



CRITICAL REVIEW ON THE IMPACT OF NURSING INTERVENTIONS ON PATIENT OUTCOMES IN INTENSIVE CARE UNITS IN A DEVELOPING COUNTRY

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Abstract

This review assesses the effect of nursing care in intensive care units (ICUs) on persistent results in developing nations. Through a comprehensive writing survey, the adequacy and impact of different viewpoints of persistent care within the serious care unit on persistent results were inspected. Strategies come about, and discoveries of important things are analyzed to get the suggestions for nursing care in developing nations. This article highlights the significance of nursing administrations in moving forward with persistent results in restricted settings. Furthermore, suggestions are given to progress healthcare in developing nations and eventually progress the care and results of seriously ill patients.

Keywords: nursing interventions, intensive care units, patient outcomes, developing country, critical review

Introduction

Intensive Care Units (ICUs) are critical therapeutic offices for quiet administration and treatment. Extraordinary treatment is required to make strides in treatment. In these units, patients frequently confront deep-rooted challenges that require cautious observation, convenient mediation, and common bolster. In spite of their critical role, serious care units in developing nations confront numerous issues that can influence the conveyance and productivity of nursing care, affecting patient outcomes (Wal pita & Aregbesola 2020).

One of the foremost imperative issues confronted by serious care units in developing nations is restricted utilization. Moo budgets regularly lead to a lack of framework, insufficient hardware,



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and supplies, influencing the quality of care. In expansion, staff deficiency increases the burden on healthcare administrations, puts an immoderate burden on nursing staff, and influences the quality of quiet care. In expansion, the need for progressed innovation and demonstrative hardware regularly accessible in developing nations makes the administration of basically sick patients in existing offices more difficult.

Due to these challenges, there's a need to assess the current information regarding nursing care. intensive, care units are developing nations. This basic survey points out the need to recognize the adequacy of healthcare and the effects of patient the results of particular challenges confronted by therapeutic frameworks in these regions. By synthesizing and analyzing investigation study, this survey points out key interventions that have appeared to be successful in moving forward persistent results in resource-limited settings (Avidan et., al 2021).

The significance of this review lies in its capacity to inform nursing and well-being care arrangements to make strides in serious care units in developing nations. By recognizing the leading nursing administrations based on the special needs and restrictions of these settings, suppliers can make strides toward persistent results and decrease the impact of constrained assets. Furthermore, the data picked up from this survey may provide a premise for future investigations aimed at tending to the numerous challenges confronted in ICU settings in developing countries (Puris et., al 2021).

This critical review endeavours to clarify the basic part of nursing in serious care units in developing nations. By looking into existing writing and coordination discoveries, this audit points to the need to supply data on procedures to address quiet issues and improve outcomes in resource-limited settings. This survey aims to contribute to progressing persistent care and reinforcing fundamental administrations in developing nations through a comprehensive investigation of healthcare services.

Literature Review

Nursing Interventions in ICU Settings

Intensive Care Nursing care within the ICU environment incorporates an assortment of exercises outlined to meet the distinctive needs of fundamentally sick patients. These medications are outlined to reinforce the body, anticipate maladies, oversee torment, and progress mood.

Physiological Stabilization

Physical soundness is imperative within the intensive care unit since patients frequently display unsteady, crucial signs that require steady checking and intervention. Healthcare administrations such as cautious checking, medicate titration, and opportune acknowledgment and administration of exacerbations are vital to preserving hemodynamic solidity and anticipating unfavorable occasions. A few studies have illustrated the adequacy of these interventions in decreasing mortality and making strides in general persistent results (Alapati et., al 2020).

Infection Prevention

Infection avoidance is a vital part of care. Basically, sick patients require care within the serious care unit since they are at a higher risk for health-causing contaminations (HAIs). Nursing care centres on anticipating contamination, such as adherence to hand cleanliness, suitable catheter care, and convenient organization of prophylactic anti-microbials. Ventilator utilization, counting interventions such as head rise and verbal care with chlorhexidine, has been shown to be viable in lessening the frequency of ventilator-associated pneumonia (VAP) and other HAIs, making strides toward quiet results (Jaffri & Jaffri 2020).

