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The Importance of Coping in Critically Ill Patients

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Post-intensive care syndrome; resilience; coping; patient-centered outcomes

As ICU-associated mortality rates continue to decrease, a growing recognition of the long-term physical and psychological morbidity for critically ill patients has emerged. For example, as many as 50% of survivors of critical illness develop symptoms of depression, anxiety, or posttraumatic stress disorder (PTSD), which may persist years after their acute hospitalization.(1, 2) Highlighting the devastating nature of these long-term sequelae, a Society of Critical Care Medicine Task Force coined the term Post-Intensive Care Syndrome (PICS) to describe the physical, cognitive, mental health complications in survivors of critical illness.(3) While there are no proven treatments for patients with PICS, several promising therapies to manage PICS have been identified, ranging from pharmacological therapies to music therapy to general cognitive behavior therapy.(1) Consequently, there are increasing efforts to develop methods to both identify and treat patients at risk for developing PICS. However, identifying patients at risk for PICS is often complicated by altered cognitive function and delirium.

A combination of ICU and patient specific factors are likely responsible for the development of PICS. One modifiable ICU specific factor is the over use of sedative agents, and several studies have focused on minimizing over sedation to preventing acute delirium and its long-term consequences. Patient specific factors associated with the development of PICS may include specific personality traits or other learned adaptive processes.(4) One such learned process is resiliency; a complex psychometric construct describing a person's ability to positively adapt to a stressful or traumatic situation.(5) The presence of resiliency varies widely in the general population, ranging from 25–80%.(5) Importantly, the protective characteristics of resiliency – including traits such as optimism, cognitive flexibility, and adaptive coping mechanisms – can be learned through a variety of interventions, and can mitigate negative psychological outcomes.(6–9) Teaching individuals to become more resilient can improve psychological outcomes in a variety of settings.(10, 11)

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Thus, the development of a survey instrument that identify individuals with maladaptive coping strategies would be a great advance in critical care medicine for the following reasons. First, these instruments could identify patients who are at the greatest risk for developing PICS. The survey instruments could be used to risk stratify patients and enable tailored or personalized therapies for specific patients. Second, these instruments could help providers and patients better understand the pathogenesis and explain the current variation in the recovery process. However, no critical care specific survey instruments currently exist that accurately measure adaptive coping mechanisms. Unfortunately, established survey instruments such as the COPE, Brief COPE, and the Utrechtse Coping List (UCL) are designed for the general population and have not been validated in the critically ill. All of the established survey instruments are lengthy. Even the Brief COPE, the shortest of these three surveys, is 28 questions long.^(12–14) A lengthy survey instrument may impair proper screening as critically ill patients may have a limited attention span. Finally none of the existing instruments have been validated for the use by a proxy or surrogate. The ability to have proxy measures of patient coping strategies is particularly important in the ICU, as patients are often unable to answer for themselves.

Therefore, Boezeman and colleagues⁽¹⁵⁾ developed and validated a short, critical care focused survey instrument entitled the Sickness Insight in Coping Questionnaire (SICQ). The SICQ measures patient coping in five domains: fighting spirit, toughness, redefinition, positivism, and non-acceptance. Initially 103 ward-patients were enrolled to validate the survey instrument in a general inpatient population before studying critically ill patients. Subsequently, 100 critically ill patients with their immediate proxies were enrolled to further validate the SICQ and assess agreement between patient and proxy responses. Importantly, the study determined that the SICQ is both reliable and valid. Additionally, the responses between patient and proxy generally correlate, suggesting the proxy accurately assess patient coping mechanisms. Though the study by Boezeman is an important start, there are several limitations to this initial and novel study. First, this survey instrument needs to be validated in non-Dutch speaking populations to ensure consistency across language and cultures. Second, in order to examine patients who could actually complete the SICQ, the study population had lower than expected severity of illness. Therefore the results of this study may not be generalizable to sicker critically ill patients.

Despite such limitations, the SICQ instrument will be useful as a quick and efficient method to identify critically ill patients with maladaptive coping skills who may be at increased risk of developing the psychosocial components of PICS. Using proxies, the SICQ may facilitate earlier identification of patients with maladaptive coping skills, and enable the use of specific therapies to treat or prevent components of PICS. Once identified, these individuals may benefit from the early administration of specific therapies to teach resiliency and manage PICS. For example, cognitive behavior therapy can teach cognitive flexibility; the ability to adjust one's thinking to adapt to new situation. Exercise and relaxation techniques can help improve optimism and decrease stress. Mindfulness therapy and journaling can reduce stress and improve emotional awareness. In a small pilot study of 23 ARDS survivors, individuals with poor adaptive coping had increased symptoms of depression, anxiety, and PTSD. Subsequently, these ARDS survivors completed telephone-based training of specific adaptive coping strategies. The number of individuals with symptoms of

PTSD decreased from 67% to 17% and most survivors demonstrated improvements in symptoms of anxiety and depression.(11) This pilot study suggests that patients with maladaptive coping strategies can be taught coping strategies to decrease their psychological symptoms. Importantly, such interventions could be developed to increase resiliency and improve a variety of psychological outcomes.

In summary, Boezeman and colleagues developed a short, hospital-specific measure of coping and then validated the SICQ instrument in critically ill patients. This survey instrument offers the ability to efficiently identify patients at risk for PICS from either patient or proxy response. Moreover, once validated the SICQ could be used to identify patients who may respond to coping-specific interventions and more effectively to manage specific debilitating components of PICS.

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