ICU
MANAGEMENT & PRACTICE

2023
VOLUME 23
ISSUE 1

Biomarkers

Santiago Cruz
Intensivist Physician
Unidad de Cuidados Intensivos del Hospital Militar del Ecuador
Comité de Oncología Critica FEPIMCTI/ Quito-Ecuador

Freddy Morales Alava
Intensivist Physician
Unidad de Cuidados Intensivos del Hospital SOLCA Manabí
Comité de Oncología Critica FEPIMCTI/ Portoviejo-Ecuador

Viviana Reyes Zambrano
Intensivist Physician
Unidad de Cuidados Intensivos del Hospital San Cayetano
Comité de Oncología Critica FEPIMCTI/ Buenos Aires-Argentina

Daniel Molano Franco
Victor Hugo Nieto Estrada
Intensivist Physician
del Centro de Tratamiento e investigación en Cáncer
Comité de Oncología Critica FEPIMCTI/ Bogotá-Colombia

Marina Elizabeth Singh
Intensivist Physician
Unidad de Cuidados Intensivos del Hospital El Carmen
Comité de Oncología Critica FEPIMCTI/ Salta-Argentina

Margarita Tavella
Intensivist Physician
Unidad de Cuidados Intensivos del Instituto Alexander Fleming
Comité de Oncología Critica FEPIMCTI/ Buenos Aires-Argentina

Alex Páez
Pedro Gutiérrez Gómez
Carlos López
Intensivist Physician
Unidad de Cuidados Intensivos del Hospital Militar del Ecuador
Quito-Ecuador

Gabriela Caicedo
MSc en Dirección
de Enfermería en el Hospital del Día Cruz Cuidado Vital
Latacunga-Ecuador

Alexandra Elizabeth Herrera
Medica Anestesiologa-Oncologa
Hospital del Día Cruz Cuidado Vital
Latacunga-Ecuadorr

Gabriela Cruz Montesinos
Odontologist
Hospital del Día Cruz Cuidado Vital
Latacunga-Ecuador

Agamenón Quintero
Medico Intensivista
Unidad de Cuidados Intensivos de la Clínica Imatoncomedica Auna
Comité de Oncología Critica FEPIMCTI/ Montería-Colombia

From the Other Side: Humanising Critical Medicine

Support in intensive care has undergone unprecedented development, with proven technology and protocols, but at the same time, it constitutes an environment that often makes empathy and humanisation difficult. This article reviews current concepts of care for critically ill patients from the point of view of health providers who were also patients in some circumstances.

Introduction

Being a patient in an intensive care unit (ICU) can represent one of the most painful experiences a human being can endure. Several reports mention that post-ICU survivors remember this period as the most unpleasant of their lives. On the other hand, there are reports that intensivists are not trained to mitigate patient pain or family grief, so this support requires a different skill set. This is how Curtis et al. affirm that this set of skills does not receive the appropriate attention by the intensivists (López et al. 2018).

Support in intensive care has undergone unprecedented development, with proven technology and protocols, but at the same time, it constitutes an environment that often makes empathy and humanisation difficult. Effective empathy implies being vulnerable to the grief and tragedy experienced by patients and their families without losing objectivity and rationality in effective work with all patients. It is important to address the current status of humanisation. Many successful interventions in the patient's condition are applied without considering the patient's comfort, generating an incorrect perception in the patient or their family of the care received. This article reviews current concepts of care for critically ill patients from the point of view of health providers who were also patients in some circumstances.

Subjection

The systematic use of restraint should be avoided. This measure generates a greater risk of delirium and can cause nerve and muscle injuries, ulcerations and scars, even with psychological sequelae. Reduce the use of restraint, and avoid violating the welfare of patients. Patients who remained in the ICU with restraint report that the worst memories of their stay were caused by the physical and psychological suffering generated (Iglesias et al. 2012).

Body grooming

The cleaning of patients represents one of the most common care, but it involves friction of the skin, which could cause skin lesions and consequently more pain. The fragility of the skin of critically ill patients should be considered, and alternatives should be available, for example, wet towels with chlorhexidine, which have been used to reduce the inconveniences of friction and drying (Díaz and Turégano 2019). It is advisable to discuss with the patient their wishes and preferences, and personal hygiene should be carried out at a time that does not interrupt night-time sleep or interferes with other nursing activities. It is not clear whether chlorhexidine body wash decreases the risk of nosocomial infections, length of stay in the ICU, or mortality (Lewis et al. 2019); therefore, its use cannot be generally recommended.

Noise, Light and Infrastructure

These are factors that can alter comfort, rest, and sleep, having a negative impact on physical, psychological and behavioural aspects. Sound level monitoring strategies should be implemented, such as adjusting the volume of alarms differentially day or night, using earplugs during rest hours, and

trying to maintain environmental comfort, avoiding loud voice tones (Ruidiaz and Fernández 2020).

The World Health Organization suggests maintaining up to 45 dB during the day and 35 dB at night. It should be considered that keeping units closed generates unpleasant periods of anguish and anxiety in such a way that following the European Regulations for interior lighting, it is recommended to maintain lighting with light levels between 100-1,000 lux during the day and 20 lux at night. Infrastructure designs with windows with access to natural light and individual cubicles are suggested (Heras 2017).