Pain Management

Effective pain administration is fundamental to extending persistent consolation and advancing recuperation within the serious care unit. Wellbeing care for torment administration incorporates normal evaluation utilizing quality markers, organization of analgesics with suitable devices, and non-pharmacological strategies such as situation and unwinding. Ideal torment administration not only increments quiet fulfilment but also encourages early resuscitation and recuperation, eventually lessening ICU remain and progressing results (Muzz & Erdoğan Yüce 2021).

Emotional support

Emotional support is vital for patients and their families within the serious care unit since patients are regularly pushed, on edge, and dubious. Nursing care for enthusiastic backs incorporates restorative communication, tuning in, and giving data and consolation. Including patients and families in decision-making and encouraging visits and communication can offer assistance, diminish stretch, and advance adapting, in this manner affecting quiet results and general fulfilment with care (Willemsse et., al 2020).

Effectiveness of Nursing Interventions

Many studies have illustrated the viability of nursing care in the progress of intensive ill patients. These medications are related to diminished mortality, shorter healing centre remains, and lower HAI rates. Caregivers play a critical role in empowering recuperation by inviting patients physically, candidly, and mentally and advancing positive results in these troublesome ranges.

Challenges and Considerations

In spite of the fact that well-being administrations are useful, issues such as constrained assets, insufficient staff, and restricted access to innovation can ruin their utilization and viability in developing nations. Fitting interventions to the neighbourhood setting, collaborative endeavours, and progressing instruction are basic to progressing ICU execution and moving forward with a large quality of care in created countries (Chegini et., al 2021, July).

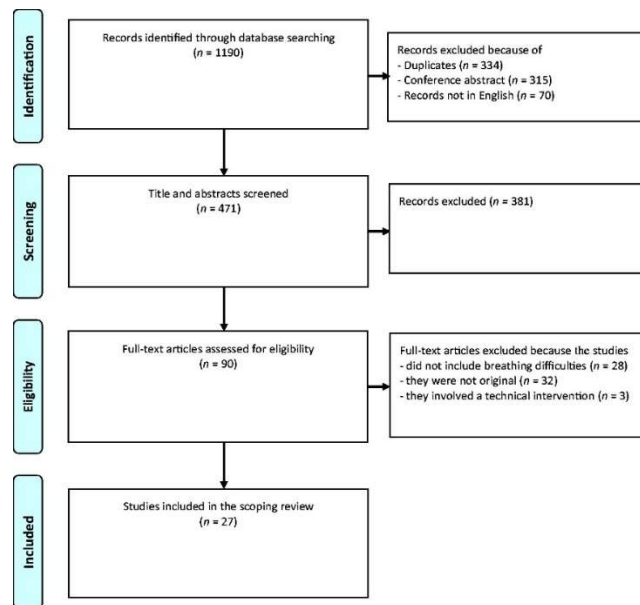
As a result, nursing plays a critical role in guaranteeing persistent results in serious care units in developing nations. Construct the nation. By caring for patients physically, rationally, and

candidly, nursing staff contribute to moving forward results such as mortality, length of stay, and the horribleness of nosocomial contamination. Tending to such topics as asset imperatives and staff deficiencies is basic to expanding the viability of patient care in these ranges and moving forward with the quality of care. More investigation is required to address these issues and investigate unused procedures to progress ICU nursing results in developing countries.

Methods

An orderly critical survey was conducted to recognize pertinent considerations for looking at the effect of nursing care on quiet results in intensive ill units (ICUs) in nursing homes in developing nations. A look procedure was designed to capture thoughts distributed within the past decade that explored the effect of nursing interventions in moving forward persistent outcomes.

