MANAJEMEN PENYUMBAT TELINGA DAN MASKER MATA TERHADAP PERUBAHAN KUALITAS TIDUR PASIEN KRITIS DI ICU (UNIT PERAWATAN INTENSIF): STUDI KASUS

Management of Earplugs and Eye Masks to Change in Sleep Quality of Critical Patients in ICU (Intensive Care Unit): Case Study

Nunung Nurhayati¹, Agung Waluyo², Yeni Rumyani³, Susy Puspasari⁴, Nyayu Nina Putri Calisanie⁴, Septa Permana⁴, Ramdhani⁴

- 1. Mahasiswa Doktor, Fakultas Keperawatan Universitas Indonesia
- 2. Dosen Fakultas Keperawatan Universitas Indonesia
- 3. Mahasiswa STIKEP PPNI Jawa Barat
- 4. Dosen STIKEP PPNI Jawa Barat

Riwayat artikel

Diajukan: 3 Juni 2023 Diterima: 19 Juli 2023

Penulis Korespondensi:

- Nunung Nurhayati
- Mahasiswa Doktor,
 Fakultas Keperawatan
 Universitas Indonesia

e-mail:

nunky adzra@yahoo.com

Kata Kunci:

Earplug, maker mata, ICU, kualitas tidur, pasien kritis

Abstrak

Pendahuluan: Gangguan tidur sering terjadi pada pasien yang dirawat di ICU. Hal ini dikarenakan lingkungan di ICU cenderung tidak nyaman, bising dan cenderung menakutkan bagi pasien dan keluarga, baik secara fisik maupun psikis. Proses penyembuhan pasien yang dirawat di ICU dipengaruhi oleh kualitas tidur pasien yang prima. Untuk mengatasi gangguan kualitas tidur perlu dilakukan teknik penyumbat telinga dan penutup mata karena terapi ini juga mudah dilakukan selain murah dan aman. Tujuan: Meningkatkan kualitas tidur pasien sakit kritis di ICU. Metode: menggunakan pendekatan studi wawancara kepada ahli CI (Clinical Instructure) sebagai peserta dengan persyaratan pendidikan minimal Perawat dan memiliki masa kerja minimal 5 tahun di ICU. Hasil: sebagian besar pasien kritis di ICU mengalami gangguan kualitas tidur yang disebabkan oleh kondisi pasien, kecemasan dan kebisingan; pemberian earplug dan eyemask kurang efektif bila dilakukan di ICU pada pasien kritis yang menggunakan ventilator tetapi efektif jika diberikan pada pasien kritis di ICU. Ruang ICU dengan kriteria sebagai berikut: Pasien dalam keadaan sadar penuh, tenang, dan menunggu untuk dipindahkan ke ruang rawat inap. Kesimpulan: Hasil penelitian ini diharapkan dapat menjadi acuan bagi perawat dalam menentukan intervensi yang akan diberikan kepada pasien yang mengalami gangguan kualitas tidur dengan memberikan penutup telinga dan penutup mata.

Abstract

Background: Sleep disturbances often occur in patients treated in the ICU. This is because the environment in the ICU tends to be uncomfortable, noisy and tends to be scary for patients and families, both physically and psychologically. The healing process of patients treated in the ICU is influenced by the excellent quality of the patient's sleep. To overcome sleep quality disorders, it is necessary to use earplugs and eye mask techniques because this therapy is also easy to do apart from being cheap and safe. Objective To improve the quality of sleep of critically ill patients in the ICU. Method: This study uses an interview study approach to CI (Clinical Instructure) expert as a participant with minimum educational requirements for Nurses and has a working period of at least 5 years in the ICU. Results: most critical patients in the ICU experience sleep quality disturbances caused by the patient's condition, anxiety and noise; giving earplugs and eyemasks is less effective when carried out in the ICU in critical patients who are on a ventilator but effective if given to critical patients in the ICU. ICU room with the following criteria: The patient is fully conscious, calm, and waiting to be transferred to the inpatient room. Conclusion The results of this study are expected to be a reference for nurses in determining the intervention to be given to patients who experience disturbances in sleep quality by providing earplugs and eye masks.

PENDAHULUAN

Sleep is a basic need for every human being. Besides that, sleep is also an essential factor for human survival; usually, humans sleep for 6-8 hours because a lack of quality sleep can cause decreased physical performance, cognitive function, social function, and mental and physical conditions. Even cause death. The ICU is an inpatient room in a hospital that is equipped with specialized staff and equipment to treat patients with critical illnesses such as coronary heart disease or coronary arteries that are potentially life-threatening with a Dubai prognosis, i.e. the prediction of the disease cannot be determined or is in doubt (Hudivawati, 2019). Sleep disturbances often occur in the ICU because the environment in the ICU tends to be uncomfortable, noisy and tend to be scary for patients and families, both physically and psychologically (Hudiyawati, 2019). Based on this, patients undergoing treatment in intensive care require adequate quality sleep, which can help speed up the healing process of critically ill patients. During sleep, the muscles will relax, and the nervous system will be restored. The sleep quality of patients treated in the ICU is known to be poor due to several factors, including Pain felt by patients, anxiety, side effects of drugs, use of ventilators, intervention and nurse (Arttawejkul, 2020).

