


CONFORTO AMBIENTAL NA PESSOA EM SITUAÇÃO CRÍTICA: PROTOCOLO DE SCOPING REVIEW
CRITICAL PATIENT ENVIRONMENTAL COMFORT: A SCOPING REVIEW PROTOCOL
CONFORT AMBIENTAL EN PERSONAS EN ESTADO CRÍTICO: PROTOCOLO DE REVISIÓN DE ALCANCE

Derek Moura^{1,2}  <https://orcid.org/0000-0002-8719-1094>

Débora Andrade^{1,2}  <https://orcid.org/0000-0002-3138-8867>

Carla Silva^{3,4}  <https://orcid.org/0000-0001-5147-2751>

Igor Pinto^{3,5}  <https://orcid.org/0000-0003-3739-2020>

¹ Escola Superior de Saúde Norte da Cruz Vermelha Portuguesa, Oliveira de Azeméis, Portugal

² Unidade de Saúde da Ilha de Santa Maria, Açores, Portugal

³ Universidade Católica Portuguesa, Porto, Portugal

⁴ Instituto Português de Oncologia do Porto, Porto, Portugal

⁵ Hospital Pedro Hispano, Unidade Local de Saúde de Matosinhos, Porto, Portugal

Derek Moura - derekmoura@hotmail.com | Débora Andrade - 3664@essnortecvp.pt | Carla Silva - enf_carlasilva@hotmail.com |
Igor Pinto - isp.igor@gmail.com



Corresponding Author

Derek Braga Moura

Canada Bento Joaquim, Almagreira
9580-011 – Açores – Portugal
derekmoura@hotmail.com

RECEIVED: 03th August, 2022

REVIEWED: 18th September, 2022

ACCEPTED: 16th November, 2022

PUBLISHED: 31th January, 2023

RESUMO

Introdução: É importante compreender o conceito de conforto como um todo para construir um plano de intervenção assistencial adequado às necessidades da pessoa. Um ambiente calmo e tranquilo potencializa a adesão da pessoa ao tratamento, o que permite melhores resultados.

Objetivos: Desenvolver uma *scoping review* que permita mapear as intervenções de enfermagem que promovem conforto ambiental no sono da pessoa em situação crítica.

Métodos: Revisão da literatura, com base na estratégia metodológica do Instituto Joanna Briggs para *Scoping Reviews*. As bases de dados utilizadas serão: CINAHL Complete, COCHRANE Library Plus, PUBMED, JBI Evidence Synthesis, Scientific Electronic Library Online (SciELO), e como fontes de literatura cinzenta incluirão, OpenGrey, Repositórios Científicos de Acesso Aberto de Portugal (RCAAP) e DART- Europe.

Resultados: Espera-se com a elaboração desta *scoping review* mapear as intervenções de enfermagem que contribuem para o conforto ambiental e promovem o sono em pessoas internadas em cuidados intensivos e em situação crítica, assim como, os indicadores e instrumentos para avaliar o sono presentes nos artigos incluídos.

Conclusões: O desenvolvimento do conhecimento sobre as intervenções de enfermagem em contexto de cuidados críticos irá permitir mapear um conjunto de intervenções que tenham em foco a promoção conforto da pessoa em situação crítica.

Palavras-chave: serviço hospitalar de emergência; cuidados críticos; sono; enfermagem

ABSTRACT

Introduction: It is important to understand the concept of comfort as a whole in order to build a care intervention plan that is appropriate to the needs of the person. A quiet and peaceful environment enhances the person's adherence to treatment, which allows better outcomes.

Aims and objectives: To develop a *scoping review* that makes possible to map the nursing interventions that promote environmental comfort to the sleep of the critically ill person.

Methods: Literature review, based on the methodological strategy of the Joanna Briggs Institute for Scoping Reviews. The databases used will be: CINAHL Complete, COCHRANE Library Plus, PUBMED, JBI Evidence Synthesis, Scientific Electronic Library Online (SciELO); and as sources of gray literature: OpenGrey, Open Access Scientific Repositories in Portugal (RCAAP).

Results: With this scoping review it is expected to map nursing interventions that contribute to environmental comfort and sleep promoting in people in intensive care and in critical condition.

Conclusion: The development of knowledge about nursing interventions in the context of critical care will allow the mapping of a set of interventions that focus on promoting the comfort of the person in critical situation.

Keywords: emergency service, hospital; critical care; sleep; nursing

RESUMEN

Introducción: Es importante comprender el concepto de confort en su conjunto para construir un plan de intervención asistencial adecuado a las necesidades de la persona. Un ambiente tranquilo y pacífico favorece la adherencia de la persona al tratamiento, lo que permite mejores resultados.

Objetivos: Desarrollar una revisión de alcance que permita mapear las intervenciones que promueven el confort ambiental para el sueño de la persona críticamente enferma.

