



Editorial Cardiac Critical Care

Ethics in Extracorporeal Membrane Oxygenation and South West Asia and Africa Extracorporeal Life Support Organization: A Robust Growth with Ethics

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INTRODUCTION

These are uncertain times in world history. Post-pandemic with economic uncertainties, extracorporeal membrane oxygenation (ECMO) remains the most definitive temporary support measure for acute respiratory distress syndrome treatment. ECMO comes with mammoth challenges, but with prolific modifications, many South West Asia and Africa Extracorporeal Life Support Organization (SWAACELSO) centers adopted its use with successful outcomes. Extracorporeal Life Support Organization (ELSO), the fountainhead of global ECMO remains proud of its most forthcoming global chapter, that is, SWAACELSO.

At this time of the year, with war waging all around us in West Asia, I, as president of SWAACELSO, pen these opening remarks of the journal 8. 2 issue, with the hope that war will soon end. In this context, SWAACELSO has, with the help of its parent body, ELSO, taken on a leadership role in extending ECMO services in the war-hit region to some extent. As per the latest ELSO report, compiled by ELSO Registry Chair Tonna *et al.*, over 100,000 patients in the registry have received ECMO and survived hospital discharge in the past decade.^[1] This ELSO registry recharges and encourages each one of us to reach for higher thresholds in our work on ECMO. This registry is a big resource for all of us in the future for research and more in depth learning on ECMO. Timely management on ECMO for nutrition, coagulopathy, sepsis and ECMO flows, makes it a successful venture. Correct sedation and anaesthesia agent, go a long way for early mobilization of patients on ECMO.^[2-5]

In many SWAACELSO countries such as India, Kuwait, and Saudi Arabia, the recent evolution of platinum/gold/silver “ELSO centers of Excellence” made the dynamics of ECMO in the southwest Asian countries more robust and sustainable. This brings forth a brighter future for more such centers of excellence from other SWAACELSO centers. Kenya, Morocco, and Bahrain were recently added as newer centers of SWAACELSO. All this is possible due to the timely and able leadership of ELSO, to whom all centers of SWAACELSO owe allegiance.

Continuing to serve the motto to bring educative and informative content for its delegates and researchers, SWAACELSO, too, in 2023-2024, like its parent body ELSO, to which it remains affiliated, brought about enhanced ECMO courses virtually and in person. The ECMO intensivists from Qatar, Kuwait, Saudi Arabia, Iran, Cairo, and different regions of India organized competitive, high-quality continuing medical education (CME) and webinars on different

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aspects of ECMO. We encourage all centres of ECMO under SWAACELSO to follow the same so that ECMO is seen as the next stethoscope in each intensive care unit of every hospital in the SWAACELSO region for academic and educative goals.

ROBUST ACADEMIC GROWTH IN SWAACELSO

SWAACELSO enjoyed an happening academic year in the past trimester of 2023 and continued the same in 2024. Three big ECMO Simulation workshops were held in Cairo, Egypt. All India Institute of Medical Sciences (AIIMS), New Delhi, India; Qatar, RVCC, Mumbai, India. More than 804 patients in the SWAACELSO region received ECMO in 2023 from 25 different centers in India itself. AIIMS led the way for V-A pediatric ECMO RVCC Mumbai and MGM Hospital, Chennai for VV ECMO. ECMO for heart and lung transplants is a dynamic activity at MGM, Chennai.

Reflecting the increasing interest and importance of ECMO to clinicians and researchers, the SWAACELSO region saw a surge in the number of publications from the region. A textbook on cardiac Critical Care and ECMO, another on “ECMO Practical Manual Volume 1” and 2 with a third book on Patient Blood management and ECMO saw the chapters and articles on ECMO surge. More than 200 publications in indexed national and international journals saw the light of the day in 2023–24 from the SWAACELSO region.^[4]

ETHICS AND ECMO AND SWAACELSO

The four key ethical principles of medical ethics – autonomy, beneficence, non-maleficence, and justice, when applied in decision-making, are indeed most helpful in resolving many ethical issues when ECMO is used. ECMO initiation for ECMO in most SWAACELSO regions is a challenge for ECMO maintenance, for using ECMO as a bridge to VAD or nowhere for overcoming family expectations in cases of prolonged ECMO; for balancing beneficence and non-maleficence; and for medico-legal issues of stopping ECMO in cases of futility.^[5]

The entire steering committee group of SWAACELSO, between February and April 2024, overcoming individual differences, came together at multiple offline and online executive meetings to amend its bylaws. The ELSO board members initiated and aided in good recommendations, when differences arose. This was cohesive growth from its leaders at ELSO.

ETHICAL DISAGREEMENTS ARE THE NORM ON ECMO

Similar ethical disagreements ensue among ECMO team members, very often over the need for continuation or stopping ECMO on a patient.

Somewhat surprisingly, we found that the majority of disagreements about continuing ECMO were less about whether the treatment was more burdensome than beneficial and whether enough time had passed to decide that the patient had had a reasonable trial of ECMO. The epistemic focus of these disagreements emphasizes the importance of clear initial communication about identifying milestones that suggest appropriate progress. Having a policy for clinician-guided limitation of life-sustaining treatment in combination with setting clear expectations may help avoid cases of intractable conflict, as some authors have described.^[6]

Clarifications of goals of care that helped shape later clinical trajectories should be introduced. In more than half of ECMO cases, ethics consultants identify and address a specific ethical issue, including clarifications of goals of care that help shape later clinical trajectories. This suggests that treatment teams may underappreciate the frequency with which ethical questions arise in the use of a new life-sustaining treatment. Having ethics consultants routinely involved also allows them to develop a better understanding of the range of possible outcomes with this technology, which is particularly important when they are called for cases in which there are concerns that the burdens of treatment are intensifying, as are the finances.

As suggested by Courtwright *et al.*, in this single-center experience, routine integration of ethics consultation into the care of ECMO patients revealed that most of the ethical questions involving ECMO more closely resembled traditional concerns about the appropriate use of any life-sustaining treatment rather than the novel dilemmas imagined in the current literature.^[7]

ECMO AT SWAACELSO

ECMO is an upcoming, ever advancing field. It has its limitations due to ignorance, fear, and acceptance of poor outcomes. With so much advancement, the need of the hour now is to maintain ECMO ethics in the SWAACELSO region with greater research. Research with diverse economic populations will gather more interest among the younger generation. These are my sentences as a present President of SWAACELSO, and I owe gratitude to each and every SWAACELSO member for its robust growth.

An invited review by the ELSO CEO, Christine Stead in this issue on “Opportunities and Challenges at SWAACELSO” in 2024 is an eye opener on the vast and dynamic expansion of ECMO in this uniquely diverse SWAACELSO region under ELSO leadership. All ECMO enthusiasts and workers should enroll themselves as an ELSO member to learn more.

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