

Multidisciplinary teams in high intensity medicine

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When I was younger, I had the privilege of seeing the greatest player in the history of soccer play live: Diego Armando Maradona. Maradona was able to win matches and tournaments just on his own. In contrast, in third millennium medicine, no physician can expect to defeat complex diseases requiring high-intensity care without the support of a team.

The inherent complexity of precision medicine, the abundance of treatment options, and the need to set up long-term treatment pathways with different intensities of care, are driving toward a win-win approach of patient management by Multidisciplinary Teams (MDT). This is the whole reason Acute Care Medicine Surgery and Anaesthesia (AMSA) was born: ranging from the name of the journal to the composition of the

editorial board, our interest in critically ill and surgical patients is clearly visible.

MDTs are widespread, and nowadays they are the standard of care in many fields of medicine such as interventional cardiology, oncology, or the management of subarachnoid haemorrhage from a ruptured aneurysm.¹⁻³ Remaining in the emergency area, MDT's management of trauma allows multiple life-threatening injuries to be handled simultaneously.⁴

In addition to peer MDTs, high-intensity patients require inter-professional cooperation of a heterogeneous character such as counselling, multidisciplinary briefings, pathway sharing, etc.⁵

One of the lessons learned from the peak waves of the SARS-CoV-2 pandemic is the need to provide paths in which patients can be rapidly transferred between wards and critical care units each with a different intensity of care.^{6,7}

Needless to say, advanced MDTs entail the involvement of non-physicians such as nurses, technicians, and psychologists.⁸ Besides strictly clinical issues, in the post COVID-19 world, as well as with the current economic framework, healthcare facilities cannot avoid facing constantly the challenges of efficiency, resource allocation, and appropriateness of treatment.⁹ In this scenario, it is essential to develop innovative, cross-functional individuals whose task it is to link members of different teams. An efficient modern health care system must leverage functional roles such as nurse case managers and even bed managers, especially in emergency and high-intensity care settings.¹⁰

The editors of this journal also strongly support the cross-sectoral approach to scientific research. The highest degree of this approach is the exchange with non-medical disciplines. A truly innovative approach requires engagement with physicists, mathematicians, engineers, jurists, bioethicists, etc.^{3,11} Emergency medicine, *high-intensity* medicine deserves thinking head.

The very aim of AMSA is to provide a space where all these purposes can find a place. We are interested in all topics related to the macro-areas of emergency, surgery, anaesthesia, and intensive care; from experimental-laboratory work, to clinical trials, to descriptions of organizational models, to evaluation of clinical outcomes. We would like to receive work suggesting innovative techniques and ideas. We are keen on epidemiological work; to understand phenomena, it is necessary to measure size and to argue on the basis of robust data. Aspects of our work that are not strictly technical affect not only topics of organization but also clinical outcomes: for this reason, we are also receptive to papers addressing the historical, anthropic, and social dimensions of medicine.¹² We would also like to publish provocative papers, the offspring of brilliant and visionary minds. Finally, AMSA seeks to be a platform that accepts the intrinsic uncertainty of medicine as well as the uncertain nature of all developing sciences erroneously of all developing sciences.¹³

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References

1. Jennings C, Astin F. A multidisciplinary approach to prevention. *Eur J Prev Cardiol* 2017;24:77-87.
2. Roberto M, Panebianco M, Aschelter AM, et al. The value of the multidisciplinary team in metastatic renal cell carcinoma: Paving the way for precision medicine in toxicities management. *Front Oncol* 2023;12:1026978.
3. Ciemins EL, Brant J, Kersten D, et al. Why the interdisciplinary team approach works: Insights from complexity science. *J Palliat Med* 2016;19:767-70.
4. Bissoni L, Gamberini E, Viola L, et al. REBOA as a bridge to brain CT in a patient with concomitant brain herniation and haemorrhagic shock - A case report. *Trauma Case Rep* 2022; 38:100623.
5. Rose L. Interprofessional collaboration in the ICU: How to define? *Nurs Crit Care* 2011;16:5-10.
6. Agnoletti V, Gamberini E, Circelli A, et al. Description of an integrated and dynamic system to efficiently deal with a raging COVID-19 pandemic peak. *Front Med* 2022;9:819134.
7. Agnoletti V, Russo E, Circelli A, et al. From intensive care to step-down units: Managing patients throughput in response to COVID-19. *Int J Qual Health Care* 2021;33:mzaa091.
8. Horlait M, De Regge M, Baes S, et al. Exploring non-physician care professionals' roles in cancer multidisciplinary team meetings: A qualitative study. *PLoS One* 2022;17:e0263611.
9. Catena R, Agnoletti V, Catena F. Addressing the healthcare challenge: Introducing Discover Health Systems. *Discov Health Systems* 2022;1:7.
10. Woodward J, Rice E. Case management. *Nurs Clin North Am* 2015;50:109-21.
11. Ameredes BT, Hellmich MR, Cestone CM, et al. The multidisciplinary translational team (MTT) model for training and development of translational research investigators. *Clin Transl Sci* 2015;8:533-41.
12. Cobianchi L, Dal Mas F, Verde JM, et al. Why non-technical skills matter in surgery. New paradigms for surgical leaders. *Discov Health Systems* 2022;1:2.
13. Simpkin AL, Schwartzstein RM. Tolerating uncertainty – the next medical revolution? *N Engl J Med* 2016;375:1713-15.