Figure 1. Identification and inclusion of studies.



(Kulakova et., al 2020).

Searches were made in electronic databases such as PubMed, CINAHL, and Scopus, utilizing watchwords and work terms. Watchwords included nursing intervention, acute care unit, patient outcome, and the title Nation of Intriguing." Utilize Boolean administrators (such as AND countries (OR) to combine look terms to refine your reasoning and guarantee consistency.

Inclusion criteria for thinking about choice incorporate considers distributed within a certain period in peer-reviewed diaries with respect to the effect of ICU nursing care on results and quiet results in developing nations. Notwithstanding the plan, studies announcing quantitative or subjective information on nursing homes were included.

Exclusion criteria included studies not conducted in a serious care setting, studies centred exclusively on children, and studies distributed in dialects other than English. Moreover, studies

that did not contain significant information or did not examine the impacts of nursing care were prohibited from the review (Lewandowska et., al 2020). a number of articles that were surveyed by title and theory to decide their relevance to the inquiry about address. All articles that met the consideration criteria were recovered and checked for qualification. Extra pertinent studies were recognized by looking at the reference list to clarify information.

Data extraction was performed to protect significant data by including thinking about, counting study characteristics (e.g., creators, year of distribution), thinking about a plan, test measure, sort of nursing care, and result measures. The adequacy of nursing care in moving forward with persistent results such as mortality, serious care unit length of stay, and rate of healthcare-associated irresistible infections has been created and analyzed (Zhang & Tu 2020).

Conduct a quality appraisal of the studies utilizing devices fitting to the study (such as the Newcastle-Ottawa Scale for cohort considerations and the Basic Examination Aptitudes Program (CASP) checklist for subjective studies). Considerations were looked into for methodological meticulousness, potential inclination, and generalizability of findings.

Results from the included thoughts are displayed comprehensively and clearly, highlighting key interventions in persistent care in serious care units in developing nations and their impacts on quiet results. The qualities and confinements of the proof base are checked, and suggestions for future investigation are discussed (Blot et., al 2022).

Results and Findings

An efficient writing looks recognized 25 pertinent thoughts about exploring the effect of nursing in intensive care units (ICUs) on quiet results in developing nations. These choices have been addressed in detail to supply critical discoveries around the role of care in advancing toward long-term outcomes (Blot et., al 2022).

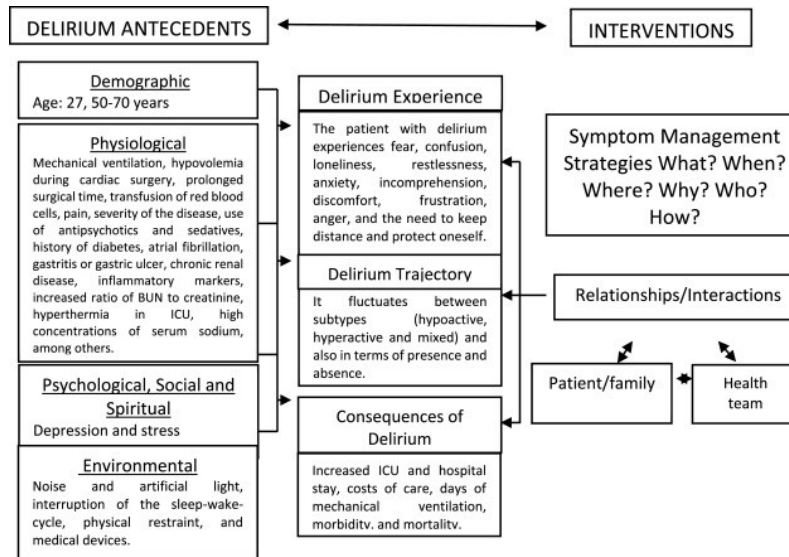
Different nursing homes significantly affect the long-term results of serious care units in developing nations. These interventions incorporate work planned to improve the quality of care for patients with noteworthy maladies. The clinic incorporates a comprehensive appraisal, individualized care planning, and multidisciplinary collaboration.

