





### Review article

# The perfect nurse-patient relationship and its impact on the care plan and patient outcomes

### Jana Omar Ali<sup>1</sup>, Amjad Mohammed Ali<sup>1</sup>, Lama Majed Ahmed<sup>2</sup>, Osama Ali Yahya<sup>3</sup>, Ali Hadi Ali<sup>3</sup>, and Hattan Ibrahim Hasan <sup>3</sup>

<sup>1</sup> Nursing student at Jazan University, Saudi Arabia.

- <sup>2</sup> Nursing student at the faculty of nursing, Jazan University, Saudi Arabia.
- <sup>3</sup> Nursing students at the Faculty of Nursing, Jazan University, Saudi Arabia

\*Correspondence; Jana Omar Ali: itsjanafathi@gmail.com

#### DOI: 10.21608/jbaar.2024.295122.1050

#### Abstract

The nursing relationship is a crucial therapeutic interpersonal process that collaborates with other human processes to enhance health in individuals and communities. It has been reported that the nurse-patient relationship is universally recognized as the fundamental core of nursing. This study introduces an allencompassing theory that examines the dynamics of the relationship, with a specific emphasis on the viewpoint of the patient. This phenomenon is characterized as an ever-evolving and dynamic state of being that is distinguished by a sense of spiritual oneness, seen as a potent linkage of energy. The main characteristic of this connection is the vital nurse-patient interaction, which greatly enhances the patient's sense of empowerment. The nurse-patient relationships and good interactions necessitate the nurse to possess perceived qualities of kindness, sagacity, and skill in making connections with persons. This review aims to summarize the main concept, elements, and role of nurses and patients in constructing perfect relationships giving a significant impact on patients' outcomes and quality of care.

**Keywords:** nurses - patients - nurse-patients' relationship - care -patient's outcomes - therapeutic nursepatients - nurses-patients communication.

#### Introduction

The 1989 publication by the National League for Nursing noted that psychologists can offer useful insights into how caring affects a person's physical [1], mental [2], and functional well-being both during and after the experience [3]. The nursepatient connection involves complex attitudes and behaviors that have ethical and deontological implications [4]. Although there is an ongoing debate in the scientific literature on the definition and characterization of this idea, it has been linked to improvements in patient health outcomes. This essay aims to clarify the concept of nurse-patient interaction [5]. The nurse-patient connection is commonly perceived as a beneficial relationship that seeks to empower individuals in addressing a specific health-related issue by enabling them to identify and, if possible, select the most optimal strategy to manage it [6].

This relationship involves the establishment of interpersonal ties between the nurse and the patient or their family [7], which foster attitudes that support communication and involvement. This scenario involves a transaction that depends on face-to-face interaction and mutual influence [8,9]. The nursepatient relationship has been reconceptualized as a 'caring interaction' since it is based on the connection between the nurse and the patient or the patient's family. Moreover, the reactions and actions of the patient have an impact on the nurses, and vice versa [10]. The nurse is responsible for delivering care to the individual or their family. Therefore, the main goal of these nursing exchanges is to engage in the act of providing care in its most genuine and unadulterated state [11].

The nurse-patient relationship is essential for delivering care, given its historical [12], clinical [13], methodological [14], and deontological importance as the evolution of the nursing profession has been influenced by an emphasis on

the patient-nurse connection as the fundamental basis of healthcare [15]. This evolution has been impacted by various perspectives, including the interactive-integrative paradigm of nursing. According to this paradigm, individuals should be regarded as whole entities that require engagement with nurses [16,17]. Within this context, a specialized group of nursing theorists known as the 'school of interaction' was formed [18]. Their focus is on studying the interaction between nurses and patients and there are five main elements used to describe the attributes and features of the nursespatients' relationships (Figure 1).

Therefore, this review aims to summarize the main concept, elements, and role of nurses and patients in constructing perfect relationships giving a significant impact on patients' outcomes and quality of care.