Métodos: Revisión de la literatura, basada en la estrategia metodológica del Instituto Joanna Briggs para *Scoping Reviews*. Las bases de datos utilizadas serán: CINAHL Complete, COCHRANE *Library Plus*, PUBMED, JBI Evidence Synthesis, Scientific Electronic Library Online (SciELO), y como fuentes de literatura gris se incluirán, OpenGrey, Open Access Scientific Repositories of Portugal (RCAAP) y DART – Europe.

Resultados: Con la elaboración de este *scoping review*, se espera mapear las intervenciones de enfermería que contribuyen al confort ambiental y favorecen el sueño en personas hospitalizadas en cuidados intensivos y en situación crítica, así como indicadores e instrumentos para evaluar el sueño.

Conclusiones: El desarrollo del conocimiento sobre las intervenciones de enfermería en el contexto del cuidado crítico permitirá mapear un conjunto de intervenciones que se enfocan en promover el confort de la persona en situación crítica. Como resultado, centrándose en las intervenciones dirigidas al confort, se produce una mejora en la calidad y cantidad del sueño, lo que contribuye al normal funcionamiento y rápida recuperación de la persona en situación crítica.

Palabras Clave: servicio de urgencia en hospital; cuidados críticos; sueño; enfermería

INTRODUCTION

Review of literature

Comfort in healthcare is a widely explored topic. Although there is a considerable amount of scientific literature focused on comfort as a macroconception, there is little research focused on the specific case of environmental comfort in the context of the person in critical condition. Nursing interventions related to the management of environmental factors conditioning the comfort of the critically ill person are also little explored.

The hostile context of the intensive care unit and the emergency service has a major impact on the sleep of the critically ill person. They are life-promoting contexts, but they are also adverse environments. It is important to understand the concept of comfort as a whole in order to build a care intervention plan that is appropriate to the needs of the patient. When approaching comfort, the same is understood as a feeling of absence or relief from a discomfort or any other factor that conditions tranquility and satisfaction (Herdman & Kamitsuru, 2018). There are, according to Katharine Kolcaba's *Theory of Comfort*, three dimensions when approaching comfort (relief, tranquility and transcendence), referring to four contexts (physical, psychosocial, environmental and social) (González Gómez et al., 2017). Having said that, the relevance of exploring the dimensions as well as the different contexts of the comfort of the person in critical situation arises, in particular the dimension of environmental comfort. Quality of sleep is defined as a feeling of well-being or tranquility in and with the environment itself (Cardoso et al., 2020). While this is undoubtedly an important nursing focus (Silva, 2019), there are limited studies addressing sleep in the specific context of the critically ill and examining the role of the nurse in improving it through the promotion of environmental comfort.

There are several environmental factors that can affect sleep quality in critical care context. In critical care units for the critically ill, including emergency care and intensive care, patients develop disorders of the standard and quality of sleep so there may be a worsening of their clinical situation, confusion, feelings of frustration and depression (Valente, 2019). It is therefore essential to promote the sleep the critical patient's sleep to contribute to their quality of life in order to control the problems arising from the change in sleep quality. Many of these conditioners are modifiable and should be addressed by the nursing team through a set of interventions. Although factors inherent to the condition of health or disease have a significant impact on one's sleep and rest, environmental factors should also be monitored as to their effect on the pattern, duration and quality of sleep (Aydin Sayilan et al., 2021).

Being the quality and quantity of sleep related to the patient's recovery, it becomes, by its restorative effects, an aspect of great relevance to the nurse's intervention plan (Valente, 2019).

The person in critical situation presents several changes as a result of the process of adaptation to the unit where he is inserted, since he is in an unknown environment, deprived of his usual routine, subjected to constant factors that will alter sleep" (Valente, 2019). The pattern of sleep is conditioned by circadian rhythm. This plays a central role in regulating the sleep-wake cycle. The replacement of sleep allows, therefore, that it is possible to manage the health/disease process with greater concentration and energy, being fundamental for resting and the recovery/rehabilitation of the person (Valente, 2019). Sleep is promoted by the behaviours and interventions adopted by the professionals, it favours the obtaining of the state of comfort, which in turn aims for the gain of health, being on the other hand, favoured with the promotion of an adequate environment, in response to the need of environmental comfort (Silva, 2019). Therefore, it is crucial that the nurse promotes a favourable environment to the person, as a welcoming environment that provides relief, safety, protection and well-being (Biazim et al., 2020).

Strategies based on carefully reflected interventions harbor health gains, not only for the person but also for the health institutions themselves. A quiet and peaceful environment enhances the person's adherence to treatment, which allows better outcomes (Goode, 2017). Due to the small amount of literature addressing the specificity of environmental comfort and nursing interventions that promote sleep in the context of urgency and/or intensive care, the scope of this type of review favours the exploration of an unfamiliar theme (Munn et al., 2018). Having said that, we opted for a *scoping review* as it allows us to map poorly studied areas of knowledge (Mun et al., 2018).