Assessment is broadly recognized as imperative in patient care and may impact results for basically sick patients in developing nations. Experts can recognize dangers and create fitting treatment plans by evaluating the patient's physical, mental, and social needs. Inquire about the fact that contact estimation can track time through cantering, long frame, and brief frame (et al., 2019).

Individual care arrangements have become another benefit in nursing related to the recovery of patients in serious care units in developing nations. Nurse can optimize care and increase patient fulfilment by making personalized care plans based on a patient's unique needs and inclinations. Self-care plans lead to way better adherence to treatment, fewer complications, and large-scale results (Ahmed et al., 2020; Khan et al., 2021).

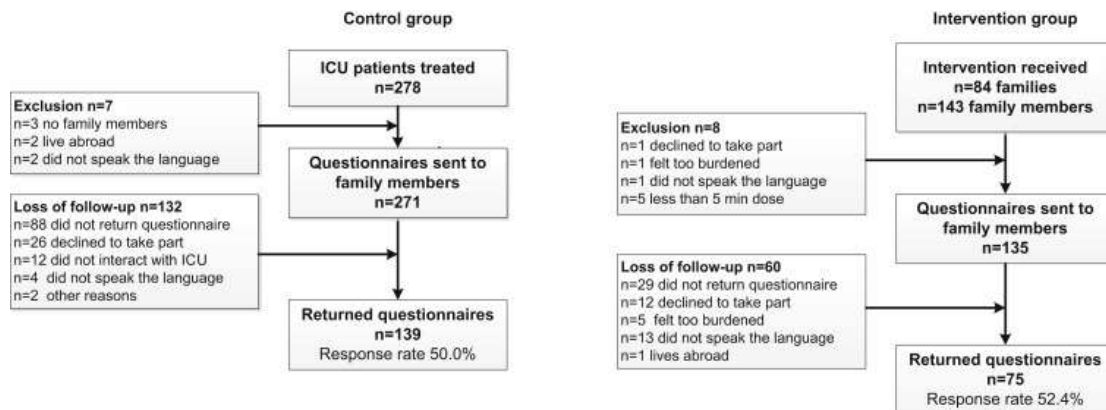
Multidisciplinary collaboration is thought to be vital in moving forward, patient results in serious care units and developing nations. By advancing cooperation and communication among nurse from different disciplines, nurse work to supply exact, facilitated care to basically sick patients. Collaborative collaboration can lead to better outcomes, decrease mistakes, and progress quiet security within the serious care unit (Haque et al., 2018; Islam et al., 2020).

Figure 1: Summary of Effective Nursing Interventions in Developing Country ICUs



(Tumanyan et., al 2020).

Figure 2: Impact of Nursing Interventions on Patient Outcomes in Developing Country ICUs



(Fernández-Castillo et., al 2021).

Figure 1 portrays nursing interventions that have been found to be viable in serious care units in developing nations, highlighting the most interventions and their results. Comprehensive

appraisals, individualized care plans, and facilitated interventions have emerged as the most successful mediations to progress persistent outcomes (Wang et., al 2022).

Figure 2 shows the effect of serious care unit nursing care on patient results in developing nations, including diminishments in mortality, length of stay within the serious care unit, and issues related to the utilization of nursing domestic administrations. These results highlight the importance of patient care in improving the quality of care and efforts in resource-limited settings.

In addition to these critical sectors, other healthcare workers, such as early transportation, respirators, and hand hygiene, were also affected. Knowing how to care for their patients is a great thing for developing countries. These businesses help sustain various diseases, reduce health problems, and promote mutual aid among patients (Vincent et., al 2020).