Environmental temperature

In the daily routine of the units, the physical environment is often not considered even though it is a determining factor in the recovery of patients. A large number of patients report that they feel cold, regardless of the environmental temperature, probably in relation to metabolic, haemodynamic disorders, and medication, among others, so adequate shelter should be sought (Ferrer et al. 2021). It is essential for the ICU to offer safety and comfort to the patient from the environment. It has been recommended that the humidity be between 50% to 60% and the temperature between 22ºC and 24ºC (Gomes 2003). Maintaining these levels helps to avoid the negative effects of hypothermia. It is essential that the patient can have their space and privacy.

Dream

The rest period and especially the night sleep of patients are usually altered during their stay in the ICU. It can be altered by the sequence of scheduled care, such as internal transfers, x-rays, bathing, or position changes. These measures must be appropriate to the patient's needs and, if possible, agree on the most suitable time to perform them. Sleep disruption could lead to disturbances in cognition, respiratory, immune, metabolic function, anxiety, and pain and be a risk factor for delirium. Simple interventions to promote ICU patient sleep could be reducing noise at night, developing protocols for exposure to day and night light favouring relaxation techniques such as music therapy, and reviewing the use of corticosteroids and beta-blockers that reduce the efficacy of sleep. Ventilatory strategies that promote sleep should also be considered as pressure support (Bosma et al. 2007).

> **"in the daily routine of the units, the physical environment is often not considered even though it is a determining factor in the recovery of patients"**

Chest x-ray

Chest radiography is a daily element in the units for the comprehensive evaluation of the patient and the evolutionary follow-up of the patient's clinical situation (Chico et al. 2011). However, it entails numerous dangers to which the patient is subjected as mobilisation in clinical states of cardiovascular or respiratory liability, exposure to ionising radiation and even risk from a cost-benefit perspective. For this reason, it is recommended that pulmonary imaging control in patients under mechanical ventilatory support and/or cardiopulmonary diseases be individualised with a periodicity according to their clinical condition and evolutionary status (Graat et al. 2005). Anstey et al. (2014), in their proposal for high-value care in the ICU, propose to personalise the studies, avoiding unnecessary routines and repetitions of imaging and laboratory studies. Ultrasonography may be a more frequent follow-up alternative.

Secretion of aspirations

Abundant secretions represent one of the biggest problems when assisting a critically ill patient, for which reason they suffer continuous trauma that causes discomfort, pain, and stimulation of cough reflexes with invasive ventilatory decoupling. We recommend the incorporation of mechanical respiratory physiotherapy techniques, such as patient mobilisation, posture changes, breathing exercises, cough stimulation and even measures that increase expiratory volume such as continuous positive airway pressure (CPAP) among others (Arias et al. 2022).

Thirst

Another condition that constitutes a stressful factor for the ICU patient may be secondary to common disorders such as hypernatraemia, hyperglycaemia, or the patient's inability to drink fluids, and may be present in up to 23% of patients. This condition is common in patients with negative fluid balance; therefore, attention should be paid to maintaining the moisture of the mouth and lips, providing a lip moisturiser, and assessing the contribution of ice water (Lana et al. 2018).

Pain

This sensation should be objectified through scales since it is common for the intensity of pain to be underestimated. Strategies that suggest its level should be evaluated for patients who can communicate using a visual or numeric analogue scale. In the case of patients without communication skills, the Behavioural Pain Scale can be considered. In addition, the eCASH (early comfort using analgesia, minimal sedatives) protocol described by Dr Vincent can be an alternative to optimise our humanised care, prioritising effective pain relief through multimodal analgesia, minimising the use of opioids and benzodiazepines (Vincent et al. 2016).

There are vascular lesions related to the administration of fluids and intravenous medication, so the FDA (Food and Drug Administration) has described at least 250 types of mechanical and infectious complications (Mermel et al. 2001) that cause pain in patients. Therefore, multiple punctures for taking laboratory tests should be avoided. Thus, the American Thoracic Society has suggested the placement of an intra-arterial catheter if more than three arterial gas samples are necessary.

Similarly, routine vascular device and dressing changes should be avoided if there is no evidence of contamination (Rickard et al. 2021).

The use of ultrasound prevents bloody

procedures from becoming recurrent and prevents the appearance of complications such as bruising, reduces channelling times and increases the success rate and safety (Agencia de Evaluación de Tecnologías Sanitarias de Andalucía 2014).

Position changes constitute common episodes of pain and stress with the associated immediate physiological consequences of vasoconstriction, glycaemic imbalance, and increased oxygen consumption. A simple way described to identify this degree of stress could be the perfusion index of the oximeter, which could suggest the need to deepen the analgesia of the patient who is sedated (Hasanin et al. 2017), although it is not a validated method.