Non-pharmacological therapies that can be given to treat sleep disorders in patients in the ICU can also be overcome by modifying the environment, adjusting the lighting system, and helping patients to feel comfortable and calm (Engwall M, 2015). One therapy that can be given is the provision of earplugs and eye masks. Earplugs and Eye Masks are a way that can be used to prevent waking during sleep caused by external influences such as light and noise. Earplugs and eye masks are a relevant and logical way, namely by covering the ears and eye mask masks that can be used to prevent awakening during sleep caused by external stimuli, such as minimizing light entering the patient's eyes and minimizing noise around the patient and environment.

Earplugs and eye masks are nursing interventions that can be done to reduce patient

sleep disturbances to maintain normal circadian rhythms (Demoule, 2017). In addition, earplugs and eye masks have proven to be effective in improving the quality of patient sleep; besides being cost-effective, easy to apply to large groups or individuals, and well tolerated by the body, the use of earplugs and eye masks is also an easy and inexpensive method to improve perception and perception. Sleep quality in patients admitted to the ICU (Mutarobin, 2019).

METHOD

This research uses a descriptive case study conducted on an expert CI (Clinical Instructure) as a participant with a minimum of News education; the method used is the interview. The presentation of the data is adjusted to the selected descriptive case study design. The case studies are presented as narratives and verbal expressions of the case study subjects. Based on the results of field records as supporting data, the respondent's data collection is accompanied by an agreement letter signed by the respondent with an undisclosed name.

RESULTS

The case study results obtained data from CI (Clinical Instructure) with a master's educational background in nursing and have worked in the ICU room of a type A Hospital in Bandung City for 12 years. Based on the results of interviews with nurses obtained, data: Most of the patients treated in the ICU experienced disturbances in the quality of their sleep. The following is the respondent's statement:

"mmmm...as long as I treat patients in the ICU, I often find sleep problems in my patients...mmmm...maybe because they feel pain, right...or maybe because the patient is also worried about the devices attached to his body...".

The intervention of giving eyemasks and earplugs has not been carried out in the ICU room of the hospital, and the following is the respondent's statement:

"eeemmm... so far we haven't done the SOP for using eyemask and earplug... so we haven't done the SOP for this technique yet...".

The SOP applied to critical patients in the ICU to improve the quality of patient sleep is to use relaxant therapy; this is by the following respondent statements:

"Erm...to calm down the average ICU patient, the patient is given a relaxant, because on average, the patients in the ICU are patients who experience anxiety and decreased consciousness attached to a ventilator and are given relaxants. For ICCU patients (intensive cardiology care unit) for cardio, we usually give relaxant drugs such as Alprazolam and morphine when the patient is indeed on the action, especially post thrombolytic and post PCI...".

The influence of sleep quality disorders can cause a decrease in the immune system of critical patients in the ICU; this is to the respondent's statement as follows:

"... actually if we refer to the sleep quality of patients in the ICU... if the target is to improve the quality of sleep, it can be done... because indeed one of the effects of lack of sleep will affect the quality of their immunity... then the illness itself will be greatly affected if the quality of the patient's sleep is not good...".

Eyemask and earplug interventions can be given to critical patients in the ICU with particular criteria; this is according to the respondent's statement as follows:

...so actually, for eyemask and earplug SOP...the technique could have been inserted in the ICU...but maybe with particular criteria for the patient. The first is clear the patient must be aware... the second is that the patient does not experience any disturbances both from the heart system and from the respiratory system... so the patient's condition is really calm... maybe it can be given to patients who are treated in the ICCU room who are stable. Suppose in patients in the ICU, namely after the wining of the ventilator is finished... so the patient is already using a non-rebreathing mask or has been extubated... then

for example, for a patient in the ICCU. In that case, the patient is out of trouble with his heart and is critical of his own breathing...".

Eyemasks and earplugs are less effective for critical patients who are still experiencing decreased consciousness and anxiety because this will make the patient uncomfortable; the respondent's statement is as follows:

"...not an obstacle but from the value of its effectiveness... if there are no honest barriers... but the value of its effectiveness... because the average patient in the ICU is patients with decreased consciousness and anxious patients... not an obstacle but an evaluation value... and taking action on these patients it will be useless later...especially in anxious patients...even though for example he doesn't have a loss of consciousness, but he is restless...then given the therapy the patient will feel uncomfortable...so there are no obstacles obstacles but rather the value of effectiveness...can only be input performed on patients who are stable and waiting to be transferred to the room...".