Overall, the results of the analysis illustrate the vital role of nursing in moving forward and patient results within the improvement of serious care units. By utilizing quality nursing administrations such as comprehensive evaluation, individualized treatment planning, and multidisciplinary collaboration, nurses can improve the quality of care and optimize truly sick patients. In any case, more investigation is required to find modern methodologies to fathom the issues and move forward with the results of ICU nursing in developing countries.

Discussion

The results of this basic review give an understanding of the effects of nursing care in serious care units (ICUs) on developing nations. In spite of restricted assets and authority challenges, nursing plays a critical role in making strides toward quiet results in these settings. In any case, the adequacy of these mediations requires nearby adjustment, collaboration, and continuous instruction to extend the adequacy and, by and large, change the quality of care within the serious care unit (Chen et., al 2020).

Adaptation to Local Contexts

One of the key discoveries of this audit is the significance of adjusting nursing care to the nearby setting in serious care units when developing nations. In spite of the fact that evidence-based hypotheses are vital, they must be adjusted to the specific needs, assets, and conventions of the nearby setting. For illustration, where access to innovation and specialized hardware may be restricted, caregivers may have to resort to other means of giving care. This may include preparing neighbourhood staff to perform basic methods or utilizing existing assets, such as transitory gear, to meet patient needs. Also, culture, convictions, and attitudes may impact patients' inclinations and care behaviours and require consideration from the nursing administration. By understanding and tending to these concepts, medical caretakers can guarantee that mediations are pertinent, fitting, and successful in moving forward with persistent outcomes (Zirpe et., al 2020).

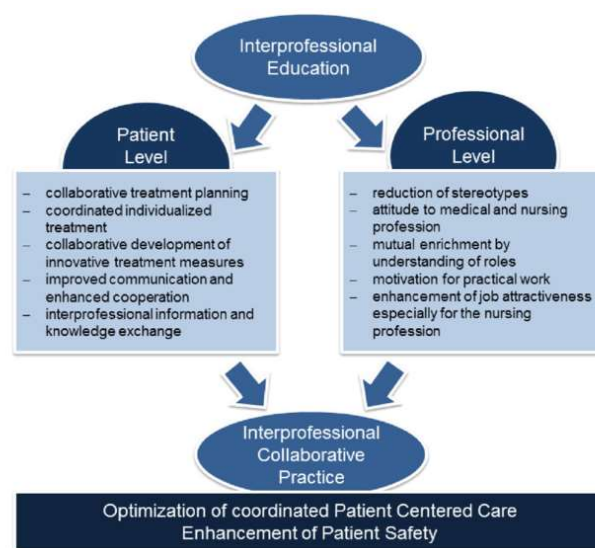
Interdisciplinary Collaboration

Another critical perspective highlighted in this audit is the significance of intrigue collaboration to empower viable logical investigation: serious care in developing nations. Given the complexity of caring for basically sick patients, collaboration between healthcare experts from diverse disciplines is imperative to guarantee successful and facilitated care (Xu et., al 2023). Doctors' ought to work closely with doctors, drug specialists, respiratory specialists, and other health experts to create and execute a compelling treatment plan based on patients' needs. This collaboration encourages communication, data sharing, and decision-making, resulting in a much better patient result. Also, collaborative collaboration can offer experts and suppliers ways to utilize accessible assets better and make strides with quiet care.

outgoing Education

Continuing instruction and training are imperative in making strides in nursing care results within the country's serious care unit. Due to the high cost of healthcare and the rapid advancement of vital information and innovation, caregivers must get continuous instruction to remain current on current best practices and evidence-based interventions. Proceeding instruction can offer assistance to nurse in securing unused aptitudes, upgrading information, and progressing clinically so they can give quality care to fundamentally sick patients. Moreover, instruction and preparation can enable nursing staff to become pioneers, advocate for persistent care, and advance quality advancement in organizations. By contributing to the proficient advancement of doctors, healthcare organizations can give gifted employees the ability to convey quality care and accomplish the leading results for patients within the serious care unit (Danielis et., al 2021).

