

The identification and management of Post Intensive Care Syndrome in COVID-19 critical care survivors: the first wave.



J Collins, M Gilmartin, S Mason*, G, Mc Dermott, A Fahy, V O' Doherty L Snyman, M Donnelly

ABSTRACT

Post intensive care syndrome (PICS) refers to patients with new or worsening impairment in any physical, cognitive or mental health domain after critical illness of intensive care (1). Two of the major risk factors for the development of PICS include ARDS and prolonged mechanical ventilation. Both factors are often seen in patients infected with SARS-CoV2(1). As the COVID-19 pandemic continues, a number of authors have begun to highlight the need to consider the potential long term effects, which may place new burdens on health care systems(2). Post-ICU clinics are specialised review clinics for patients discharged from ICU(3). Existing data suggests variable efficacy of Post-ICU clinics in improving quality of life measures, there is evidence for their efficacy in reducing the symptoms of PTSD(4).

Aim: We instituted a post-ICU clinic for COVID-19 critical care survivors in order to assess the prevalence of PICS components. Our intention is to utilise the gathered data to advocate for the establishment of a permanent post-ICU clinic service in our institution.

Methodology & Theoretical Orientation: Adult patients in ICU with respiratory failure in the setting of a positive SARS-CoV-2 PCR test were recruited before discharge. Exclusion criteria included patient refusal, expected survival <48 hours, alternative diagnosis as a reason for admission in the setting of positive SARS-CoV-2 PCR test. Baseline demographics, admission disease severity markers, ICU interventions and sedation doses were gathered. Patients were invited to attend a Post-ICU outpatient clinic >3 months post discharge. Reviews were carried out by intensivists, physiotherapists and psychology staff at this time. Post ICU physical and psychological testing was carried out using standardized assessment tools, including 6 minute walk test (6MWT), PHQ-9 (Depression), GAD-7 (anxiety) and PTSD checklists. Data collection and patient consent was carried out in accordance with local ethical approval. Statistical analysis was carried out using SPSS software.

Conclusion & Significance: Many of the survivors of COVID-19 critical illness reviewed in this Post-ICU clinic demonstrated features of Post Intensive Care Syndrome involving the physical, psychological and mental health domains. While further evidence is required to confirm that early recognition and intervention for PICS improves morbidity and mortality following ICU admission it would seem sensible that such patients receive prompt and targeted review from healthcare professionals who are familiar with this pathology.

Patient Characteristics	n	%
Male	15	68
Smoker	3	13
Obesity (BMI >25)	12	54
6MWT BORG-CR10 score >4 ^a	5	22
SpO2 <94% during 6MWT	10	45
PHQ-9 score > 10 ^b	7	3
PTSD Checklist score >31-33 ^c	6	27
GAD-7 score >10 ^d	6	27

7th World Nursing and Nursing Care Congress, Webinar | October 08, 2021

Tallaght University Hospital, Ireland (Email: sabinamason270@hotmail.com)

Citation: Sabina Mason, The identification and management of Post Intensive Care Syndrome in COVID-19 critical care survivors: the first wave., 7th World Nursing and Nursing Care Congress, Webinar | October 08, 2021, 07

BIOGRAPHY

Sabina Mason is a critical care research coordinator who works in Tallaght Hospital ICU, Dublin, Ireland. She has worked through the coalface of the pandemic in this difficult area. She qualified as a nurse in the UK 20 years ago, 18 years in Intensive care. She is currently working as a research coordinator in Intensive care. She has completed BSc (Hons) In Nursing for Clinical Practice and LLB Law. During the pandemic, Sabina could see and hear about the devastating effect the pandemic had on family members, not being able to see or be with their loved ones during their final journey so she produced an 'end of life memoir journal'.

PUBLICATIONS

1. Biehl M, Sese D. 2020. Post-intensive care syndrome and COVID-19- implications post pandemic. Cleveland clinic journal of medicine. 87: 55.
2. Stam H, Stucki G, Bickenbach J. 2020. COVID-19 and post-intensive care syndrome: a call for action. J Rehabil Med. Jrm00044
3. Inoue S, Hatakeyama J, Kondo Y, Hifumi T, Sakuramoto H, Kawasaki T, Taito S, Nakamura K, Unoki T, Kawai Y, Kenmotsu Y, Saito M, Yamakawa K Nishida O. 2019. Post-intensive care syndrome: its pathophysiology, prevention and future directions. Acute medicine and surgery; 6: 233-246
4. Jensen J, Thomsen T, Overgaard D, Bestle MH, Christensen D, Egerod I. 2015. Impact of follow up consultations on ICU survivors on

[7th World Nursing and Nursing Care Congress](#), Webinar | October 08, 2021

Tallaght University Hospital, Ireland (Email: sabinamason270@hotmail.com)

Citation: Sabina Mason, *The identification and management of Post Intensive Care Syndrome in COVID-19 critical care survivors: the first wave.*, 7th World Nursing and Nursing Care Congress, Webinar | October 08, 2021, 08