Diaries for Recovery From Critical Illness

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Objective

To assess the effect of a diary versus no diary during a patient’s recovery from admission to the intensive care unit (ICU).

Type of Review

This article is a summary of a Cochrane review of three randomized, controlled trials.

Relevance for Nursing

Annual estimates suggest that more than 20 million patients require treatment in ICUs worldwide to manage critical illnesses, injuries, or exacerbations of chronic conditions. During ICU admission, patients experience extreme physical and psychological stressors, including delirium, fear, lack of privacy, noise, pain, sedation administration, sleep deprivation, and the abnormal ICU environment. These experiences affect a patient’s recovery from critical illness and may result in physical and psychological disorders. The psychological stresses do not go away upon discharge or transfer and may still affect patients when they are under the care of an oncology nurse. One strategy that has been developed and implemented by clinical staff to treat the psychological distress prevalent in patients in the ICU is the use of patient diaries. These provide a background to the cause of the patient’s ICU admission and an ongoing narrative outlining day-to-day changes and a final note on discharge or transfer.

The patient diaries generally are structured with a summary outlining the reason and event of admission to the ICU, daily entries, and the final note on discharge or transfer. Primary authorship is predominantly the responsibility of the bedside ICU nurse. Diaries were authored by a multidisciplinary group of ICU staff with or without member involvement. Some ICUs encourage the participation of the patient’s family, reporting the diaries as a potential focus for family empowerment and family-centered care.

Evidence-based information about the value of diaries will assist the ICU staff in deciding whether to provide diaries for their patients. Although this Cochrane review is of particular interest to nurses employed in an ICU, it still is of value to non-ICU nurses because they may be able to ask about this service if a patient with cancer is admitted or transferred to the ICU. In addition, nurses who are qualified and experienced in the ICU may be asked to work an occasional shift in that unit.

Summary of Key Evidence

Authors stated that because of the small number of studies eligible for inclusion in their review and the diverse outcomes reported, they were not able to undertake a meta-analysis. They identified three eligible studies—two describing patients in the ICU (N = 358) and one describing relatives of patients in the ICU (N = 30). The study involving relatives of patients in the ICU was a sub-study of family members from one of the studies of patients in the ICU. A mixed risk of bias existed within the included studies. Blinding of participants to allocation was not possible, and blinding of the outcome assessment was not adequately achieved or reported. Overall, the quality of the evidence was low to very low. The patient diary intervention was not identical between studies. However, each provided a prospectively prepared, day-to-day description of the participants’ ICU admission.

The evidence included in this summary is from a Cochrane systematic review of three randomized, controlled trials. The studies included in this review were carried out in six European countries, including Sweden, Italy, Denmark, Norway, Portugal, and the United Kingdom. This is in accordance with the majority of reported patient diary usage, which has been within Europe, particularly Scandinavia.

Characteristics of the Evidence

No studies reported their first primary outcome measure describing the risk of post-traumatic stress disorder (PTSD) in patients recovering from admission to ICU using a structured clinical interview. They applied this definition a priori be-cause the American Psychiatric Association supports it as the gold standard for the diagnosis of PTSD. When attempting to reduce the risk of detection bias in the diagnosis of PTSD, the interviewers were trained in the administration, but not the meaning of PTSD.

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or scoring, of the items in the instrument. The use of an uninformed clinician makes the interview no longer diagnostic and limits its reliability as an assessment tool. Therefore, the author did not include these results in the Cochrane Review. No general agreement exists on which outcomes should be measured in trials focusing on psychological recovery after critical illness. Such agreement would be beneficial to aid consistency across relevant trials. A single study reported the potential effectiveness of patient diaries to reduce the risk of anxiety and depression in comparison to no patient diary. However, these results were not statistically significant, and the study was methodologically limited because of poor sample size. This same study reported the cutoff score of “clinically significant anxiety and depression” of 8. Although “caseness” of anxiety and depression is best described by a score range of 11 or greater, the score of 8 or greater is “just suggestive of the presence of the respective state.”

No evidence exists of an effect on post-traumatic stress symptomatology between patients who did or did not receive patient diaries three months after ICU admission, but a significant decrease was seen in post-traumatic stress symptomatology in the intervention arm for family members. The reliability of these results is limited because the chosen instrument for measuring PTSD symptomatology in these studies (the Post-Traumatic Stress Syndrome 14–Questions Inventory [PTSS-14]) has not been adequately validated in the revised form after four new items were added to the original PTSS-10. Although the PTSS-14 has been correlated with a better measure in a small study (N = 44), it was designed as an early screening tool that incomprehensively lists post-traumatic stress symptoms but does not link the symptoms to a trauma or event.

Evidence suggests that patients’ psychological health after a stay in the ICU continues to be problematic beyond three months, suggesting that the follow-up timeline in three studies was insufficient. In one study, the reduction of anxiety and depression was measured only three weeks after receiving the patient diary intervention. Additional studies are needed to assess long-term effects of patient diaries on depression, anxiety, and PTSD.

Recall of delusional memories was comparable between study groups. Researchers have discussed the role of patient diaries in the provision of a coherent narrative of the illness period, diminishing the effect or dominance of imagined occurrences and hallucinations.

**Best Practice Recommendations**

Minimal evidence from randomized, controlled trials is available to evaluate the effectiveness of patient diaries to promote recovery from critical illness for patients or family members. Studies limited by small sample sizes have examined the potential of diaries to reduce PTSD symptomatology in family members. Evidence is inadequate to support their effectiveness in improving psychological recovery after critical illnesses for patients and their family members. Fundamental concerns regarding the safety and effectiveness, particularly the method in which patient diaries are provided, need to be considered. Whether patient diaries are effective or whether they may have an adverse psychological effect has not been determined.

**Research Recommendations**

Additional research needs to be undertaken to ascertain the effect of patient diaries for patients and caregivers or family members of the patients recovering from the ICU. Use of patient diaries for patients recovering from ICU admission is becoming more common, but whether it is a safe and effective practice is unclear. Therefore, additional research is required.

When designing additional research of the effectiveness of patient diaries, researchers should carefully consider the complexity of the patient diary as an intervention and consider the active components that may affect the diaries’ effectiveness. The entire intervention surrounding the development and provision of patient diaries, including content, process, timeline, and personnel involved, needs to be adequately described within the research to enable replication and generalizability. Multidimensional aspects of psychological recovery, including anxiety, depression, and symptoms of PTSD, should be assessed for at least six months, but preferably for 12 months, after discharge from the ICU. Researchers should continue to plan their protocols to minimize risk of bias and should report clearly in accordance with Consolidated Standards of Reporting Trials guidelines. Researchers should carefully consider their choice of outcome measures to ensure the validity of their research.

**Reference**


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