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EDITORIAL

Creating an environment of empowerment in the intensive care units: From containment to mobilisation☆

Creando un ambiente de empoderamiento en las unidades de cuidados intensivos: de la contención a la movilización

During recent years we have experienced several movements in favour of keeping critically ill patients awake, and thus facilitating their cooperation and early mobilisation as a strategy to minimise post intensive care unit syndrome (ICU).[1] Following this line of thinking, many publications, research projects and conference themes today focus on the debate on policies in line with patient-centred care, early mobilisation, the humanisation of the ICU and the prevention and management of delirium. Although these conceptual movements are proposed independently, a rapid glance at each one is sufficient to see they all have a common focus: the growing concern regarding what consequences our patients' stay in the ICU has.

Since the beginnings of ICUs in the middle of the last century until now, survival rates have increased spectacularly (possibly thanks to technological advance and the robust development of a knowledge base). It is now time that we asked what life is like for our patients after their admittance to our ICUs, how they interpret that experiences and what the medium and long term consequences are of that experience. With regards to the latter, a strategy for minimising post ICU sequelae is to promote the cooperation from patients so that they participate in their care and recovery process. This is a ground-breaking movement and has become universal, with voices being heard in different languages, requesting a change in paradigm. Both the eCASH model proposed by Vincent et al.[2] and the ABCDEF[3] bundle proposed by Barnes-Daly et al. talk about the cooperative and calm patient who is capable of interacting with their environment, of moving and taking decisions, and thus becoming involved in their care. If we put this view into the context of the future of health models globally, we can see that there is a clear tendency towards healthcare practice focusing on the person. Although many healthcare professionals have already been working in this way for many years, either individually or in small groups, it is now that this clear commitment to empowerment of patient and family is being formally supported by institutionalised care.

Promotion of patient empowerment has been strongly developed in areas such as chronicity, is recognised by the WHO as a strategy for maintaining the efficiency and sustainability of healthcare systems and is included as a priority line of research in the Horizon 2020 programme of the European Commission.[4,5]

Although there are still only a few authors who have dealt with empowerment in the critically ill patient environment, an in-depth look at this concept indicates that waking up our patients to aid their interaction and participation is the first step towards their empowerment.[6] This conceptual leap between a ''sleepy'' patient (passive and immobile) and an ''awake'' patient (mobilised or moving actively at an early stage) fits into the transition we are currently experiencing in today's societies: a change from paternalism to self-determination. Obviously this transition would be complex, particularly in our units where it is sometimes difficult to understand that the patient is ''capable'' due to the baseline illness or the effects of the treatment administered.

The Director-General of Citizen's Advice Coordination and for Humanisation of Healthcare of the Community of Madrid recently published directives which are applicable to the healthcare area (an innovative approach since up until

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now this type of directives only focused on the social health sector). In these directives *Physical restraint* is defined as ''any action or procedure which restricts a person's free body movement to a position of choice and normal access to any part of their body, with any method applied thereto, or adjacent to it, from which the person cannot easily free themselves'' and *chemical restraint* as ''the deliberate and intentional administration of a drug to control a baseline non psychiatric, non medical problem, for which a better treatment exists and which consequently limits or restricts the everyday physical movements or activities of the patient, and their mental performance''.[7] In other words, physical and chemical restraint share a key element: the restriction of movements.

We found very similar concepts when we searched among MeSH terms. Thus *Restraint, Physical* is defined as the use of a device aimed at controlling the movement of one part or the whole body. *Immobilisation* is defined as the restriction of movement of one part or the whole physical body *(restraint, physical)* or chemically with analgesia or the use of tranquilisers or non depolarising neuromuscular agents.[8] Again, the idea of a lack of movement or immobilisation appears as the central element of definitions, which contrast to the before-mentioned concepts of empowerment and movement.

For some time in Spain, there have been lukewarm movements which question the use of mechanical contention (MC) on critically ill patients, and are in favour of chemical contention (CC). Physical contentions would therefore be reduced in favour of the use of drugs to restrain or hold body movement or impulse. Although MC and CC may be apparently different in intensity and application they actually share the same base which is to ''contain''. We should not accept that CC is the alternative to MC since it is also a manner of contention. By establishing the dichotomy of MC vs CC we run the risk of eliminating MC at the expense of increasing CC and consequently perpetuating immobilisation in contrast to current trends which promote early mobilisation. Put another way, the MC vs CC dichotomy makes us vulnerable to over-sedation.

If we convert these reflections into clinical practice and observe our environment we may appreciate that on many occasions the use of the available drug arsenal is for promoting convenience (analgesics, sedatives, antipsychotic drugs, hypnotic, etc.) with CC as its intention. Although it is true that establishing limits to intentionality in drug use is not a simple matter, in clinical practice the ICU professionals are faced with similar circumstances where the limit of intentionality determines good practice, as in the case of a rational use of antibiotic therapy.

