# Article information:

Effects of earplugs and eye masks combined with relaxing music on sleep, melatonin and cortisol levels in ICU patients: a randomized controlled trial | Critical Care | Full Text
<https://ccforum.biomedcentral.com/articles/10.1186/s13054-015-0855-3>

# Article summary:

1. The use of earplugs and eye masks combined with relaxing music can improve sleep quality in ICU patients.

2. There were significant differences between the intervention group (using earplugs, eye masks, and music) and the control group in terms of depth of sleep, falling asleep, awakenings, falling asleep again after awakening, and overall sleep quality.

3. No significant differences were found in melatonin and cortisol levels between the two groups, suggesting that other factors may have influenced these hormone levels.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article titled "Effects of earplugs and eye masks combined with relaxing music on sleep, melatonin and cortisol levels in ICU patients: a randomized controlled trial" aims to investigate the effects of using earplugs and eye masks with relaxing background music on sleep, melatonin, and cortisol levels in ICU patients. The study concludes that this combination of non-pharmacological interventions is useful for promoting sleep in ICU adult patients.

Overall, the article provides a comprehensive overview of the study design, methods, results, and conclusions. However, there are several potential biases and limitations that should be considered when interpreting the findings.

Firstly, the sample size of the study is relatively small (n=45), which may limit the generalizability of the results. A larger sample size would be needed to confirm these findings.

Secondly, there is a lack of information regarding the specific characteristics of the participants in terms of age, gender, comorbidities, and severity of illness. These factors could potentially influence sleep quality and hormone levels in ICU patients.

Additionally, it is unclear whether blinding was implemented during the study. Lack of blinding could introduce bias into subjective measures such as sleep quality evaluations.

Furthermore, while the study reports significant differences between groups in various aspects of sleep quality, it does not provide detailed information on effect sizes or clinical significance. Without this information, it is difficult to determine the practical implications of these findings.

Moreover, there is no discussion or exploration of potential adverse effects or risks associated with using earplugs and eye masks combined with relaxing music in ICU patients. It would be important to consider any potential negative impacts or contraindications before implementing these interventions widely.

The article also lacks a thorough discussion of alternative explanations for the observed effects. For example, it is possible that factors other than earplugs and eye masks combined with relaxing music contributed to improved sleep quality in the intervention group. These factors could include differences in nursing care, medication use, or individual patient characteristics.

Additionally, the article does not provide a balanced presentation of the potential limitations and drawbacks of using these interventions. It primarily focuses on the positive effects and does not adequately address any potential drawbacks or limitations.

In terms of reporting bias, the article appears to be relatively objective and does not contain overtly promotional content. However, it is important to note that the study was funded by a grant from the National Natural Science Foundation of China, which could introduce some degree of bias.

In conclusion, while this article provides valuable insights into the effects of earplugs and eye masks combined with relaxing music on sleep quality in ICU patients, there are several potential biases and limitations that should be considered. Further research with larger sample sizes and more comprehensive assessments is needed to confirm these findings and explore potential alternative explanations for the observed effects.

# Topics for further research:

* Potential adverse effects of using earplugs and eye masks combined with relaxing music in ICU patients
* Alternative explanations for improved sleep quality in the intervention group
* Drawbacks and limitations of using earplugs and eye masks combined with relaxing music in ICU patients
* Factors influencing sleep quality and hormone levels in ICU patients
* Larger studies on the effects of earplugs and eye masks combined with relaxing music on sleep quality in ICU patients
* Objective measures of sleep quality and hormone levels in ICU patients using earplugs and eye masks combined with relaxing music.

# Report location:

<https://www.fullpicture.app/item/6975ff33466ea082c6aeacd469221655>