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SCIENTIFIC LETTER

Intensive care medicine and pre-hospital care: Is the integration the key to success? Integra Project☆

Medicina Intensiva y Medicina Extrahospitalaria: ¿la integración supone la clave del éxito? Proyecto Integra

To the Editor,

The change of paradigm toward an Intensive Care Medicine (ICM) open to early care and follow-up of the critically ill patient requires integrating different levels of healthcare. Also, it benefits from the participation of intensivists trough different ways of multi-professional and multidisciplinary collaboration.[1–3] This model should not be exclusive of the hospital setting only. Complexity and technicity in the out-of-hospital setting is on the rise in pre-hospital care and secondary transfers as well as in the early activation processes from this setting. On the other hand, the introduction of special teams for inter-hospital transfers of critically ill patients has become more widely accepted and they have been perfectly sized to meet the needs and complexity of these patients.[4–10]

The possible role of the intensivist in this setting has not been explored in our country yet. This study was designed to know the big picture on the actual situation of critically ill patients in the out-of-hospital setting and the intensivists' opinions and interest.

The Scientific Committee of the Spanish Society of Intensive and Critical Care Medicine and Coronary Units (SEMICYUC) gave its consent and e-mailed 3 surveys to its members. Surveys were sent to assistant or resident intensivists. In the case of resident tutors, they received another form with more specific questions on the training of their residents. Surveys were opened from March 1 through June 1, 2018. Questions were distributed in different blocks: characteristics of the sample and questions on the working space, training, and opinion. Participation was voluntary and the anonymity of participation was guaranteed. Data were handled and treated with confidentiality.

One hundred and thirty four surveys were obtained from medical specialist (40% of all respondents had already worked in pre-hospital care (PHC); 48% had a permanent job, 25% were interim professionals, and 21% temporal employees), 67 from residents (61% over the last 2 years of their residency), and 12 from tutors.

Data are shown in Table 1. Professionally, pre-hospital care is seen as a professional option for intensivists and it is something that interests them. Most assistant intensivists would like to work in both units if that was possible (64%) being professional motivation the main reason (36%). Working flexibility and the integration of this professional area within ICM services is seen as something positive by 75% of all specialists. On the other hand, there are working issues when it comes to recognizing the specialty of ICM in the PHC setting in some regions, which may condition access to these jobs. Also, respondents say that the time spent working in PHC is not recognized by most ICM job placement programs.

Physicians and residents alike agree that group clinical sessions with PHC services are rare (65% of respondents say they have never ever participated in these sessions over the last 5 years), still they are regarded as useful by 90% of specialists. The computerization of PHC services is also varied.

Regarding training, most residents say this area of knowledge is not part of their curriculum; 82% of them have never been trained in triage or catastrophes. Fifty percent of the tutors think that the new training plan may be insufficient to meet the minimum training needs in this field while 87% of the specialists and 67% of the tutors believe that it is necessary to provide more training in this area.

Regarding critical secondary transfers (Table 2) between intensive care units, most of these transfers are performed by the usual PHC services (61%). These transfers are only specialized regarding ECMO transfers (13%). Forty-two percent say they have organizational issues and lack of secondary transfer protocols including inter-hospital agreements, and minimum safety measures, and informed consent. Referring units are the ones that often have a transfer protocol available (30%). Most respondents think it would necessary to have specialized transfer teams avail-

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Table 1 Data obtained from the surveys.

Work				
Do you see PHC as a professional option?	F: 63% yes	R: 87% yes		
If possible, would you accept a job in both units?	F: 64% yes	R: 93% yes		
Out on professional grounds only?	F: 36% yes			
How is ICM recognized in your AC PHC job placement programs (compared to FCM)?	Lower 32%	Same 19%	Higher 8%	I don't know 40%
Is time worked in PHC recognized by intensivist units?	No 47%	Yes 17%		I don't know 35%
Integrative elements among different healthcare levels				
Do you do group clinical sessions in your unit?	None in 5 years 65%	Occasionally in 5 years 19%	<3/year 12%	>3/year 4%
Do the PHC units have access to electronic health records in your AC/province?	Yes 30%	No 47%		
Training				
Is it part of the residents training?				No: 75% R
Have you been trained in triage and catastrophes during your residency?				Not yet: 82% R
Do you think training should improve in this area?				Yes: 87% F and 67% T
Do you care for air transfers?				Yes: 55% R
Do you think ICM is an added value to air medicalized rescues?				Yes: 80% F

AC, autonomous community; F, answer from an assistant intensivist; FCM, family and community medicine; ICM, intensive care medicine; PHC, pre-hospital care; R: answer from a resident intensivist; T, answer from a tutor.

able as part of a national structure to guarantee the flow of these critically ill patients among the different Spanish autonomous communities.

Fifty-eight percent of respondents say they do not have ECMO-type extracorporeal support techniques available; 46% of respondents say they the referring center and are worried about the impossibility of transferring patients with ECMO. When an ECMO transfer is performed, it is carried out by the referring centers in only 16% of the cases, and by the reference center in 13% of the cases. Sixty-six percent of respondents think that ECMO and other extracorporeal support devices are being introduced without any type of territorial organization, thus promoting health inequalities. Sixty-one percent think that this type of transfers is the sole responsibility of the ICM unit, yet most (72%) agree that they have not been trained in these transfers.

