

Extended visitation policy may lower risk for delirium in the intensive care unit

10.1136/eb-2018-102884

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Commentary on: Rosa RG, Tonietto TF, da Silva DB, *et al.* Effectiveness and safety of an extended ICU visitation model for delirium prevention: a before and after study. *Crit Care Med* 2017;45:1660–1667.

Implications for practice and research

- ▶ Extended intensive care unit (ICU) visitation models (12 hours per day) can result in reduced appearance and shorter length of delirium as well as shorter ICU stay.
- ▶ Further studies are needed to demonstrate the effect of extended visitation policies on delirium and their meaning on family members as well as ICU staff.

Context

Delirium is a common phenomenon in critically ill patients and affects patients' short-term and long-term outcome parameters adversely. It also increases morbidity and mortality. Disturbed consciousness and cognition, as well as inattentiveness and alterations in perception, are characteristic symptoms that can last for hours to days. Research indicates a prevalence up to 80% in ICUs.¹ Moreover, delirium is related to a prolonged duration of mechanical ventilation (MV), hospitalisation and a higher rate of self-extubation. The literature describes three types of this phenomenon: the mixed, the hyperactive and the hypoactive type. The latter is the most common among critically ill patients in ICUs and is associated with a greater need for MV. Early diagnosis and management seems to be important in minimising the incidence of this syndrome.²

Methods

The aim of this prospective before and after study was to evaluate the benefit of an extended ICU visitation model in critically ill patients in relation to the occurrence of delirium.³ Rosa and colleagues recruited 141 patients for a restricted visitation model (RVM; 4.5 hours per day) and 145 patients for an extended visitation model (EVM; 12 hours per day). The confusion assessment method for the ICU was used to measure delirium. In addition, length of delirium and ICU-acquired infections (eg, pneumonia, urinary tract infection, bloodstream infection) were observed and a maximum of two family members could visit the patient at a time.

Findings

Patients in the EVM showed significantly less incidence of delirium (adjusted relative risk (aRR)), 0.5; 95% CI 0.26 to 0.95; P=0.03), shorter duration of delirium (aRR, 0.61; 95% CI 0.39 to 0.97; P=0.03) and shorter length of ICU stay (aRR, 0.89; 95% CI 0.79 to 0.99; P=0.04). However,

there was no significant difference for ICU-acquired infections as well as ICU mortality among the study groups.

Commentary

The authors of this study hypothesised that an EVM would result in less incidence of delirium when compared with RVM. An extended visitation policy was associated with reduced occurrence of delirium. The researchers mentioned some possible limitations, for example, a Hawthorne effect, where individuals modify their behaviour in response to being observed. This could lead to overestimation of the effectiveness of the intervention. Furthermore, important risk factors for delirium (eg, demand on sedation) were not monitored. However, this well-conducted investigation presents novel data on the importance of 'family engagement and empowerment' and refers to the ABCDEF bundle, an evidence-based and multicomponent approach to the management of delirium. This bundle comprises the following components: Assess, prevent and manage pain; Both spontaneous awakening trial and spontaneous breathing trial; Choice of analgesia and sedation; Delirium: assess, prevent and manage; Early mobility and exercise; and Family engagement and empowerment. To guide effective interventions for providing holistic and family-centred care, clinicians should also use patients' and family members' experiences as well as their own. An extended visitation policy could be beneficial.⁴ Moreover, data from a large survey (n=1521; 47 countries) with a focus on assessing the knowledge and use of the ABCDEF bundle demonstrate that 67% of family members were actively involved on ICUs but only 33% used dedicated staff to support them. Furthermore, 35% reported that their units had open visiting for family visits.⁵ Overall, family engagement and empowerment, as a non-pharmacological strategy, can be beneficial in delirium prevention and the family members should be counted as a part of the treatment team.⁶

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Provenance and peer review Commissioned; internally peer reviewed.

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References

1. Kersten A, Reith S. Delir and Delirmanagement bei kritisch kranken Patienten: Nichtpharmakologische Maßnahmen bestimmen Prävention und Therapie. *ProCare*. *Juni* 2016;21:16–22.
2. Arumugam S, El-Menay A, Al-Hassani A, *et al.* Delirium in the intensive care unit. *J Emerg Trauma Shock* 2017;10:37–46.
3. Rosa RG, Tonietto TF, da Silva DB, *et al.* Effectiveness and Safety of an Extended ICU Visitation Model for Delirium Prevention: A Before and After Study. *Crit Care Med* 2017;45:1660–7.
4. Azoulay E, Vincent JL, Angus DC, *et al.* Recovery after critical illness: putting the puzzle together—a consensus of 29. *Crit Care* 2017;21:296.
5. Morandi A, Piva S, Ely EW, *et al.* Worldwide Survey of the "Assessing Pain, Both Spontaneous Awakening and Breathing Trials, Choice of Drugs, Delirium Monitoring/Management, Early Exercise/Mobility, and Family Empowerment" (ABCDEF) Bundle. *Crit Care Med* 2017;45:e1111–e1122.
6. Eghbali-Babadi M, Shokrollahi N, Mehrabi T. Effect of family-patient communication on the incidence of delirium in hospitalized patients in cardiovascular surgery ICU. *Iran J Nurs Midwifery Res* 2017;22:327–31.