1. METHODS

The question that guide this research is:

What nursing interventions promote environmental comfort in sleep in the critically ill person?

The objective of the scoping review is to map the nursing interventions that promote environmental comfort to the sleep of the critically ill person.

1.1 Sample

The Scoping Review uses PCC (Population, Concept and Context) mnemonics to construct the guiding question of the research (Munn et al., 2018). This way it is possible to construct a clear title for a review within the Joanna Briggs Institute, facilitating the clear definition of the central and objective issues of Scoping Review (Munn et al., 2018). Therefore, in this review it has been defined as "P," Population, any studies concerning adults in critical situation of illness or critically ill adult person in intensive care units and/or emergency services; "C," Concept, studies that address nursing interventions that contribute to environmental

comfort and promote sleep and "C," Context, studies conducted in intensive care and emergency services. The eligibility criteria were defined in accordance with the methodology of JBI (Peters et al., 2020), including studies available in full text, in Portuguese, English or Spanish, focusing on adult inpatients in the context of intensive care or in a critical situation in the emergency service. No time limit will be set not to restrict search and data collection.

Exclusion criteria will be applied to all outcomes of the population under 18 years of age, pregnant, people with psychiatric conditions and people at the end of life or in palliative care. Letters to the editor, posters, conference summaries and review protocols will not be included because they include little information for this review.

1.2 Data collection instruments and procedures

The research will be conducted in the CINAHL Complete databases, COCHRANE Library Plus, PUBMED, JBI Evidence Synthesis, SciELO and as sources of grey literature it will include, OpenGrey, RCAAP and DART-Europe, with the use of the combination of several terms "Hospital Emergency Service" OR "Critical Care" AND "Sleep" NOT "Children" AND Nurs*. This mesh terms were used to focus the topic under research. Table 1 represents a example of the research done in 17 e 18 of february of 2022, as recommended by the methodology of JBI (Peters et al., 2020)

Table 1 - Example of searching strategy in the CINAHL database (via EBSCO)

SEARCH	STRATEGIES	RESULTS
#1	Hospital Emergency Service	35,291
#2	Critical Care	66,339
#3	Sleep	80,595
#4	Nurs*	995,906
#5	"Hospital Emergency Service" OR "Critical Care" AND "Sleep" NOT "Children" AND Nurs*	34,708
#6	Advanced Research for: AB Abstract	133
#7	Filters: Language – English, Spanish or Portuguese	126

Primary and secondary, qualitative and quantitative studies will be considered. Therefore, experimental and quasi-experimental scientific studies, randomized and non-randomized studies and observational, analytical and cohort studies will be considered. Qualitative studies that focus on qualitative data, projects based on phenomenology, qualitative description and research-action will also be considered. Literature reviews, including systematic or supplementary reviews and opinion articles, will also be included.

ZOTERO 5.0.94 (Corporation for Digital Scholarship and Roy Rosenzweig Center for & History and New Media, 2021) will be used to collect and manage the research and results obtained by removing duplicates. The results of the research and the selection of studies will be schematically presented in table format. Subsequently, the titles and summaries will be reviewed by two independent reviewers in order to determine whether they meet inclusion criteria for the review. Any disagreement will be resolved by consensus or by a third auditor (Peters et al., 2020).

To clearly organize and analyze the results, an example table (table 2) was developed for extracting data from the articles selected by the search strategy.

Table 2 - Example of data extraction table

Article	Author/Year/Title	Objectives	Methods	Content	Interventions	Results/ indicators used in the evaluation
E1						

The selection of studies should be based on inclusion and exclusion criteria. The reasons for excluding sources of evidence that do not meet the inclusion criteria will be mentioned in the review. It should be noted that the results of the study and the study eligibility process will be described.

1.3 Statiscal analysis

There will be no place for statistical analysis, a content analysis will be done on the articles. To presente results you can use the same table or, as you mention, other resources All data resulting from the literature review process will be presented respecting the scoping review’s objectives. They will be used, whenever necessary, as resources that allow the clear interpretation of the evidence extracted through tables and/or schemes.

2. RESULTS

With this scoping review it is expected to map nursing interventions that contribute to environmental comfort and sleep promoting in people in intensive care and in critical condition, as well as any indicators and tools to assess sleep in the included articles. Nevertheless, we expect to obtain from a review of this nature results that can have applicability in the emergency department context. The development of the scoping review will bring benefits to the practice of nursing by identifying a set of nursing interventions described in the literature aimed at promoting sleep in the critically ill person.

