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Person-centred care during prolonged weaning from mechanical ventilation, nurses' views: an interview study

Carl-Johan Cederwall[a,b,*], Sepideh Olausson[a], Louise Rose[c,d,e], Silvana Naredi[f], Mona Ringdal[a,g]

[a] Institute of Health and Care Sciences, The Sahlgrenska Academy, University of Gothenburg, Box 457, 405 30, Gothenburg, Sweden
[b] Sahlgrenska University Hospital, Central intensive care unit, CIVA, Gröna stråket 2, 413 45, Gothenburg, Sweden
[c] Lawrence S. Bloomberg Faculty of Nursing and Interdepartmental Division of Critical Care Medicine, University of Toronto, 155 College St, Suite 276, Toronto, ON, M5T 1P8, Canada
[d] Department of Critical Care Medicine, Sunnybrook Health Sciences Centre, Toronto, Canada
[e] Provincial Centre of Weaning Excellence/Prolonged Ventilation Weaning Centre, Michael Garron Hospital, Toronto, Canada
[f] Department of Anaesthesiology and Intensive Care at Institute of Clinical Sciences, Sahlgrenska University Hospital, 41345, Gothenburg, Sweden
[g] Department of Anaesthesiology and Critical Care, Kungälvs Hospital, Sweden

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ABSTRACT

Objective: To determine: 1) if the three elements of person-centred care (initiating, working and safeguarding the partnership) were present, and 2) to identify evidence of barriers to person-centred care during prolonged weaning from mechanical ventilation.
Research methodology: Secondary analysis of semi structured interviews with 19 critical care nurses using theoretical thematic analysis.
Setting: This study was conducted in three Swedish intensive care units, one in a regional hospital and two in a university hospital.
Findings: Three themes and nine subthemes related to person-centred care were identified. The three themes included: 1) '*finding a person behind the patient' related to the 'initiating the partnership' phase*, 2) '*striving to restore patientís sense of control' related to 'working the partnership*' phase and 3) '*impact of patient involvement' related to 'safeguarding the partnership' phase of person-centred care*'. Additionally a further theme '*barriers to person-centred care*' was identified.
Conclusion: We found evidence of all three person-centred care routines. Barriers to person-centred care comprised of lack team collaboration and resources. Facilitating patients to actively participate in decision-making during the weaning process may optimise weaning outcomes and warrants further research.

Implications for Clinical Practice

- Person-centred care increases patient involvement in the weaning process.
- Person-centred care requires staff resources and a working inter-professional team collaboration.
- Person-centred care could be a mean to achieve a structured and successful weaning process.

Introduction

Weaning from mechanical ventilation can be categorised as simple, difficult, or prolonged. The prolonged weaning category includes patients who fail at least three weaning attempts or require more than seven days of weaning to achieve successful extubation (Boles et al., 2007). Prolonged weaning is experienced by up to 30% of patients weaning from mechanical ventilation

* Corresponding author at: Sahlgrenska University Hospital, Central intensive care unit, CIVA, Gröna stråket 2, 413 45 Gothenburg, Sweden.
E-mail address: carl-johan.cederwall@vgregion.se (C.-J. Cederwall).

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(Penuelas et al., 2015) and poses a great challenge to patients, family members and clinicians. Patients that require prolonged weaning experience longer hospital stays as well as increased complications, mortality and healthcare costs compared to patients experiencing simple or difficult weaning (Funk et al., 2010; Penuelas et al., 2015). Protracted periods of mechanical ventilation also have negative psychological consequences for patients including depression, agitation, delirium and delusional memories (Ringdal et al., 2006; Rose et al., 2014). Patients experience dependence on healthcare professionals due to loss of voice, loss of control and feelings of anxiety, fear and loneliness (Baumgarten and Poulsen, 2015). Hence it is imperative that healthcare teams optimise the weaning process while recognising the impact of prolonged weaning on the patient and their family members.

