





# The effect of diaries on post-intensive care unit syndrome: a systematic review and meta-analysis of randomized controlled trials

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## Background

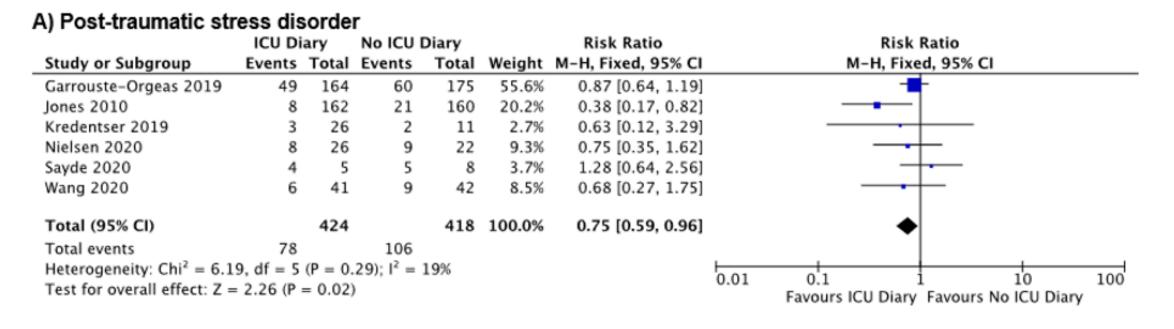
Patients discharged from the intensive care unit (ICU) have long-term symptoms affecting the physical, psychological, and cognitive wellbeing and suffer from memory gaps, unpleasant recall, and flashbacks. Moreover, patients are unable to understand memories, dreams, and nightmares. Intensive care unit diaries were developed to make sense of these memories allowing patients to reconstruct their experience in the ICU after discharge. We conducted a systematic review and meta-analysis randomized controlled studies to investigate the effects of intensive care unit diaries on posttraumatic stress disorder, depression, and anxiety.

### Methods

PubMed and EMBASE were searched up to February 10, 2021. We included randomized controlled studies comparing patients admitted to the ICU who received a diary to those who did not. The primary outcome was the rate of post-traumatic stress disorder.

We included seven randomized controlled studies. Patients who received a diary during the intensive care unit admission had reduced rate of post-traumatic stress disorder (78/424 [18%] vs. 106/418 [25%]; RR=0.75; 95% CI, 0.59–0.96; P=0.02) when compared to patients who did not receive a diary. Rate of depression was also reduced in patients using a diary (7/69 [10%] vs. 13/51 [26%]; RR=0.41; 95% CI, 0.18-0.96; P=0.04) while rate of anxiety was similar (12/69 [17%] vs. 17/51 [33%]; RR=0.48; 95% CI, 0.17–1.33; *P*=0.12).

Figure 1. Forest plot for the rate of post-traumatic stress disorder (A) df = degrees of freedom, M–H = Mantel-Haenszel, CI = confidence interval.



### Conclusions

Patients admitted to the ICU who received a diary had decreased rate of post-traumatic stress disorder and depression but not anxiety.

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