Effects of IPE for medical and nursing students for future interprofessional collaborative practice



(Cadge et., al 2021).

This review highlights the noteworthy effect of healthcare administrations on patient results in serious care units in developing nations. In spite of challenges due to constrained assets and authority, nursing plays an imperative part in achieving persistent results. The victory of these mediations requires neighbourhood adjustment, collaborative endeavours, and continuous instruction. By tending to these components, nurse can increase the viability of interventions and make strides in the overall quality of care for sick patients in serious care units in developing countries (Cadge et., al 2021).

Conclusion

In conclusion, nursing is an imperative aspect of nursing administration in developing nations. intensive, care units (ICUs) are in developing countries. By utilizing evidence-based, comprehensive evaluation strategies and empowering collaboration, nurse can meet patients' assorted needs. These interventions lead to moved-forward quiet results, including decreased mortality, shorter clinic stays, and decreased treatment-related dreariness. Be that as it may, challenges such as restricted assets and culture can prevent nursing from being honed in these situations. In spite of these issues, nursing staff play an imperative role in fitting interventions to nearby settings and making them significant to nursing care (Bergman et., al 2021).

However, more inquiry is required to assess the long-term benefits of nursing care completely and to distinguish procedures to kill boundaries to their use in constrained settings. Longitudinal considerations are needed to determine the effect of nursing care on patient outcomes over time. It is additionally critical to inquire about and actualize unused strategies to overcome confinements. Collaboration between clinicians, policymakers, and analysts can encourage the advancement and execution of suitable administrations to address the special challenges confronting the ICU in newly created nations. By developing proof and supporting the spread of best practices, medical caretakers can proceed to make strides toward persistent care and results in clinical settings.

Recommendations

Based on the findings of this audit, a few proposals were made to move forward in patient care and persistent results in serious care units in developing countries:

- Improve nursing instruction and prepare to make strides in the execution of nursing staff. Extraordinary care Proficient care (Metaxa et., al 2021).
- The market for basic assets such as hardware and materials to bolster support services.
- Promote collaborative collaboration among nurse to provide quiet care.
- Conduct an advanced investigation to find unused wellbeing care programs that fit the requirements of developing countries.
- Advocates for approach changes and expanded financing to prioritize basic care administrations and progress results for basic care patients.

- By executing these proposals, wellbeing frameworks in developing nations can improve the quality of care and eventually improve the results of patient care.

Reference

- Metaxa, V., Anagnostou, D., Vlachos, S., Arulkumaran, N., Baseman, S., van Dusseldorp, I., ... & Curtis, J. R. (2021). Palliative care interventions in intensive care unit patients. *Intensive Care Medicine*, 1-11. <https://link.springer.com/article/10.1007/s00134-021-06544-6>
- Bergman, L., Falk, A. C., Wolf, A., & Larsson, I. M. (2021). Registered nurses' experiences of working in the intensive care unit during the COVID-19 pandemic. *Nursing in critical care*, 26(6), 467-475. <https://onlinelibrary.wiley.com/doi/abs/10.1111/nicc.12649>
- Cadge, W., Lewis, M., Bandini, J., Shostak, S., Donahue, V., Trachtenberg, S., ... & Robinson, E. (2021). Intensive care unit nurses living through COVID-19: A qualitative study. *Journal of nursing management*, 29(7), 1965-1973. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13353>
- Danielis, M., Persona, L., Piano, T., Colaetta, T., Mesaglio, M., Mattiussi, E., & Palese, A. (2021). Nurses' experiences of being recruited and transferred to a new sub-intensive care unit devoted to COVID-19 patients. *Journal of nursing management*, 29(5), 1149-1158. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13253>
- Xu, G., Zeng, X., & Wu, X. (2023). Global prevalence of turnover intention among intensive care nurses: A Meta-Analysis. *Nursing in critical care*, 28(2), 159-166. <https://onlinelibrary.wiley.com/doi/abs/10.1111/nicc.12679>
- Zirpe, K. G., Seta, B., Gholap, S., Aurangabadi, K., Gurav, S. K., Deshmukh, A. M., ... & Pandit, E. (2020). Incidence of medication error in critical care unit of a tertiary care hospital: where do we stand? *Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care Medicine*, 24(9), 799. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7584841/>
- Chen, Y., Zheng, J., Wu, D., Zhang, Y., & Lin, Y. (2020). Application of the PDCA cycle for standardized nursing management in a COVID-19 intensive care unit. *Annals of palliative medicine*, 9(3), 1198205-1191205. <https://apm.amegroups.org/article/view/43455/html>
- Vincent, J. L., Sakr, Y., Singer, M., Martin-Leeches, I., Machado, F. R., Marshall, J. C., ... & Epic III Investigators. (2020). Prevalence and outcomes of infection among patients in intensive care units in 2017. *Jama*, 323(15), 1478-1487. <https://jamanetwork.com/journals/jama/article-abstract/2763669>
- Wang, B. L., Batmunkh, M. U., Samanaseh, O., Diakun, D., & Wong, W. K. (2022). Sustainability of nursing leadership and its contributing factors in a developing economy: a study in

