2012

Position Statement on Nurses' Role in Weaning from Ventilation



European federation of Critical Care Nursing associations – EfCCNa

Contents

Developed by

The EfCCNa Practice Committee 2012

Colette Ram (The Netherlands)

Bronagh Blackwood (Northern Ireland)

Lerma Hernandez (Belgium)

Catharina Alanko (Finland)

Andres Schäfer (Germany)

Gudrun Jonsdottir (Iceland)

Julie Benbenishty (Israel)

Elin Steffenak (Norway)

Issue

Timely weaning from mechanical ventilation is in the patient's best interests because of the problems associated with invasive mechanical ventilation. In recent years, clinical and research attention has focused on weaning protocols that provide a structured guide for the weaning process.

In general, a weaning protocol consists of

a) clear criteria for determining when a patent is ready to wean
b) a guide for gradually reducing ventilator support or conducting a spontaneous breathing trial
c) criteria for determining when a patient is ready for endotracheal extubation.

The ICU nurse is always present at the bedside and should be able to identify if a patient is ready for weaning from mechanical ventilation.

Purpose

Currently, there is no consensus on which method of weaning is the most efficacious in optimising event-free recovery from ventilation [1, 2].

Protocols differ with regard the weaning method (e.g. spontaneous breathing trials [SBT], pressure support [PS] or synchronised intermittent mechanical ventilation [SIMV]) and method of delivery (physician-led, nurse led, or automated).

It is not surprising that international trials reveal discordant results in weaning protocol effectiveness.

Furthermore, the use of weaning protocols to guide the weaning process is variable across Europe[3] resulting in inconsistencies in standards of practice.

Thus, the purpose of this position statement on the nurse's role in weaning from mechanical ventilation is to outline the current evidence for protocolized weaning and provide European intensive care nursing associations with guidance for best weaning practice.

Evidence

Recent evidence on protocolized weaning was published in a Cochrane review[4, 5]. It included 11 studies (involving 1971 critically ill adult patients) that compared the use of protocols to wean patients from the ventilator against usual practice.

Results showed that in comparison with usual care, the average total time spent on the ventilator was reduced by 25%, the duration of weaning was reduced by 78% and length of stay in the intensive care unit reduced by 10%.

There were no differences in adverse events indicating that weaning protocols are just as safe as usual weaning practice conducted without a protocol.

Despite the promising effects shown in the summary of results in the review, there was significant variance in results among trials.

The review authors explained that variance in results is possibly caused by different contextual factors (populations of patients, countries and usual practice within units) or different protocol factors.

Indeed, international studies have suggested that the health care setting[6] and the collaborative culture among staff within intensive care units[1] can impact on successful weaning processes.

This information and position statement is to be shared with all national associations who are members of EfCCNa, and other relevant groups involved in the care of mechanically ventilated patients in the ICU environment.

Statement

As a result of reviewing this evidence, the EfCCNa recommends that ICU nurses should actively participate in:

- Early identification of a patient's readiness to wean.

  The ICU nurse should facilitate early weaning by referring to a protocol that lists readiness to wean criteria. Broadly, these criteria include:

    - improvement in the patient's underlying problem
    - adequate respiratory rate and gas exchange
    - stable cardiovascular function
    - an acceptable state of consciousness.

- Developing and using locally agreed weaning protocols based on most recent and updated best evidence.

Expected activity

The EfCCNa recognises the complexity of weaning from mechanical ventilation. Thus we encourage:

- All member associations to actively pursue education and development of competencies required for managing the weaning process.
- All member associations to identify strategies for encouraging a collaborative culture among staff in managing mechanical ventilation and weaning.
- Policy makers and ward managers to give consideration to the ICU culture, health care system and organisational structures as they may be influencing factors in using weaning protocols.

References

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