

# Slumber aids could improve intensive care outcomes

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Eye masks and earplugs could help hospital patients get a better night's sleep. Researchers writing in BioMed Central's open access journal *Critical Care* investigated their effect on sleep quality in a simulated intensive care environment.

Xiaoying Jiang from Fujian Medical University, Fuzhou, China, worked with a team of researchers to carry out the study in 14 healthy people exposed to recorded intensive care noise and equivalent light levels. She said, "Sleep disruption is common in [intensive care unit](#) patients and has been associated with impaired [immune function](#), decreased inspiratory muscle endurance, extended [mechanical ventilation](#), delirium and severe morbidity".

The researchers measured sleep quality over four nights; one to get used to the new environment and one 'baseline' night, followed by two nights exposed to noise and light, one with eye masks and ear plugs and one without. To minimize any effects of ordering, the last two nights were randomized.

According to Jiang, "The earplugs and eye masks were applied easily and remained in place and intact throughout the nights they were used. Use of plugs and masks resulted in more REM sleep, shorter REM latency and fewer arousals. Subjective measures of sleep quality were also significantly improved, and participants reported much less awareness of their surroundings when they were worn".

Jiang concludes, "This study provides a reasonable basis for promoting the routine use of earplugs and eye masks for intensive care patients. Future studies should be designed to determine if this ultimately improves clinical outcomes".

**More information:** Effects of earplugs and eye masks on nocturnal sleep, melatonin and cortisol in a simulated intensive care unit environment, Rong-fang Hu, Xiao-ying Jiang, Yi-ming Zeng, Xiao-yang Chen and You-hua Zhang, Critical Care (in press), [ccforum.com/](http://ccforum.com/)

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