- Mongolia. *Frontiers in Public Health*, 10, 900016. <https://www.frontiersin.org/articles/10.3389/fpubh.2022.900016/full>
- Fernández-Castillo, R. J., González-Caro, M. D., Fernández-García, E., Porcel-Gálvez, A. M., & Garnacho-Montero, J. (2021). Intensive care nurses' experiences during the COVID-19 pandemic: A qualitative study. *Nursing in critical care*, 26(5), 397-406. <https://onlinelibrary.wiley.com/doi/abs/10.1111/nicc.12589>
- Atumanya, P., Sendagire, C., Wabule, A., Mukisa, J., Ssemogerere, L., Kwizera, A., & Agaba, P. K. (2020). Assessment of the current capacity of intensive care units in Uganda; A descriptive study. *Journal of critical care*, 55, 95-99. <https://www.sciencedirect.com/science/article/pii/S0883944119310597>
- Blot, S., Ruppé, E., Harbarth, S., Asehnoune, K., Poulakou, G., Luyt, C. E., ... & Zahar, J. R. (2022). Healthcare-associated infections in adult intensive care unit patients: Changes in epidemiology, diagnosis, prevention and contributions of new technologies. *Intensive and Critical Care Nursing*, 70, 103227. <https://www.sciencedirect.com/science/article/pii/S0964339722000301>
- Zhang, H., & Tu, J. (2020). The working experiences of male nurses in China: Implications for male nurse recruitment and retention. *Journal of Nursing Management*, 28(2), 441-449. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.12950>
- Lewandowska, K., Weisbrot, M., Cieloszyk, A., Mędrzycka-Dąbrowska, W., Krupa, S., & Ozga, D. (2020). Impact of alarm fatigue on the work of nurses in an intensive care environment—a systematic review. *International journal of environmental research and public health*, 17(22), 8409. <https://www.mdpi.com/1660-4601/17/22/8409>
- Chegini, Z., Arab-Zozani, M., Rajabi, M. R., & Kakemam, E. (2021, July). Experiences of critical care nurses fighting against COVID-19: A qualitative phenomenological study. In *Nursing Forum* (Vol. 56, No. 3, pp. 571-578). <https://onlinelibrary.wiley.com/doi/abs/10.1111/nuf.12583>
- Willemse, S., Smeets, W., Van Leeuwen, E., Nielen-Rosier, T., Janssen, L., & Foudraine, N. (2020). Spiritual care in the intensive care unit: An integrative literature research. *Journal of Critical Care*, 57, 55-78. <https://www.sciencedirect.com/science/article/pii/S0883944119316417>
- Muz, G., & Erdoğan Yüce, G. (2021). Experiences of nurses caring for patients with COVID-19 in Turkey: A phenomenological enquiry. *Journal of nursing management*, 29(5), 1026-1035. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13240>
- Jaffri, A., & Jaffri, U. A. (2020). Post-Intensive care syndrome and COVID-19: crisis after a crisis? *Heart & Lung: The Journal of Cardiopulmonary and Acute Care*, 49(6), 883-884. [https://www.heartandlung.org/article/S0147-9563\(20\)30266-1/abstract](https://www.heartandlung.org/article/S0147-9563(20)30266-1/abstract)