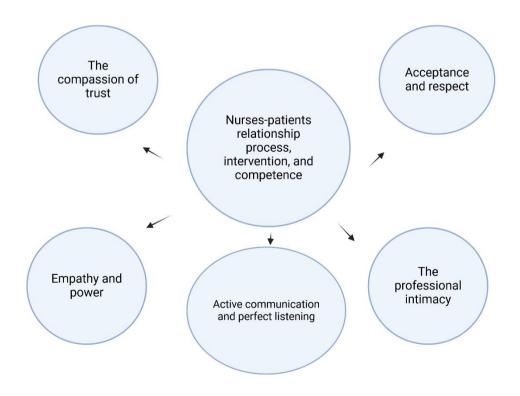


Figure 1. The concept map for elements of the nurse-patient relationship [19-21]

## The perfect nurse-patient relationship and its impact on the care plan and patient outcomes

The nursing relationship is a crucial therapeutic interpersonal process that collaborates with other human processes to enhance health in individuals and communities [22]. The therapeutic alliance is a distinct and special relationship between a professional and a service user, characterized by a connection [23]. Every combination strong necessitates ongoing endeavors to build and sustain this bond. Nurses view the establishment of the alliance as requiring a combination of interpersonal professional skills and personal life experiences, whereas clients see it as crucial for fostering collaboration and a feeling of understanding. The subject has recently garnered heightened scrutiny [24], namely regarding consumer models that facilitate individual rehabilitation through therapeutic rapport [25-27].

The therapeutic alliance can be quantified utilizing various instruments from the viewpoints of both the expert and the recipient of the service, with significant disparities between the two. When therapeutic connections are becoming more distant, the alliance and its associated factors continue to be essential for promoting change, regardless of whether treatment takes place through telephone, online communication, or even with the assistance of a completely automated chatbot [28-30].

Traditionally, the main area of research has been to understand and improve the relationship between therapist and client, especially in the context of individual psychotherapy sessions [31]. Contrary to direct therapeutic positions, there are staff members who assume the role of care coordination or function as a key worker. These experts evaluate, involve, and coordinate healthcare for individuals [32].

Each of these jobs necessarily necessitates the creation and maintenance of a prosperous relationship [33]. Consequently, research has prioritized the task of defining and analyzing the relationship as it manifests in many forms, while also investigating its correlation with outcomes in

other circumstances. In the field of secondary care community services, nursing workers have the duty of arranging and delivering focused therapy interventions. Although they are short, these interventions need the adept building of a robust relationship [34].

In this environment, nurses strive to foster a sense of mutual comprehension, reciprocity, synchronization, and a sense of belonging within a collective with their clients. However, the clients prefer to be acknowledged and engaged on an individual level rather than solely as beneficiaries of a service [35]. This requires the skillful application of one's strengths and attributes. Service users highly value the therapeutic contacts they engage in with care coordinators in community settings, regarding them as crucial for their rehabilitation, even more so than the specific care plans. The complex protocols pose challenges for the personnel as a result of burnout, struggles in fostering patient involvement, and ineffective collaboration. Moreover, the organizational structures and responsibilities impose limitations on the extent of care that nurses can provide [36-38].

The nursing staff plays a vital role in the provision of mental health treatment, especially in inpatient wards. Within these circumstances, patients allocate the majority of their time to engaging with nurses [39], and the connection between them is regarded as crucial for the advancement of therapeutic outcomes. There is a perceived correlation between therapeutic connections and the quality of care [40]. То effectively navigate these challenging circumstances, it is crucial to employ a balanced blend of tactics, foster personalized understanding, and leverage one's capabilities to facilitate the patient's recovery-oriented advancement [41-43].

Initial advancements have been made in the promotion of successful relationships. Research indicates that clinical supervision can effectively prevent staff burnout [44], while psychologically informed case discussions can enhance positive attitudes towards service users and reduce staff selfblame [16]. Utilizing psychological models in teambased training can boost staff skills and ultimately result in improved patient engagement with the However, there is currently service. no comprehensive and evaluative summary of interventions specifically targeting the important element of treatment called the therapeutic alliance, especially for the group of individuals who can and are positioned to offer empathetic and supportive relationships: nurses [45].

