Editorial

"All Roads Lead to Rome": a Call to Implementation of ICU Follow-Up Services

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Post Intensive Care syndrome (PICS) is a complex clinical condition characterised by severe alterations in the physical, cognitive, and psychological spheres in patients who survived critically ill conditions and were treated with organ and system support in the intensive care clinical setting.[1] There are several symptoms included in PICS, and recently, fatigue and chronic pain were added to the list, particularly affecting the ability of patients to return to work.[2,3] PICS was present in 64% of patients at 3-months discharge from hospital and in 56% after 12 months. The main risk factors for PICS are respiratory failure, mechanical ventilation, shock, prolonged sedation and use of neuromuscular blocking agents.[1,4]

Post Sepsis Syndrome – PSS is a relatively new pathological state involving changes in cognitive, psychological, physical, and medical conditions following severe sepsis.[5] Typical manifestations of PSS include fatigue, post-sepsis dysphagia, muscle wasting due to mitochondrial and satellite cell dysfunction, cardiovascular complications, cognitive impairments, and psychological and emotional problems, which affect the quality of life.[6] Although PSS resembles PICS, it has a distinct pathophysiological mechanism and remains separate from PICS. However, some authors have found significant overlap between the characteristics of PICS and PSS.[5] As with PICS, PSS shows features affecting family members and caregivers (PICS-F). Approximately 75% of patients who survived severe sepsis developed alterations in at least one dimension of PSS.[6] Currently, a better understanding of the causal mechanisms, prevention, and management of post-sepsis syndrome are priority topics for sepsis research.[7]

Lastly, a new syndrome emerged from the recent SARS-CoV2 pandemic: post-acute sequelae of COVID-19 (PASC).[8] PASC seems to be similar to PSS, as it is featured by lasting respiratory, cardiovascular, renal, and neurological dysfunctions. In contrast, the alterations typically shown only by PASC are fatigue, chest pain, muscle and joint pain, ageusia, and anosmia.[8] PASC affects 50% of COVID-19 survivors.[8]

Beyond the typologies of syndromes occurring after survivorship to critical illnesses, there is a large burden of patients' issues that need to be addressed after discharge from the hospital and their return home.

In response, healthcare systems established follow-up services delivered by ICUs personnel. Follow-up services for ICU survivors have been implemented for 30 years, although to date, there is still no strong evidence of their effectiveness on patient outcomes.[9] There are differences among the operative delivery of post-ICU follow-up

services: follow-up clinics, telemedicine, home visits, telephone, or mail follow-up.[10] In addition, there are many differences among organisations, management, and standards of care delivery. Currently, no typology of establishing follow-up services has been shown to be better than the others.[10]

However, there are many important reasons to implement follow-up services: patients surviving critically illnesses deserve to be monitored for their sequelae through a multidisciplinary approach (anaesthesiologists, pulmonologists, cardiologists, neurologists, physiatrists, nurses, physiotherapists, occupational therapists, psychologists, and psychiatrists).[4] Post-ICU follow-up services aim to improve the recovery and satisfaction of survivors, guarantee the continuity of healthcare, and provide essential feedback about the quality of multidisciplinary care provided by the team during the patients' ICU stay. Feedback about the delivered care in the ICU can be pivotal in stimulating case discussions among team members and identifying which area of care, prevention of complications, and adverse events should be improved, focusing on sensitive outcomes.[11]

Follow-up services for ICU survivors deliver many types of interventions, such as ward visits, telephone calls, interdisciplinary team assessment, care plans tailored to individual needs, referral to territorial resources, ICU diaries,[12] clinical assessment of physical functioning, psychiatric issues, cognitive status, quality of life, and social reintroduction.[13] Nurses involvement is pivotal as their activities cover assessment, referral to counselling when needed, and education to self-monitored cognitive and physical exercises to be practised at home.[13]

Recently, an interesting concept has emerged from the follow-up service: it has become an opportunity to also develop a form of empathetic support among peers who survived a critically ill condition and ICU stay, adding therapeutic value from reciprocal sustenance based on deep respect for personal experiences.[4,14]

Currently, post-ICU follow-up services are present mainly in the United Kingdom, Europe, Australia, and North America, and more recently in Asia.[10,11] However, they should be widely implemented.

Therefore, all pathological conditions that bring patients to critical illness that require a stay in the ICU and the supportive care delivered by the technology and multidisciplinary team can determine the development of syndromic conditions (PICS, PSS, PASC). These conditions must be prevented through attentive personalized care planning, including interventions during the ICU stay, which can

Infographic. Components of post-ICU follow-up services.

only be identified by reflections from post-ICU follow-up services. Nurses are committed to the best implementation of this continuity of care instruments, that are also a source of motivation and satisfaction of the work done during the acute phases of the critical illness.[15]

As the old proverb says "All roads lead to Rome", beyond the cause of long term sequelae of ICU stay, there is the need to enhance the presence of post-ICU follow-up services worldwide, and, possibly, the set-up of a core set of diagnostic and interventional tools that could offer guidelines for a common approach to patients on the basis of their problems (PICS, PSS, Post COVID) to improve the comparation of data, and the benchmarking, searching for the optimal strategy to give back persons their best as possible quality of life.

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