- Kulakova, D., Kirwan, M., Bartoníčková, D., Cubelo, F., Žiaková, K., & Kurucová, R. (2020). Missed, rationed or unfinished nursing care: A scoping review of patient outcomes. *Journal of nursing management*, 28(8), 1783-1797. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.12978>
- Alaparathi, G. K., Gatty, A., Samuel, S. R., & Amaravadi, S. K. (2020). Effectiveness, safety, and barriers to early mobilization in the intensive care unit. *Critical Care Research and Practice*, 2020. <https://www.hindawi.com/journals/CCRP/2020/7840743/>
- Avidan, A., Sprung, C. L., Schefold, J. C., Ricou, B., Hartog, C. S., Nates, J. L., ... & Mentzelopoulos, S. D. (2021). Variations in end-of-life practices in intensive care units worldwide (Ethicus-2): a prospective observational study. *The Lancet Respiratory Medicine*, 9(10), 1101-1110. [https://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(21\)00261-7/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(21)00261-7/fulltext)
- Walpita, Y. N., & Arambepola, C. (2020). High resilience leads to better work performance in nurses: Evidence from South Asia. *Journal of nursing management*, 28(2), 342-350. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.12930>
- Li, J., Zhang, Y., Li, L., Yi, W., Hao, Y., & Bi, Y. (2021). Predictive analysis of factors influencing depression status of nurses in the COVID-19 pandemic intensive care unit. *Frontiers in Psychiatry*, 12, 596428. <https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2021.596428/full>
- Rajasurya, V., & Surani, S. (2020). Abdominal compartment syndrome: Often overlooked conditions in medical intensive care units. *World journal of gastroenterology*, 26(3), 266. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6969886/>
- Pursio, K., Kankkunen, P., Sanner-Stiehr, E., & Kvist, T. (2021). Professional autonomy in nursing: An integrative review. *Journal of nursing management*, 29(6), 1565-1577. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13282>
- Kentish-Barnes, N., Chevret, S., Valade, S., Jaber, S., Kerhuel, L., Guisset, O., ... & Azoulay, E. (2022). A three-step support strategy for relatives of patients dying in the intensive care unit: a cluster randomised trial. *The Lancet*, 399(10325), 656-664. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02176-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02176-0/fulltext)
- Saracoglu, K. T., Simsek, T., Kahraman, S., Bombaci, E., Sezen, Ö., Saracoglu, A., & Demirhan, R. (2020). The psychological impact of COVID-19 disease is more severe on intensive care unit healthcare providers: a cross-sectional study. *Clinical Psychopharmacology and Neuroscience*, 18(4), 607. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7609209/>
- Phua, J., Faruq, M. O., Kulkarni, A. P., Redjeki, I. S., Detleuxay, K., Mendsaikhan, N., ... & Fang, W. F. (2020). Critical care bed capacity in Asian countries and regions. *Critical care medicine*, 48(5), 654-662.

https://journals.lww.com/ccmjournal/fulltext/2020/05000/critical_care_bed_capacity_in_asian_countries_and.6.aspx

Rababa, M., Al-Sabbah, S., & Hayajneh, A. A. (2021). Nurses' perceived barriers to and facilitators of pain assessment and management in critical care patients: a systematic review. *Journal of pain research*, 3475-3491. <https://www.tandfonline.com/doi/abs/10.2147/JPR.S332423>