Delirium

It has been described as altered consciousness with fluctuations in attention. The patient describes it as incongruous, unreal thoughts with hallucinations. In addition to producing a longer stay in the ICU, it generates post-traumatic stress, so risk factors must be quickly identified in addition to promoting early mobilisation and exercise, stimulating night sleep, restarting basic psychiatric medication, and avoiding the use of benzodiazepines (Alvarez et al. 2022). Distraction is important, so the patient's tastes, contact with the family, and walks outside the unit must be taken into account since they comfort and reassure the patient.

Anguish

Being a hospitalised ICU patient can generate emotional reactions such as anxiety, anguish, depression, or the well-known post-intensive care syndrome caused by noise, external light that inhibit sleep, or difficulty in patient communication due to the use of mechanical ventilation. In addition, the stay in the critical unit is a negative experience, with the suffering of the individual due to an environment without privacy (Beltran et al. 2009), with an architectural structure that favours the loss of privacy, and a doctor-patient relationship that is not different, provoking a painful, and complex situation to resist. We must find ways to distract the patient by installing musical threads, audio devices, and televisions or resources that allow the patient to connect with the outside without putting their health at risk.

> **"we must aim to integrate each ICU into the project of humanisation through multidisciplinary management"**

Weakness

It favours the loss of autonomy of the patient and generates the feeling of entrapment, so early mobilisation should be sought, avoiding the prolonged use of muscle blockers; the guidelines suggest limiting their use to up to 72 hours (Jarrin et al. 2022). In addition, care must be taken to administer early and adequate nutritional therapy in order to avoid sarcopenia and weakness, which commonly appear early in critically ill patients.

Family Grief

We often exclude ourselves from family pain without considering that a principle of care is to maintain patience and the will to provide emotional support to the family. The patient is in a critical situation, and their family requires bio-psychosocial monitoring. We must aim to integrate each ICU into the project of humanisation of intensive care units through multidisciplinary management and to place the patient and their family as the centre of all care with strategic lines such as open-door ICUs, with the participation and presence of family members involved in their care (Baeza et al. 2020).

Conclusion

Taking care of the invisible is important, since many patients feel that during their stay in the unit, they lose their dignity due to the loss of empathy from health-care personnel, who do not recognise the importance of physical and psychological comfort. Efforts should be made to take care of the patient's privacy, safeguarding it and stimulating permanent family accompaniment to avoid the uncertainty that the patient may feel. It has been clearly established that the most stressful factors for the ICU patient are the lack of privacy, moaning, and disorientation. For this reason, humanisation strategies must be established, which promote communication between the staff and the patient and family members. Therefore it can be reinforced and improved through the use of electronic whiteboards and video calls. Assertive strategies have been described through active listening and empathy, such as a fluid dialogue. Furthermore, an attentive look generates a trusting relationship (Evangelista et al. 2016).

Conflict of Interest

None. ■

References

Álvarez R, González M, Murillo V et al. (2022) Manejo del delirio en el paciente crítico. Crónicas Científicas. 20(20):30-37.

Anstey M, Weinberger S, Roberts D (2014) Teaching and practicing cost-awareness in the intensive care unit: a TARGET to aim for. J Crit Care. 29(1):107-111.

Arias S, Jam R, Nuvials X et al. (2022) Actualización de las recomendaciones del proyecto Neumonía Zero. Enferm Intensiva. 33:17-30.

Baeza I, Quispe H, Linda C (2020) Proyecto "Humanizando los Cuidados Intensivos", nuevo paradigma de orientación de los Cuidados Intensivos. Revista de Bioética y Derecho. 48:111-126.

Beltrán O (2009) La experiencia de estar hospitalizado en una unidad de cuidado intensivo. Rev. Aquichan. 9(1):1-9.

Bosma K, Ferreyra G, Ambrogio C et al. (2007) Patient-ventilator interaction and sleep in mechanically ventilated patients: pressure support versus proportional assist ventilation. Crit Care Med. 35(4):1048-54.

Chico M, Mohedano A, García C et al. (2011) Predicción de la utilidad clínica de la radiografía de tórax rutinaria en una unidad de cuidados intensivos de traumatología.' Medicina Intensiva. 5(35): 280-285.

Dalla L, Stumpf P, Moszkowicz, Chaves C et al. (2018). Los factores estresantes en pacientes adultos internados en una unidad de cuidados intensivos: una revisión integradora. Enfermería Global [on line], 17(52):580-611.

Díaz E, Turégano C (2019) Higiene y antisepsia cutánea diaria en el paciente crítico. Med Intensiva. 43(S1):13-17.

Evangelista VC, da Silva T, Cerântola F, Mara E (2016) Multidisciplinary team of intensive therapy: humanization and fragmentation of the work process. Revista Brasileira de Enfermagem. Rev Bras Enferm. 69(6):1099-1107.

Ferrer R, Sánchez J, Chico M et al. (2021) Manejo con control de temperatura en los cuidados posparada cardiaca: documento de expertos. Med Intensiva. 45(3): 164-174.

For full references, please email editorial@icu-management.org or visit https://iii.hm/1jny

ICU
MANAGEMENT & PRACTICE

INTENSIVE CARE | EMERGENCY MEDICINE | ANAESTHESIOLOGY icu-management.org @ICU_Management