3. DISCUSSION

We intend to discuss the results according to these main topics:

- It is important to understand the concept of comfort as a whole in order to build a care intervention plan that is appropriate to the needs of the patient. A quiet and peaceful environment enhances the person's adherence to treatment, which allows better outcomes (Valente, 2019).
- It's important to increase awareness about the impact that sleep promotion can have in patient outcome; Monitoring or using instruments for measuring sleep and rigorous evaluation is necessary to support decision-making and nurses intervention (Grimm, 2020).
- There is a need to exist implemented procedures quality improvement initiatives relating to environmental comfort in sleep promoting in the critically ill person to optimize sleep in critically ill person (Engwall et al., 2017).

CONCLUSION

The synthesis of information that will be obtained through the review method that is planned, as its suitability for the phenomenon to be studied.

The principle limitation of this scoping review is the little information regarding emergency services regarding this topic under study, it's more focused in nursing interventions critical care environment.

It is crucial that nurses promote an environment that provides a sense of relief and well-being. Sleep promotion thus stands out as relevant to the nurse's intervention plan, and it is necessary to develop strategies based on interventions aimed at health gains. The application of instruments to monitor various sleep parameters can allow the assessment of their correlation with comfort and the impact that this has on the construction of the intervention plan for nurses. Therefore, it is essential to understand which instruments exist in the literature and their relevance for decision making. We suggest for future research to increase awareness about the impact that sleep promotion can have in patient outcome and monitoring or use of instruments for measuring sleep and rigorous evaluation of nurses intervention. That will contribute for the development of new knowledge.

As a result, focusing on interventions directed towards comfort, there is an improvement in quality and amount of sleep which contributes to the normal functioning and rapid recovery of the person in critical situation.

ACKNOWLEDGEMENTS

This review will contribute to the achievement of the Master's Degree in Medical-Surgical Nursing: Person in Critical Condition by Derek Moura. We would like to thank the Portuguese Red Cross Northern Health School (*Escola Superior de Saúde Norte da Cruz Vermelha Portuguesa*) (ESSN-CVP) for its collaboration in this academic journey.

REFERENCES

- Aydın Sayılan, A., Kulakaç, N., & Sayılan, S. (2021). The effects of noise levels on pain, anxiety, and sleep in patients. *Nursing in Critical Care*, 26(2), 79–85. <https://doi.org/10.1111/nicc.12525>
- Biazim, S. K., Souza, D. A., Carraro Junior, H., Richards, K., & Valderramas, S. (2020). Tradução e adaptação transcultural para a língua portuguesa usada no Brasil de Richards-Campbell Sleep Questionnaire e Sleep in the Intensive Care Unit Questionnaire. *Jornal Brasileiro de Pneumologia*, 46(4). <https://doi.org/10.36416/1806-3756/e20180237>
- Cardoso, R. B., Souza, P. A. de, Caldas, C. P., & Bitencourt, G. R. (2020). Diagnósticos de enfermagem em idosos hospitalizados à luz da teoria do conforto de Kolcaba. *Revista de Enfermagem Referência*, 5(4), e20066. <https://doi.org/10.12707/RV20066>
- Corporation for Digital Scholarship and Roy Rosenzweig Center for & History and New Media. (2021). Zotero | Your personal research assistant (Zotero 5.0.94). <https://www.zotero.org/>

- Engwall, M., Fridh, I., Jutengren, G., Bergbom, I., Sterner, A., & Lindahl, B. (2017). The effect of cycled lighting in the intensive care unit on sleep, activity and physiological parameters: A pilot study. *Intensive & Critical Care Nursing*, 41, 26–32. <https://doi.org/10.1016/j.iccn.2017.01.009>
- González Gómez, A., Montalvo Prieto, A., & Herrera Lian, A. (2017). Comodidad de los pacientes hospitalizados en unidades de cuidado intensivo e intermedio. *Enfermería Global*, 16(45), 266–294. <https://doi.org/10.6018/eglobal.16.1.260101>
- NANDA International (2018). *Diagnósticos de Enfermagem da NANDA-I: Definições e Classificação - 2018/2020* (T. H. Herdman & S. Kamitsuru, Eds.; 11ª edição). Artmed.
- Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, 18(1), 143. <https://doi.org/10.1186/s12874-018-0611-x>
- Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., Mclnerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, 18(10), 2119–2126. <https://doi.org/10.11124/JBIES-20-00167>
- Silva, S. F. C. da. (2019). *A promoção do sono na pessoa em situação crítica internada em unidade de cuidados intensivos* : [MasterThesis, Escola Superior de Enfermagem de Lisboa]. <https://comum.rcaap.pt/handle/10400.26/32095>
- Valente, C. S. P. (2019). *A Promoção do Sono na Pessoa em Situação Crítica* [MasterThesis, Instituto Politécnico de Setúbal. Escola Superior de Saúde]. <https://comum.rcaap.pt/handle/10400.26/29190>