When we acknowledge the complexity of this issue and the challenge mobilisation poses in clinical practice, the following doubts arise: how can we avoid the use of MC without incurring CC? What is the role of the nurse in this patient mobilisation/interaction/participation process? Since there are no simple answers to these questions it may be that a personalised, dynamic assessment of each patient needs and the use of a multidisciplinary team to jointly establish outcome criteria would be the solution. If nurses are therefore supported by valid tools to systematically deal with assessment they could adapt the doses of analgesics and sedatives and make full use of their privileged bedside position (nurse-guided analgesic sedation protocols).[9]

To avoid contention (mechanical or chemical) and promote mobilisation/participation for the recovery of the critically ill patient the following daily objectives for each patient would run along the lines of[10]:

- On the one hand, the patients must be pain free. In all patients (with or without mechanical ventilation) the aim has to be to obtain scores under 4 points on the in Scale of Behaviour Indicators of Pain (ESCID) or the Numerical Rating Scale (NRS) or Verbal Rating Scale (VRS) and the Visual Analogue Scale (VAS). At this point it would be a good idea to include concepts such as preventative analgesia for procedures described as nociceptives (which may be safely administered as shown by Robleda et al.[11]). A patient who is kept pain-free is the starting point for working with awake and participative patients where neither the use of MC or CC would be needed.
- On the other hand, patients should not be subjected to CC, i.e. they should not receive over-sedation. The medical team has to determine, depending on the clinical circumstances and prognosis of the patient, what the aim of sedation should be (conscious sedation or superficial sedation vs deep sedation). Working with these sedation concepts forces nurses to religiously stick to the sedation scales. If we take as benchmark the Richmond Agitation-Sedation Scale (RASS), we would say that patients with conscious sedation must have values of between (0) and (−2), and patients with deep sedation values of (−4) to (−5). Monitoring of the latter patients would also be completed with objective systems such as that of the Bispectral Index® (BIS®) searching for the objective of reaching BIS values of between 40 and 60 without the presence of Suppression Ratios (SR) which could be interpreted as a sign of over-sedation. We would thus understand that any patient with a superficial sedation objective and whose RASS values were under (−2) would be an over-sedated or chemically contained patient. Similarly, any patient with a deep sedation objective with BIS values under 40 and/or SR would be an over-sedated patient or with CC. Moreover, the use of neuromuscular blockers for patient behaviour control (associated or not with analgesics and sedation) would be considered as chemically contained.
- Finally, MC must not be applied to patients except in severe cases with imminent risk to the patient's integrity or to third parties. Re-evaluation of the need for its use will be periodic and carefully assessed by a multidisciplinary team (weighing up the real advantages and drawbacks of both usage and non usage of MC). The use of MC would always be regulated by the Law on Patient Autonomy, with temporary limitation being necessary in its application and using the least restrictive method to achieve the proposed objective.[7,12]

If we examine the patients in our units we may find that many patients are under the effects of MC, CC or both, contrary to the theoretical proposals of eCASH or ABCDEF bundle and making it practically impossible for the patient to actively participate. The ''non contained'' patient is the

starting point to begin working on more specific questions such as advanced stages of early mobilisation (the use of the cycloergometer, sitting in bed or a chair, etc.) which have been given as examples in recent years as effective interventions to prevent short and long term sequelae of an ICU stay. The literature even mentions experimental models of patient-guided sedation (in analogy with patient-guided analgesia) where the patients themselves adjust the rhythm of the sedatives and/or self-administer sedative bolus in accordance with their needs. Although this proposal is still very much in the early stages of research, it is starting to be used as a safe and viable practice for selected patient groups.[13]

Whatever the intervention, all share the common focus of an awake, cooperative and involved patient taking decisions in their recovery process, which we could therefore call the critical, empowered patient. It appears that the future concept of a patient will be very different to the one we have experienced in the 20th century in the ICU: we want patients to be awake, and for drugs to only be used to control symptoms. The patients will then be able to participate, indicating what is the most comfortable ventilation method for them, using the cycloergometer or being guided by their own sedation needs (among other decisions).

We are opening our eyes to a change in the paradigm of critically ill patient care, where all technological developments of the last few years have enabled us to have a patient playing the leading role in his or her recovery. We believe in an empowered patient whose family and professionals are facilitators and ''listen to his or her voice''. They are able to provide the patient with the most appropriate resources for joint and consensual usage. If this change of paradigm successfully arouses and mobilises our patients, the challenge in our ICUs will have been met.

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