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**Approaches to Post-Intensive Care Syndrome:** 

**Nursing Point of View** 

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**Abstract** 

Health professionals have been aware of the incidence of post-intensive care syndrome (PICS) for some time.

However, there has not been a clear or definitive way of administering treatment or nursing care to help patients

suffering from PICS in their recovery. This paper suggests some ideas for the care of patients from the nursing point

of view.

**Keywords:** Post-Intensive Care Syndrome (PICS); Nursing Care

1. Introduction

Patients treated in intensive care units in hospitals may develop various kinds of disorders, affecting various bodily

or cognitive functions, or they may develop mental health disorders known as PICS after being discharged from the

hospital. Due to these factors, they may be facing difficulties in their daily lives. Upon discharge from intensive care

unit (ICU), patients may experience significant losses in both their cognitive and physical functions. The risk is

increased when the length of stay in the ICU is prolonged [1, 2]. Symptoms experienced by ICU survivors include

deterioration of both physical [1] and psychological abilities [3, 4].

The incidence of PICS is higher in patient groups who have developed acute respiratory distress syndrome [5]. Those who experience delirium while hospitalized in the ICU are at an increased risk of developing a long-term cognitive dysfunction after discharge [6]. Various factors are known to be risk factors in the onset of PICS. Among them are: heavy sedation, delirium, and immobility [7]. In addition, the patients' family members might also be a cause of Post-traumatic stress disorder (PTSD), due to their reaction of shock seeing the patient suffering from PICS. This can also cause the family members themselves to experience mood disorders or depression. This is known as PICS-F (F stands for Family). A number of factors can be attributed to a decline in quality of life, some being: age, severity of illness, depression, and posttraumatic distress symptoms [5]. Anxiety can negatively affect the patients quality of life [3, 8-10] as well as influencing long-term survival rates [3].

## 2. Diary in emergency department

PICS is still a new concept and the intervention of PICS cognitive dysfunction is in the developing stages. Though treatment in the intensive care field is progressing along with advances in medical treatment, recovery from severe diseases cannot occur in the true sense, unless health professionals can maintain the mental health of patients. Intervention by clinical psychologists and psychiatrists will become crucial for a full recovery. Furthermore, efforts to deal with PICS cognitive dysfunction may not incur medical fees and thus intervention is being left behind. Some critical care nurses might be aware of which of their patients possibly developing PICS and approach them with appropriate nursing care, as a first step of treatment, so as to avoid suffering from PICS after being discharged from emergency care or hospital.

It is important to review the care provided by nurses, and to be aware of what the patient is thinking or suffering through while undergoing emergency care. What nurses can do is to provide accurate information to patients and families for the care of PICS and PICS-F and to help in assimilating or dealing with confusing memories. As a new protocol, it will be necessary to utilize a diary to record the patients condition while in emergency care to be used as a base in giving explanations to the patient later on [11, 12]. Keeping an ICU diary is a known method of helping patients and family members at risk of PICS and PICS-F [13]. The diaries have been found to be effective in easing anxiety and depression, as well as in reducing new-onset PTSD [13]. The ICU diaries have been in wide use in Europe since the 1970s and 1980s, notably in Scandinavian countries. They are seen as an inexpensive method of improving of quality of life following critical illness [13, 14].

## 3. Continuation of ABCDE bundle

Muscle weakness due to artificial respiration, sedation, delirium, immobility occurring in patients in critical situations forms a negative cycle [15]. In order to stop the negative cycle, detailed treatment according to the patient's condition and stage should be conducted.

ABCDE bundle is known as follows:

A: airway management,

B: spontaneous breathing trials,

C: coordination of care and communication among disciplines,

D: delirium assessment and prevention, and

E: Early mobility.

Continue the ABCDE bundle is vital in working on multiple aspects of immobility, ventilator management days, deep sedation, and delirium during the stay in the emergency department. In addition to the ABCDE bundle, some additional strategy is listed as recommended below:

F: Follow-up referrals, functional reconciliation, and family involvement,

G: good handoff communication, and

H: written information to hand to the patient and family [15]

# 4. Promotion of multi-occupational collaboration

At present, many hospitals are likely to be provided with a respiratory care support team. It should be of significance that information about the patient's status be shared among the various professionals, not only medical doctors but also with clinical engineering technicians so that patients will have the opportunity to avert themselves of the risk of an incident of PICS. Nurses who are involved in giving direct care to the patient play an important role in empowering other professionals and are required to demonstrate leadership to provide better care for patients while sharing information among others. It is important that physical therapists practicing outside the ICU recognize the effects of PICS so that ICU survivors in hospitals, rehabilitation centers, home care, and outpatient clinics experiencing deterioration of physical, cognitive, and mental abilities with reduced functioning can be diagnosed accurately and receive appropriate services [16].

### **5. Conclusion**

A majority of patients entering the emergency department will likely be exposed to the three major factors that are responsible for the onset of PICS, and it has become clear that most patients have developed some symptoms which can cause physical, cognitive, or mental dysfunction. It is impossible to recall the daily care administered at the hospital and the impact it has on the patient. For this reason, it is necessary to be aware of the treatment and nursing care performed on the patient by health care professionals, and to utilize a diary in the emergency department while using the ABCDEFGH bundle in the daily practice of nursing to link multi-occupation collaboration and to prevent PICS onset. Early intervention is essential in the recovery of severe illnesses. Individualized care and tools to monitor outcomes as well as utilization of the ICU diary can help in minimizing symptoms of cognitive and mental health disorders. However, evidence in reports available concerning quality of life, physical and cognitive function, psychological symptoms, as well as use of health care resources following ICU discharge show us that much more research is still needed in order to ease the distress experienced by patients and caregivers.

## **Conflict of Interest statement**

The authors declare that they have no conflict of interest associated with this manuscript. They had no sponsors who

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