



## EDITORIAL

# Management of ICU nursing teams during the COVID-19 pandemic<sup>☆</sup>



## Gestión de los equipos de enfermería de UCI durante la pandemia COVID-19

The healthcare crisis caused by the pandemic has cruelly emphasised the relevance of critical care nurses. Every day the media has reported the demand from different hospitals for the appointment of new professionals. The Spanish Society of Intensive and Coronary Unit Nursing (SEEIUC) also called for the movement of professionals in less affected autonomous communities to offer support to those which were more saturated,<sup>1</sup> all the while knowing that there were few options because the healthcare system cuts over the last few years has reduced the critical nursing teams, and the training of nursing experts in critical care requires months of post graduate training. All of this resulted from the non recognition of a separate speciality, from the repealing of Royal Decree 992/1987<sup>2</sup> which was replaced by Royal Decree 450/2005<sup>3</sup> that included special care nursing within the macro speciality of medical-surgical nursing, still pending development by the national commission.

According to the Intensive Care Unit Standards and Recommendations,<sup>4</sup> a document with no mandatory authority, drawn up in 2010 by the Ministry of Health and Social Policy, “*in addition to being trained as a nurse, the intensive medicine nurse has been trained to provide intensive care and has the competence to apply nursing attention to the critically ill patient.*” Due to the lack of legal requirements to define how this competence in care for the critically ill patient is acquired, the reality in the ICU is diverse and plural. In 2018 SEEIUC conducted a survey to explore experiences in different autonomous communities and the results were highly diverse. Some of the communities make training courses obligatory, imparted by professionals from the hospital itself on the most prevalent pathologies in the ICU, whilst others offer online training for

the Zero projects. Some train the new professionals using simulation, for training in specific ICU techniques. Others require the nurses to have completed a master’s degree. More than one have obligatory internships prior to incorporation into the unit (with a range from 0 day to 3 months), most of which are not paid and in some centres the aspiring ICU nurse even has to pay for a liability insurance policy.

A multitude of journalists have recently contacted SEEIUC to find out what ICU nurses do, sad but true. Another frequent question was what the nurse: patient ratios were and how many ICU nurses could there be in Spain. The second was easy to answer: given the lack of legal requirements for an ICU nurse, it was impossible to know that number, because nurses could be recruited from different care areas, depending on demand. Regarding ratios, according to the previously mentioned document,<sup>4</sup> published in 2010, but for which we have been unable to find any update, for a level III care centre the ratio would 1 patient to 1 nurse; for a level II centre 1.6 patients per nurse and for a level I centre 3 patients to one nurse. However, in 2018 SEEIUC promoted a study in ICUs in Spain<sup>5</sup> where, among other issues, nurse:patient ratios were requested. Only one unit (.6%) had a ratio of 1:1, 46.8% had a 1:2 ratio, 22.2% had a 1:3 ratio, 2.5% had ratios between 1:4 and 1:6, and 27.9% had varying ratios depending on the shift.

As a consequence of the pandemic, one of the recommendations made by Italian nurses,<sup>6</sup> has been to redefine the nurse:patient ratio of 1:1 and when faced with high risk procedures which require heightened concentration the ratio should even be 2:1. Different Spanish ICU nurse managers consulted agreed that the normal ratios have not worsened during the healthcare crisis, and according to Begoña Linares, supervisor of the polyvalent ICU of the Hospital Universitario Central de Asturias, in some ICUs they have even improved. In the cardiology ICU of the hospital 12 de Octubre, Elena de la Vera stated that the ratios for assistant nursing technicians were higher (7:21). Extra nurses were also available. According to Ana Saiz, in the hospital

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in Getafe the ratio had even dropped during the week-end and at night. There were 10 nurses for 20 patients.

Gemma Martínez, nurse manager of the Hospital Clínic de Barcelona stated that to maintain ratios and due to the added complication of some professionals in isolation, in some units it was necessary to withhold additional days off (holidays, days of leave...), increase to full-time reduced contract hours of 21 and 28 h, recruit nurses who had experience in critical care from other services, re-employ some expert early retirement nurses and move some professionals around between shifts. Elena added that wintertime contingency personnel had been contracted so as to avoid having to modify shifts and staff leave, although many nurses and assistant nursing technicians in the unit offered to forego their leave right from the start of the crisis. Elisabet Gallart, from the Hospital Vall Hebron de Barcelona, added that it was not always possible to respect days of leave in her unit, although the regular shifts of 12 h on alternate days had been maintained.

Nurses in China<sup>7</sup> changed their shifts to adapt to the crisis. They tried three options: a divided shift of 4 h in the morning and 4 h in the evening, with 8 h rest between both; a 6 h shift, and 6 h shift but with an overlapping of 1 h with the next shift. The latter was chosen by 74% of the nurses consulted.

