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Future without delirium: not quite there yet but we can start by prescribing touch

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The recently published article by Kotfis et al. "The future of intensive care: delirium should no longer be an issue" [1], brought us great interest and although we agree with the authors' perspective this is still far from being reality.

Despite delirium increase report as an adverse event, it is often faced on daily practice as a patient's "weakness" or an inevitability due to acute illness that we fail to avoid. This perspective precludes multidisciplinary team effort from targeting the modifiable components of delirium mentioned in the paper.

The COVID-19 pandemic and patients' isolation in the ICUs have changed us; we struggle to implement concepts that might bring us closer to a delirium free future. Nevertheless, the constraints are still deeply buried in the critical care culture.

It is in the intensive care units (ICU) where individuals are most deprived from humanity. Like in Monthy Python's 1983 film "The meaning of life", monitors that "beep", catheters and tubes often lead critical care professionals to forget the humanity in the patient. In our ICUs, clinicians spend little time with patients, occupied with data coming from monitors, ventilators, and other tests; many times, these replace physical examination and an opportunity to reach the human is lost. Nurses underpaid and overwhelmed with paperwork and drug preparation, often struggle reaching out to the patient, wishing for a quiet shift. Here lies some of the constraints to the "G" letter in the proposed A-I bundle.

In addition, we are quick to ask for monitoring devices and technology, in detriment of changes that may increase patient comfort, encourage mobilization, and contribute to decreasing delirium. And so, as new ICUs in our country are being equipped with the latest flagship medical technology, sunlight, noise control and adequate family spaces (amongst others), are disregarded or viewed as a non-affordable luxury.

In addition, during the process of waking a patient, we often still hear: "do not untie them, they'll remove the tube", "they're agitated, please give them drugs", "they cannot sleep, please give them drugs" and so on. Often as patients awaken and hands are untied, we realize they just want to scratch their noses, move their heads away from bright light, avoid painful stimuli or simply search for the sunlight reminding them they are alive.

We believe that just like we handover vasopressor dose or ventilator support, we should also focus on our patients' stories and needs. When patients' reactions are often of fear we may act as enlightening and appeasing elements. Show them that they're not alone and that we know who they are. Nevertheless, we feel that the non-pharmacologic approach to delirium is relegated to a secondary role.

We remember times during the COVID-19 pandemic, when wide-eyed patients were certain that we wanted to kill them or that someone was in the room waiting to cause harm. After weeks of deep sedation their first words were often "Hide, they are out there to kill us. Can't you see?". As we stayed by their side reminding them where they were, many in the team considered

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our efforts a waste of time. Sedatives were frequently a quicker solution when human resources were scarce.

We often concluded that increasing respiratory support or drugs did not help much [2], but things like a children's game of word search could change everything. Simple gestures, playing heavy metal music, buying chocolate, a homemade dessert on the tip of the tongue, a hand massage or a few comforting words helped ease their minds. Each patient is different, but time by their side is needed to get to know more about who they are.

During the pandemic, staffing was scarce, hospitals restricted family visits and accordingly delirium incidence shot up [3]. We set up a medical student volunteering scheme in collaboration between the medical school and the critical care department. Students spent time by the bedside comforting and reorienting patients. "Do not be afraid" was sometimes enough to decrease their heart and breathing rates, allowing for a decrease in sedation.

As this work was implemented, "Wake-up Nanda" became a symbol of last years' struggle in persuading peers to embrace this proximity approach. Of all the work we have done in the ICU, this was the most rewarding.

Although this message has often been repeated in the last years [2], it is far from universally implemented. No trial has yet proven that human touch, or sunlight in the ICU improves prognosis [4], but is this not common sense? If improving the patient's environment and promoting humanization of care is not yet seen as a top priority, we hope that at least prolonged family visits become a paradigm. And at the end maybe we should start with a very simple change: prescribing human touch.

