificate of Authorship/Originality

I certify that the work in this thesis has not been previously submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help I have received in my research work and in the preparation of this thesis itself has been acknowledged. In addition, I certify that all the information sources and literature used are indicated in the thesis.

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Writing Aids

1. Macquarie Dictionary (Online) http://www.macquariedictionary.com.au/Lyndean

2. *Publication Manual of the American Psychological Association*, 4th Edition. (1994) Washington DC.

List of Abbreviations (commonly used within the text)

ANCOVA	Analysis of covariance
ANOVA	Analysis of variance
ANZICS	Australia and New Zealand Intensive Care Society
APACHE II	Acute Physiology and Chronic Health Evaluation
EMG	Electromyogram
ETT	Endotracheal tube
FiO_2	Fraction of inspired oxygen
HR	Heart rate
ICU	Intensive care unit
MAP	Mean arterial pressure
RCT	Randomised controlled trial
RR	Respiratory rate
SaO_2	Arterial oxygen saturation of haemoglobin
STAI	State-Trait Anxiety Inventory
VAS	Visual analogue scale

Abstract

Patients in the intensive care unit (ICU) experience anxiety when exposed to factors such as, receiving mechanical ventilation, having an endotracheal tube, the inability to effectively communicate, experiencing pain and frequently undergoing stressful procedures. This thesis reports the results of a randomised controlled trial, testing whether a concrete objective information intervention provided to ICU patients when being turned in bed reduced state anxiety. The associations between sedation, pain, adrenergic drugs, turning and state anxiety, are also described. Further, the relationship between physiological parameters, turning and state anxiety are also examined.

The intervention was tested in a randomised controlled trial of 40 ICU patients. The sample comprised equal numbers of men and women. The mean age was 67 years in the control group and 65 years in the intervention group. Most patients had an admission diagnosis of cardiovascular disease (33%), respiratory (23%), gastrointestinal (23%) or neurological (10%). All patients had an artificial airway, either an endotracheal tube (80%) or tracheostomy tube (20%), and most (90%) were receiving mechanical ventilation at the time of data collection. The groups were similar at baseline with respect to study outcome, state anxiety, as well as clinical characteristics.

Patients randomised to the control group received the usual care of being turned in bed that was standardised and delivered by nurses who were guided by scripts. The intervention group received usual care with additional concrete objective information consisting of the sensations expected to be experienced by the patient when turned in bed. State anxiety was measured with the Faces Anxiety Scale immediately prior to and within three minutes of completing the turning procedure.

Prior to turning, patients reported moderate levels of state anxiety with the means similar for both the control (2.50) and intervention (2.60) (range 1-5) groups. Following turning, the state anxiety mean score for the control group was (2.50) and the intervention group (2.35). The concrete objective information had no effect on state anxiety during turning when analysed with ANOVA (p=.63).

In this study sample, two-thirds of patients who reported anxiety during the turning procedure had not received a sedative agent. Additionally, the physiological parameters of mean arterial pressure, heart rate and respiratory rate tested with Pearson's correlation, were found to have no relationship to patients' levels of state anxiety.

It is concluded that the concrete objective information intervention tested in this study, had no effect on the level of state anxiety experienced by ICU patients when they were turned in bed. It is recommended that the implementation of the Faces Anxiety Scale will assist nurses to more accurately assess anxiety and implement treatment therapies, to assist in reducing patients' experience of anxiety.