LETTER

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Decision-making process during limitation life-sustaining support meetings in French intensive care units

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Dear Editor,

Decision to withhold or withdraw life-sustaining supports is a worldwide practice in intensive care units (ICUs) [1]. In France, these decisions are made by medical and non-medical teams during limitation life-sustaining support (LLSS) meetings according to the French legislation [2]. Previous studies have reported that over half of deaths in French ICUs occurred after a decision to withhold or withdraw treatment taken during these meetings [3]. Moreover, to date most studies [4, 5] report a lack of clarity on the modalities of the process. Our work aimed to highlight the main arguments influencing decisions during LLSS meetings and to analyze the reality of the interprofessional approach to these decisions.

This is a multicenter, observational study involving all participants of randomly screened LLSS meetings, consecutively in University Hospitals (UH) of Besançon, Dijon and Cayenne General Hospital, from August 2, 2021 to February 2, 2022. Non opposition of participants and patients (or their next of kin when appropriate) to audio recordings was checked prior to inclusion. Only one LLSS meeting per patient was eligible for inclusion. Data were collected through a non-participatory

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observational method by audio recording and real-time note-taking.

We conducted a mixt qualitative and quantitative analysis. Audio recorded meetings were transcribed, and analyzed according to a thematic "Framework Method". Recruitment was closed when theoretical saturation was reached. Measurement of speaking time was calculated after each meeting from the audio recordings. The quantitative approach aimed to present collected data in a statistical model. Finally, potential links between the qualitative and quantitative approaches were investigated.

Overall, 15 LLSS meetings (7 withholding life support, 6 withdrawal life support, and, 2 postponed decisions) involving 122 participants (33 physicians, 31 junior doctors, 28 paramedics, 2 psychologists, and 28 students) were included. Patients' characteristics are provided in the online Supplement (supplementary material 1). Only one patient was able to speak for himself, and 10/15 patients (66.7%) had relatives in their entourage to express their wishes. No patient had expressed advance directives.

Five main themes emerged from the audio recordings analysis: medical references, specific patients' characteristics, involvement of relatives, the physicians' subjectivity and temporality of events (Fig. 1A).

On average, 10 ± 2 participants including 4 ± 1 physicians were present at each meeting. Meetings lasted between 10 and 42 min (20 ± 10) and about one third of the speaking time was devoted to the presentation of the patient. Of the effective exchange time (14 ± 10) , speaking time was mainly allocated to intensivists $(70\pm 15\%)$ (Fig. 1B).





As this study was conducted during the SARS-CoV-2 pandemic crisis, we cannot ignore the bias associated with the increased work load and distress experienced by caregivers during this period.

In conclusion, our study suggests that decision-making process during LLSS meetings is not based exclusively on the patient's medical parameters, but also, on the involvement of relatives, temporality of events and on physicians' subjectivity. Concurrently, even if legal standards were met, the emergence of a genuine interdisciplinary process was missing during LLSS discussions. Enhancing the quality of deliberation in these meetings could be a major axis of improvement to optimize the process.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1007/s00134-022-06839-2.

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Acknowledgements

We acknowledge Aurelie Marceau, MD, Aline Chassagne, Florence Mathieu-Nicot, Alain Togneri, MD, Emmanuel Samain, Ph.D. for their substantial contributions to the different steps of the implementation of this study; and anonymous reviewers who provided suggestions that improved the interpretation and presentation of the study. The REUREA Study Group: Régis Aubry, Guillaume Besch, Laurent Carteron, Mathilde Giffard, Hatem Kallel, Séverine Matheus, Gael Piton, Jean Marc Pujo, Jean-Pierre Quenot, Terry Tarcy, Hadrien Winiszewski.

Author contributions

RA, MG, SM and HK commented and corrected the first versions of the manuscript. MG was the co-investigator who enabled the objectivity of the data analysis. SM contributed to the creation of table 1. HK proofread and corrected the whole manuscript, he optimized tables 1 to 4. GB corrected and improved the manuscript's design. All authors from REUREA Study group critically revised the manuscript and have read and approved the final version.

Funding

This study received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Declarations

Ethics statement

The study and its protocols were approved by the Ethics Committee of the French Society of Anesthesia and Intensive Care (SFAR) (no. IRB 00010254-2021-136; chairperson: Dr PJ Zetlaoui), on June 29, 2021.

Conflict of interest

The author declares no conflict of interest

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Accepted: 20 July 2022 Published: 29 August 2022

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