Person-centred care

Person-centred care has gained momentum within healthcare settings outside of intensive care units (ICUs) as it recognises a patient's right to be involved in her/his own care (Ekman et al., 2011). The nature of intensive care traditionally emphasises medically orientated care coupled with a highly technological environment; these have been considered challenges to overcome when providing person-centred care in ICU (Jakimowicz and Perry, 2015). A person-centred approach puts the patient at the forefront as s/he assumes an active role in decisions about care processes. Person-centred care is widely employed in chronic illness and long-term disease as it places a strong emphasis on the person behind the disease, using the term person as opposed to patient (Brummel-Smith, 2016). In this analysis, we refer to the theoretical framework developed by Ekman et al. (2011): (1) Initiating the partnership: patient narratives; (2) Working the partnership: shared decision making; and (3) Safeguarding the partnership: documenting the narrative. This model has been developed and tested for conditions in Scandinavian health settings and thus suitable for employing in Swedish ICUs.

Delivery of person-centred care in ICU may be challenging due to sedation, severity of illness, and loss of voice. Nevertheless person-centred care has the potential to improve reported outcomes. Several studies indicate a reduced hospital length of stay and total care costs with a person-centred care approach in non-critically ill hospitalised patients (Ekman et al., 2012; Hansson et al., 2016). To our knowledge, no studies have specifically examined the use of person-centred care in the ICU context and how it might impact upon the weaning process. Therefore, we performed a secondary analysis of interviews previously conducted to examine ICU nurses' involvement in the weaning process for patients experiencing prolonged weaning.

Methods

Objectives

The objectives of the study were to: 1) determine if the three elements of person-centred care (initiating, working and safeguarding the partnership) were present, and 2) identify evidence of barriers to person-centred care during prolonged weaning.

Design

This study is a secondary analysis of qualitative interview data collected previously to explore ICU nurses strategies in managing patients experiencing prolonged weaning (Cederwall et al., 2014). These data entailed rich descriptions of how critical care nurses recognised the patient as a unique person and their efforts to make individualised care plans instead of employing standardised care plans during prolonged weaning. Therefore we chose the theoretical framework of person-centred care to re-explore the data for the purpose of this study.

Setting and participants

This study was conducted in three Swedish ICUs comprising of an 11 bed medical- surgical ICU in a regional hospital (214 beds) and two general ICUs with 12 and 18 beds respectively in a university hospital (1950 beds). These ICUs employed a 1:2 nurse-to-patient ratio for patients receiving invasive mechanical ventilation. Person-centred care was not formally adopted in these units. We employed purposeful sampling to select participants. The only inclusion criterion was a minimum of two years ICU nursing experience; there were no exclusion criteria.

Ethical approval

The Regional ethical review board in Gothenburg, Sweden approved the study (Approval number 121- 12). Participants provided verbal and written consent; they were informed their participation was voluntary and that they had the right to withdrawal from the study without any explanation. We adhered to the ethical principles guiding research outlined by the Helsinki declaration (World Medical Association, 2013). As this study was a secondary analysis of existing data, no risks were associated with this study.

Data collection

The first author (CC) contacted the nurse managers of the participating ICUs to assist with participant recruitment at ward meetings. These nurse managers then provided the researchers with a contact list of nurses who expressed willingness to participate in the study. The research team then sent potential participants information about the study and an invitation letter. In total 20 ICU nurses were invited and 19 nurses who met the inclusion criteria agreed to participate.

Semi-structured interviews were conducted in a quiet room located close to the ICU by the first author. After the first three interviews, a revision of the interview guide was made and these interviews were also included in the analysis. The interviews were 10 to 50 minutes in length, and were digitally recorded and transcribed verbatim. The interviews started with an opening question: "*Can you please explain how you think when you care for a patient on prolonged mechanical ventilation when it is time to wean your patient?*" Additional questions asked how they optimised weaning, how they achieved weaning success and common problem situations experienced during weaning. No questions directly addressing person-centred care were contained within the interview guide.

Data analysis

This secondary data analysis was guided by thematic theoretical methods described by Braun and Clarke (2006). For this study we primarily used a deductive approach comprising of five steps: familiarisation with data, coding, searching for themes, reviewing themes, and finally defining and naming themes. To familiarise ourselves with the data, interviews were read repeatedly to grasp meaning as a whole. The first author coded the entire dataset looking for evidence of person-centred and non-person-centred care. Coded data extracts were compared to each other and critically reflected upon. This resulted in identification of overarching themes and related subthemes. To further define and refine these themes, a detailed description was provided that identified the theme meaning ensuring avoidance of overlapping of themes. The

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