DISCUSSION

Based on the results of interviews conducted by researchers regarding the provision of earplugs and eyemasks to patients in the ICU, several statements were obtained from respondents, namely: first; that most of the patients treated in the ICU experienced disturbances in the quality of their sleep, secondly; the intervention of giving eyemask and earplugs has not been carried out in the ICU room of the hospital, third; The SOP applied to critical patients in the ICU in improving the quality of sleep of patients is to use relaxant therapy, fourth; the influence of sleep quality disorders can cause a decrease in the immune system of critically ill patients in the ICU, fifth; the provision of eyemask and earplug interventions can be given to critically ill patients in the ICU with particular criteria, sixth; Eyemasks and earplugs are less effective for critical patients who still experience decreased consciousness and anxiety because this will make the patient uncomfortable.

These statements are reinforced by several previous studies, namely that some patients treated in the ICU experience disturbances in the quality of their sleep. Sleep quality disturbances occur because of the patient's illness, the patient's anxiety, the sound of the ventilator and also the intervention carried out by the nurse (Arttawejkul, 2020). Another thing that reinforces that the patient experiences sleep quality disorders is a change in noise from a quiet condition to a noisy state; this will disturb the patient and cause stress (Musriati, 2017). In addition to the sensor overload from noise, lighting was identified as causing sleep disturbances. The change cycle from light to dark will help regulate the patient's biological clock and play an essential role in maintaining the sleep cycle until a person wakes up. Changes in light or dark processes influence significantly sleep because melatonin secretion signals the patient's internal body clock and is an alarm for whether it is time to sleep or wake up. Bright light, lights that are not dim, and lights that are turned on at night significantly disrupt the patient's sleep pattern (Xie, 2019).

Another statement related to the intervention of giving eyemasks and earplugs can improve sleep quality in patients in the ICU; this is in line with research conducted by (Musriati, 2017) that eye masks and earplugs are carried out to facilitate the patient's sleep well-being and recovery. Eyemask and earplug therapy is possible in the ICU because this therapy is a non-pharmacological therapy that is safe, easy and inexpensive (Vevi, 2020). Reinforcing the statement that the intervention of giving eye plugs and earplugs can be applied to particular patients, this is the results of research (Vevi, 2020) that the provision of eyemasks and earplugs can be given to patients with specific criteria, namely patients with full awareness, patients who have been hospitalized for several days ICU and is ready to be transferred to an inpatient room, and patients who are no longer experiencing cardiovascular and respiratory disorders.

Therapy with earplugs and eyemasks is less effective if done in the ICU room because the problems that often occur in the ICU are patients who are not aware, who use ventilation aids, who are restless and who have severe respiratory problems. But it can be done on patients with particular criteria, namely for patients in the ICCU who are stable and patients in the ICU room who have passed the winning ventilator period. So the patient has used a non-rebreathing mask or has been extubated, for example, in a patient in the ICCU room, that is, the patient is out of trouble with cardiac and respiratory problems.

CONCLUSION

Giving earplugs and eyemasks can be done in the ICU room, but the effectiveness is less if they are done on critical patients who are on a ventilator. Earplugs and eyemasks can be done in the ICU with acute patients with particular criteria, namely, in critical patients who are stable, calm, and have passed the winning ventilator period, patients who have used nonrecruiting masks or have been extubated, if acute patients are in the room In ICCU, earplug and eyemask intervention can be performed on patients who are free from cardiac and respiratory problems. The results of this study are expected to be a reference for nurses in determining the intervention to be given to patients who experience disturbances in sleep quality by providing earplugs and eye masks.

REFERENCES

Arttawejkul, P. R. (2020). Effect of Nighttime Earplugs and Eye Masks on Sleep Quality in Intensive Care Unit Patients. *Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care*, 6-10.

Demoule, A. C. (2017). Impact of earplugs and eye mask on sleep in critically ill patients: a prospective randomized study. *Critical Care*, 1-10.

Engwall M, F. I. (2015). Lighting, sleep and circadian rhythm: An intervention study in the intensive care unit. *Intensive Crit Care Nurs*, 1-11.

- Hudiyawati, J. K. (2019). Therapy to improve sleep quality in ICU patients. *Jurnal Berita Ilmu Keperawatan*, 1-10.
- Musriati, N. S. (2017). Faktor-faktor Yang Menyebabkan Gangguan Kualitas Tidur Pada Pasien di Ruang ICU. *Jurnal Intesive Care Unit*, 1-12.
- Mutarobin, M. N. (2019). Penerapan Evidence-Based Nursing Pengaruh Earplug Dan Eye Mask Terhadap Kualitas Tidur Pada Pasien Di ICU. Jurnal Keperawatan Indonesia, 129-138.
- Vevi, H. &. (2020). Efektivitas Penggunaan Earplugs Dan Eye Mask Pada Pasien Di Ruang Intensive Care. . *Jurnal Keperawatan*, 33-40.
- Xie, H. K. (2019). Clinical review: The impact of noise on patients' sleep and the effectiveness of noise reduction strategies in intensive care units. *Critical Care London*, 208-218.