Gemma also commented that the work of nurses had also been reorganised to reduce the costs of the Personal Protection Equipment (PPE) and avoid risk of contagion. Many procedures have been reviewed to determine the level of exposure and depending on the risk the PPE had been adapted accordingly. According to Begoña, activities were grouped to the maximum and the PPE control was carried out by the supervisor. Ana commented that the supervisor left the PPE ready in boxes for the next shift (one per worker of each shift). *“Everything a nurse can do without assistance, they will, regardless of to whom competence lies. This has taught us to work without hierarchical divisions and with the concept of teamwork that has surpassed any of our previous realities. Reason has overridden everything else and our objective is a common one: to care for the critically ill patient whilst keeping PPE use as low as possible. This is to the advantage of the individual and to the entire team”*, says Elena. In those ICUs that have physiotherapists on their staff, such as the Hospital in Getafe, it was suggested they help the nurse, to turn the patients around (on their fronts and on their backs). Thanks to the MOviPre<sup>8</sup> study, in the process of being published, we determined that there was just one physiotherapist per unit in 75% of ICUs with less than 8 beds, in 59.3% of those with between 8 and 14 beds, in 43.8% of those with between 15 and 24 beds and in 50% of those with more than 24 beds. In other words, the physiotherapist is another greatly forgotten figure in critical care.

All the nurse managers agreed that theatre and anaesthetist nurses were recruited to the ICU when non emergency surgical activity was cancelled in the hospital. In the Vall Hebron hospital, Elisabet stated that they had been able to recruit nurses from the paediatric and neonatal ICUs. Elena added that during the first few days, the regular ICU staff were the ones in charge of the “COVID patient”, whilst the nurses with less experience worked more actively from the “clean zone”. Ana commented that staff from the

ICUs were withheld leave so as to be present and to tutor the “new nurses”.

Furthermore, to manage the lack of experience of these nurses in critical patient care, Elena commented that they were trained by professionals from the unit itself, whilst these professionals also went about their daily work, leading to a heavy care burden for them. To alleviate this pressure on the regular ICU nurses, a training programme was rapidly created called “COVID-19 critical care training”, with face-to-face workshops based on simulation and online training with access to different files containing written descriptions and videos. Ana commented that a printed and bound version of the most used medication guideline was made available so that they could consult it and resolve any doubts they had regarding solutions, concentration, preservation and administration routes.

Everyone repeatedly stated that the efforts made by the ICU nurses were exceptional. In most cases they were faced with all types of front line work whilst their colleagues (and the difficulty this entailed for them) were busy making sure they were “up to date”.

SEEIUC wishes to extend our thanks to these nurse managers who do not usually appear in the press because usually it is the registrar who is interviewed. However, without the nurse managers the reorganisation of teams with such different backgrounds, with the added complexity of a shortage of PPE and the emotional overload for the professionals of caring for the patients and exposing themselves to a high risk of contagion, would frankly be very difficult, an enormous challenge. We will conquer the coronavirus, and immediately afterwards we will continue to fight for recognition of the nursing profession and specifically for the critical care nursing specialty.

## References

1. Llamamiento en situación de emergencia por COVID-19 desde la Sociedad Española de Medicina Intensiva, Crítica y Unidades Coronarias (SEMICYUC) y la Sociedad Española de Enfermería Intensiva y Unidades Coronarias (SEEIUC) a los profesionales de cuidados intensivos. Available from: <http://seeiuc.org/wp-content/uploads/2020/03/Comunicado-conjunto-SEMICYUC-SEEIUC.pdf> [updated 28 Mar 2020; accessed 4 Apr 2020].
2. Real Decreto 450/2005, de 22 de abril, sobre especialidades de Enfermería. BOE 6-5-2005, núm. 108.
3. Real Decreto 992/1987, de 3 de julio, por el que se regula la obtención del título de enfermero especialista. BOE 1-8-1987, núm. 183.
4. Ministerio de Sanidad y Política Social. Unidad de Cuidados Intensivos. Estándares y Recomendaciones. Informes, estudios e investigación; 2010. Available from: <http://seeiuc.org/wp-content/uploads/2020/03/Comunicado-conjunto-SEMICYUC-SEEIUC.pdf> [accessed 4 Apr 2020].
5. Arias-Rivera S, López-López C, Frade-Mera MJ, Via-Clavero G, Rodríguez-Mondéjar JJ, Sánchez-Sánchez MM, et al. Equipo ASCyD. Valoración de la analgesia, sedación, contenciones y delirio en los pacientes ingresados en unidades de cuidados intensivos españolas. Proyecto ASCyD. *Enferm Intensiva*. 2020;31:3–18.
6. EFCCNa Newsletter. Issue March 2020. Available from: <https://www.efccna.org/news/efccna-newsletters> [accessed 6 April].

7. Huang L, Lin G, Tang L, Yu L, Zhou Z. Special attention to nurses' protection during the COVID-19 epidemic. *Crit Care.* 2020;24:120.
8. Estudio MoviPre: línea investigación en movilización precoz. Available from: <https://seeiuc.org/estudio-movipre/> [accessed 7 Apr].

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