Background

During intensive care unit (ICU) admission, patients experience extreme physical and psychological stressors, including the abnormal ICU environment. These experiences impact on a patient’s recovery from critical illness and may result in both physical and psychological disorders. One strategy that has been developed and implemented by clinical staff to treat the psychological distress prevalent in ICU survivors 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 activities.

Objectives

To assess the effect of a diary versus no diary on patients, and their caregivers or families, during the patient’s recovery from admission to an ICU.

Search methods

We searched the Cochrane Central Register of Controlled Trials (CENTRAL, 2014, Issue 1), OvidMEDLINE (1950 to January 2014), EBSCOhost CINAHL (1982 to January 2014), Ovid EMBASE (1980 to January 2014), PsycINFO (1950 to January 2014), Published International Literature on Traumatic Stress (PILOTS) database (1971 to January 2014); Web of Science Conference Proceedings Citation Index - Science and Social Science and Humanities (1990 to January 2014); seven clinical trial registries and reference lists of identified trials. We applied no language restriction.

Selection criteria

We included randomised controlled trials (RCTs) or clinical controlled trials (CCTs) that evaluated the effectiveness of patient diaries, when compared to no ICU diary, for patients or family members to promote recovery after admission to ICU. Outcome measures for describing recovery from ICU included the risk of post-traumatic stress disorder (PTSD), anxiety, depression and post-traumatic stress symptomatology, health-related quality of life and costs.

Data collection and analysis

We used standard methodological approaches as expected by The Cochrane Collaboration. Two review authors independently reviewed titles for inclusion, extracted data and undertook risk of bias according to prespecified criteria.
Main results
We identified three eligible studies; two describing ICU patients (N = 358), and one describing relatives of ICU patients (N = 30). The study involving relatives of ICU patients was a substudy of family members from one of the ICU patient studies. There was a mixed risk of bias 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.

No study adequately reported on risk of PTSD as described using a clinical interview, family or caregiver anxiety or depression, health related quality of life or costs. Within a single study there was no clear evidence of a difference in risk for developing anxiety (risk ratio (RR) 0.29, 95% confidence interval (CI) 0.07 to 1.19) or depression (RR 0.38, 95% CI 0.12 to 1.19) in participants who received ICU diaries, in comparison to those that did not receive a patient diary. However, the results were imprecise and consistent with benefit in either group, or no difference. Within a single study there was no evidence of difference in median post-traumatic stress symptomatology scores (diaries 24, SD 11.6; no diary 24, SD 11.6) and delusional ICU memory recall (RR 1.04, 95% CI 0.84 to 1.28) between the patients recovering from ICU admission who received patient diaries, and those who did not. One study reported reduced post-traumatic stress symptomatology in family members of patients recovering from admission to ICU who received patient diaries (median 24, range 14 to 28), in comparison to no diary (median 28; range 14 to 38).

Authors’ conclusions
Currently there is minimal evidence from RCTs of the benefits or harms of patient diaries for patients and their caregivers or family members. A small study has described their potential to reduce post-traumatic stress symptomatology in family members recovering from admission to ICU. However, there is currently inadequate evidence to support their effectiveness in improving psychological recovery after critical illness for patients and their family members.

Plain language summary
Review question
We reviewed the evidence about the effect of diaries, in comparison to no diary, on recovery in people recuperating from critical illness, and their caregivers and families.

Background
People who have been critically ill experience significant physical and psychological problems during recovery. Diaries outlining a person’s intensive care unit (ICU) experience have been suggested as something that may be effective in helping survivors and their family members recover psychological function.

Study characteristics
The evidence is current to January 2014. We identified three eligible studies; two describing 358 ICU patients, and one describing 30 relatives of ICU patients. These were included in the review. The study involving relatives of ICU patients was a sub study of family members from one of the ICU patient studies. All people included in the studies were adults based in Europe and the UK, with a mixed severity of critical illness requiring admission to an ICU.

Key results
We found no studies that had reported the risk of post-traumatic stress disorder in patients recovering from admission to ICU using a structured clinical interview. The other primary outcome measures of anxiety and depression were described in one study of 36 patients. In this study no clear evidence of a difference was seen in anxiety and depression when patient diaries were used for people recovering from ICU admission, in comparison to no diaries. Post-traumatic stress symptoms in family members and caregivers were reduced in another study of 30 people when patient diaries were used, in comparison to no diaries.

Current research has not adequately assessed the safety and effectiveness of patient diaries. Adverse events associated with the use of diaries have not been reported. It has not been established whether patient diaries are an effective practice or whether they may cause harm.

Quality of the evidence
The overall quality of the evidence to support the use of diaries to promote recovery for patients and caregivers or families recuperating from critical illness is low or very low. This is because of the small amount of research and the methodological quality of studies. There is no evidence to support their use and it has not been established whether they cause benefit or harm.