Authors' response

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We would like to thank Fernandes and colleagues for raising several important issues relating to our Viewpoint published in Critical Care [1]. We fully agree that ICU design and organization deprive patients of humanity. The COVID-19 pandemic has caused a major global decrease in the quality of care, but despite its overwhelming burden, it could help us re-design the way we think about ICU.

Humanizing care is a general attitude of professionals toward patients and relatives to provide holistic care [5]. We fully agree that bringing sunlight, fresh air and sound control are common sense interventions that cannot be regarded as luxury, but normality. To humanize ICUs, we all need empathic clinician-patient encounter. Basile et al. have shown that negative behaviors of ICU clinicians leave patients and families dehumanized; this may delay patient recovery, bring mental illness, and cause lack of trust [6]. The idea of ICU liberation was designed to implement evidence-based pain, agitation, and delirium guidelines by using the ABCDEF bundle to humanize ICU care [7]. We now extend it towards gaining insight and redesigning ICUs to restore a sense of human dignity.

We agree that starting by "*prescribing touch*" is an easy and accessible intervention that carries no financial cost. As the authors rightly mention quality of care is a measure of humanity in the ICU brought by simple gestures and finding a person in the patient in front of us. Although no trial has shown the efficacy of human touch in the adult ICU, it has been proven to be a standard of care in neonatal ICUs, with advanced differentiation between 'procedural touch' and 'comforting touch stimulation' [8]. Maybe it is time to introduce these terms into adult ICU.

Technology advances are integral components of the ICU but must be balanced with caring for the patient as an autonomous person. We must teach students and remind ourselves that fine monitoring and high technology equipment cannot replace a focused physical examination and a thinking, caring professional. It is also easy to find an excuse for losing humanity, such as underpayment or paper overload, but changing working conditions should involve the hospital ethical boards and management teams. We agree that the changes take

time and, in many cases, both healthcare teams and hospital management may be reluctant to modify the ICU culture, but we believe that the changes are inevitable and will be requested by highly aware families.

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References

1. Kotfis K, van Diem-Zaal I, Roberson SW, Sietnicki M, van den Boogaard M, Shehabi Y, et al. The future of intensive care: delirium should no longer be an issue. Crit Care. 2022;26:200.
2. Chou S-T, Pogach M, Rock LK. Less pharmacotherapy is more in delirium. Intens Care Med. 2022;48:743–5.
3. Kotfis K, Roberson SW, Wilson JE, Dabrowski W, Pun BT, Ely EW. COVID-19: ICU delirium management during SARS-CoV-2 pandemic. Crit Care Lond Engl. 2020;24:176.
4. Burry LD, Cheng W, Williamson DR, Adhikari NK, Egerod I, Kanji S, et al. Pharmacological and non-pharmacological interventions to prevent delirium in critically ill patients: a systematic review and network meta-analysis. Intens Care Med. 2021;1–18.
5. Wilson ME, Beesley S, Grow A, Rubin E, Hopkins RO, Hajizadeh N, Brown SM. Humanizing the intensive care unit. Crit Care. 2019;23(1):32. https://doi.org/10.1186/s13054-019-2327-7.
6. Basile MJ, Rubin E, Wilson ME, Polo J, Jacome SN, Brown SM, Heras La Calle G, Montori VM, Hajizadeh N. Humanizing the ICU patient: a qualitative exploration of behaviors experienced by patients, caregivers, and ICU staff. Crit Care Explor. 2021;3(6):e0463. https://doi.org/10.1097/CCE.0000000000000463.
7. Ely EW. The ABCDEF bundle: science and philosophy of how ICU liberation serves patients and families. Crit Care Med. 2017;45(2):321–30. https://doi.org/10.1097/CCM.0000000000002175.
8. Smith JR. Comforting touch in the very preterm hospitalized infant: an integrative review. Adv Neonatal Care. 2012;12(6):349–65. https://doi.org/10.1097/ANC.0b013e31826093ee.

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