This study has many limitations in its design, low participation, and probably selection biases. Even so, it shows the big picture with large areas with room for improvement. It can be said that there is professional interest on this issue among intensivists, and even more among residents, but not with the differences that physicians expect to see. ICM is seen as an added value in this setting yet training limitations and barriers among the different levels of healthcare can be a significant limiting factor. On the other hand, inter-hospital transfers, and especially ECMO transfers, seem to worry many health professionals who believe we still have availability issues to certain treatments and referral therapies among the different centers and organizational issues like lack of qualified personnel and, probably, lack of safety during the entire process.

This study discussed an innovative issue that has become very popular following the growing technical proficiency and complexity of the healthcare process in the management of critically ill patients focused on managing the internal process that runs in our country. That is why results cannot be extrapolated. More studies are needed to help us define the actual role of ICM in these stages of the healthcare process.

Table 2 Data on secondary transfers obtained from the surveys conducted among specialists.

Secondary transfer								
Are critical inter-hospital specialized transfers available among units in your AC?	No	61%	Seldom	20%	T-ECMO only	13%	Yes	5%
Do you think this type of transfer is necessary?	Yes	74%	Maybe	21%	No	4%		
Regarding secondary transfers, do you have a protocol that includes inter-hospital agreements, safety minimum requirements, informed consent?	No	42%	Yes (referring ICU)	30%	Yes (receiving ICU)	17%	I don't know	11%
ECMO transfer and referrals								
Does your unit have ECMO available?	No	58%			Yes	34%		
Specify the type of ICU with ECMO-capabilities you are referring to:								
Patient referring center, without an established T-ECMO						46%		
Patient referring center, T-ECMO is performed anarchically and sporadically by this or that unit						7%		
Patient referring center, T-ECMO is performed in an orderly fashion by our unit						9%		
ECMO reference center, we import and perform T-ECMO						13%		
ECMO reference center, T-ECMO is under discussion						9%		
Do you think T-ECMO is the sole responsibility of the ICM unit?						Yes	61%	
Do you think you can perform T-ECMO?						No	72%	

AC, autonomous community; ECMO, extracorporeal membrane oxygenation; ICM, intensive care medicine; ICU, intensive care unit; T-ECMO, transfer with extracorporeal membrane oxygenation.

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Listening to professionals, patients and relatives: Study about the visiting system in an Intensive Care Unit☆

Escuchando a profesionales, pacientes y familiares: estudio sobre el régimen de visitas en una Unidad de Cuidados Intensivos

Dear Editor:

Recommendations to establish adequate visiting hours have already been published in the guidelines of different scientific societies.[1] SEMICYUC[2] believes that relaxing visiting hours may be an indicator of the quality of care provided to critically ill patients (2017). Also, it is considered a priority in the implementation of humanization plans.[3]

The goal of this study was to know the opinion of healthcare providers, patients, and families on the actual visiting system of the ICU of the Galdakao-Usánsolo Hospital while the study was being conducted. Also, to assess the possibility of achieving consensus in the implementation of an open-door policy. This was a descriptive, correlational study conducted in an intensive care unit with 15 polyvalent wards. During 2017, 1081 patients were admitted, 607 of whom remained hospitalized for over 48 h.

Data mining was conducted through an anonymous survey specifically designed for this purpose and for every participant group including socio-demographic variables and working characteristics, matters of opinion, and open questions.

Variables were expressed as frequency and percentage. The bivariate analysis was conducted using the chi-squared test and Fisher's exact test. *P* values < .05 were considered statistically significant.

This study included 58 healthcare providers (the entire ICU personnel), 120 close relatives (78.3% were spouses or first-degree relatives), and 123 patients whose basic characteristics are shown in Fig. 1. Sixty-five-point-five percent of the healthcare providers, 53.7% of the patients, and 28.3% of the relatives were not satisfied with the actual visiting system. Seventy-seven-point-six percent of the healthcare providers, 56.9% of the patients, and 43% of the relatives said the system was actually poor. This means that healthcare providers and patients are less satisfied with the actual system and that, basically, it is the healthcare providers who demand changes.

The fact that most relatives are satisfied would be explained by the fact that family expectations are low when a loved one has been admitted to an ICU. First because of the patient's severity. Second, because general wisdom suggests that visiting hours should be limited in an ICU. These low expectations raise their level of satisfaction as other studies have described.[4,5]

Five possible time schedules were proposed (limit the actual schedule that goes from13:00 to 14:00 h and from 20:00 to 21:00 h; keep it; add 2 more hours in the morning and 2 in the afternoon; extend it from 13:00 to 21:00 h or free visiting hours). The most popular proposals from the 3 groups involve extending the actual visiting system without significant differences among the 3 groups (Fig. 2). The most voted time schedule extension of all is the most restrictive one (add 2 more hours in the morning and 2 in the afternoon). When asked for the extension from

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