

**Sigma's 30th International Nursing Research Congress**

**ICU Diary Programs Used to Decrease PICS Symptoms in ICU Survivors/Families:  
An Integrative Research Review**

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**Purpose:**

Due to the evolution and headway in critical care medicine, the survival of ICU patients is more common and achievable than in the past (Mehlhorn et al., 2014). Unfortunately, ICU survivors, along with their families, now have another challenge to face beyond their actual survived critical illness. Many suffer from not only physical, but multiple psychological issues as well (Ullman et al., 2014). Importunate symptoms effecting ICU survivors physically, mentally, and cognitively is growing in current literature as Post-Intensive Care Syndrome (PICS) (Mehlhorn et al., 2014 & Blair et al., 2017). PICS-Family (PICS-F) describes family members who may also endure similar symptoms after a loved one survives critical illness (Blair et al., 2017 & Jones et al., 2012). Often the psychological symptoms of PICS include depression, anxiety and PTSD (Ullman et al., 2014, Mehlhorn et al., 2014, & Blair et al., 2017). ICU diaries have been suggested in literature as an intervention to implement to help decrease symptom(s) of PICS and PICS-F in ICU survivors and their families. This integrative research review was conducted to evaluate if utilizing an ICU diary program decreases symptom(s) or incidences of PICS/PICS-F after ICU survivors and their families are discharged from the ICU.

**Methods:**

Whittemore and Knafl's (2005) methodology for integrative research reviews was utilized to investigate. Literature review was systematically conducted by searching the following databases: Cochrane, PubMed, CINAHL Plus, MEDLINE Complete, Health Source: Nursing Academic Edition and bibliography mining. Keywords utilized were "diary" and "post-intensive care syndrome." Search articles were confined to the years between 2010-2018.

**Results:**

An initial 39 articles were discovered, 17 of them being duplicates, and 16 articles were eliminated for not meeting inclusion criteria. Six articles were obtained through bibliographic mining. Total of 12 articles met inclusion criteria for IRR including 3 level ones, 2 level threes, 3 level fours, 3 level fives, and 1 level six. All articles were critically appraised utilizing Brown's (2018) checklist guidelines and the EBR tool (Long & Gannaway, 2015). Backman et al., Blair et al., Egerod et al., Garrouste-Oregas et al., Jones et al., Kynoch et al., Levine et al., Mehlhorn et al., and Ullman et al. agree there

is a growing need to find effective ways to help ICU survivors and family members to cope with life after surviving the ICU; anxiety, depression, and PTSD are common symptoms seen in ICU survivors and/or their family members (2010, 2018, 2011, 2017, 2012, 2016, 2018, 2014, 2014). Blair et al., Egerod et al., Jones et al., Kynoch et al., Mehlhorn et al., and Ullman et al. determined the use of an ICU diary program may be beneficial in decreasing PTSD symptoms in patient family members who survive the ICU (2018, 2011, 2012, 2016, 2014, 2014). Backman et al., Blair et al., Egerod et al., Kynoch et al., Levine et al., Mehlhorn et al., and Parker et al. suggests an ICU diary has potential to help long-term psychological effects for patients (2010, 2018, 2011, 2012, 2016, 2014, 2013). Implementation of an ICU diary program, which is low cost and low technology, would be beneficial to ICU survivors and/or their families. Emphasis of the ICU diary program should focus on coping strategies for ICU patients and or their families surviving critical illness.

**Conclusion:**

After evaluating literature, results suggest that ICU diary programs may be beneficial in decreasing PTSD symptoms long term in patients with more benefits seen in patient family members. The literature suggests larger, randomized, multi-centered trials are needed to effectively answer the research question at hand both for patients and more specifically for family members. PTSD, anxiety, and depression are all defined in subcategories of cognitive and mental dysfunction of Post-Intensive Care Syndrome. All three systematic reviews agreed that PTSD symptoms may be reduced in family members with the use of an ICU diary, and 2 of the systematic reviews suggested that ICU diaries may reduce PTSD symptoms in ICU survivors. All three systematic reviews agreed that more research is needed to assess if an ICU diary program is effective. Most lower level articles reviewed suggested that ICU diaries benefit ICU survivors and/or their families in different areas of psychological recovery. However, the need for more research is essential to assess the effectiveness of ICU diaries by conducting larger, multi-centered trials.

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**Applicable category:**

Clinical

**Keywords:**

Critical Care , ICU Diary and Post-Intensive Care Syndrome

**References:**

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## Abstract Summary:

Many ICU patients are surviving critical illness but in return are suffering from Post-Intensive Care Syndrome (PICS). ICU diaries in the critical care setting have been suggested as a way to help decrease symptoms of PICS for ICU survivors and their families, especially the detrimental psychological effects.

## Content Outline:

### I. Introduction

- A. ICU survivors are surviving critical illness but facing difficult challenges post discharge.
- B. Background and significance of Post-Intensive Care Syndrome (PICS) in ICU survivors and their families (PICS-F)
- C. Literature suggests that ICU diaries may help decrease symptoms of PIC

### II. Body

#### A. Methodology

- 1. IRR utilizing Whittemore and Knaf's methodology (2005)
- 2. Database search
  - a. Cochrane, PubMed, CINAHL Plus, MEDLINE Complete, Health Source: Nursing Academic Edition
  - b. bibliography mining
- 3. Keywords utilized
  - a. "Post-Intensive Care Syndrome"
  - b. "diary"
- 4. Search articles confined to years 2010-2018
- 5. Articles obtained
  - a. 39 initial articles
  - b. 17 duplicates

- c. 16 excluded
  - d. 6 articles from bibliographic mining
- 6. Exclusion Criteria
  - a. not related to topic
  - b. implementation of an ICU diary program
  - c. not in English
  - d. narrative CNE offerings

## B. Results

1. 39 initial articles
2. 12 included in final review
3. Evidence critically appraised
4. Levels of evidence according to Long & Gannaway EBR tool (2015)
  - a. 3 level one's
  - b. 2 level three's
  - c. 3 level four's
  - d. 3 level 5's
  - e. 1 level six

## C. Literature Synthesis

1. Effective strategies needed for coping post ICU survival
  - a. depression, anxiety, and PTSD common
  - b. effects survivor families as well
2. ICU diaries may be beneficial
  - a. decrease symptoms of PTSD in families
  - b. potential to decrease long term psychological effects in patients
3. Clinical Implications
  - a. low cost, low technology
  - b. may be beneficial for ICU survivors and/or their families
  - c. focus effort on coping strategies for ICU survivors and families post discharge

## III. Conclusion

- A. After evaluating literature, results suggest that ICU diary programs may be beneficial in decreasing PTSD symptoms long term in patients with more benefits seen in patient family members.
- B. PTSD symptoms commonly seen in mental health aspect of PICS and PICS-F.
- C. The literature suggests larger, randomized, multi-centered trials are needed to effectively answer the research question at hand both for patients and more specifically for family members.