Item	Considerations
Commence by familiarising the nurse himself with	Initiating a handshake at your initial meeting is
the patient and consistently using her name when	often a reliable way to quickly establish trust and
engaging in conversation.	respect.
	Ensure that your patient is given adequate privacy
	while receiving care. Ensure that her basic needs
	are met, including the relief of pain or any other
	sources of discomfort.
Practice active listening when interacting with	To ensure understanding of her concerns, repeat the
patient.	spoken information. For example, "Mrs. Smith, you
	mentioned your concern about how quickly your
	bone pain will be addressed?" Nevertheless,
	employing repetitive statements excessively
	throughout a conversation may create the
	perception in your patient that you are not sincerely
	focused on her.
Maintain direct eye contact with the other	Nurses must remember that an excessive amount of
individual.	eye contact can be overwhelming and perceived as
	threatening. Periodically, exhibit a smile and nod
	affirmatively while engaging in conversation with
	your patient.
Being calm in an intentional way	Convey information using language that she can
	understand. Make sure that nurses' vocal inflection
	effectively communicates the message "I genuinely
	care about your welfare."
Maintain acceptable professional boundaries	Some individuals may necessitate further
	therapeutic interaction, such as hand-holding and
	embracing, while others may prefer to abstain from
	physical contact. Consistently demonstrating
	tolerance for cultural diversity is of utmost
	importance.

#### Table 1. The therapeutic nurse-patient relationship's main considerations

#### **Role of patient**

There is a significant agreement among authors that the patient is generally seen as a passive entity. Consequently, it is widely acknowledged that a "good patient" is someone who assumes a completely submissive attitude, abstains from asking or objecting, and adheres to all directions [46]. This viewpoint assigns an excessive level of significance to the professional's authority concerning the patient [47].

The patient's passive status is frequently associated with paternalism, which regards the patient as a subordinate who must rigidly comply with therapeutic orders. Professionals believe that a considerable percentage [48], or the majority [36], of patients, lack the necessary education and cultural background to actively engage in a fair professional relationship. This leads to the passive position [49].

It has been revealed that patients consider trust to be a crucial element in their relationship with the nurse [32]. The patient entrusts the nurse with confidential information and delegates decisionmaking authority, assuming a subservient position. Many historians credit the Oath of Hippocrates as the source of this function [50], as it significantly stresses the healthcare practitioner's authority, skill, and moral traits, but fails to consider the patient's autonomy [11].

#### **Role of nurses**

The bibliography differentiates between two discrete roles in nursing: the function of a specialist nurse and the role of a nurturing nurse [50]. Most authors describe nursing as primarily empirical, emphasizing the relevance of cognitive and behavioral abilities, as well as the integration of values and beliefs [32], while considering them to be of lower significance. Some authors argue that the expert's role is restricted to collecting fragmented information specifically related to the biological aspects of the patient. Conversely, a skilled practitioner employs their expertise, professional background, and clinical skills to cater to the specific objectives of every patient [21]. Consequently, there is a wide range of opinions regarding the nurse's role as an expert. Authors explore the nurse's mother role, which encompasses a degree of closeness that may be seen as excessive or is based on the concepts of adherence, collaboration, concordance, and compliance [48].

Several studies emphasize the role of nurses as mere facilitators of treatment regimens, presuming that patients will adhere provided they comprehend. This underscores the crucial role of nurses in providing care and support [51].

#### **Types of nurse-patient Relationship**

The research focuses on analyzing the nurse-patient characteristics of interaction. specifically exploring concepts such as adherence, empowerment, relationship quality, helplessness, and authority [52]. Compliance refers to the voluntary act of conforming to and acquiescing to the demands or requests of another person. Furthermore, apart from compliance, other notions that have been considered include empowerment and association. These studies characterize the nurse-patient relationship as an interactive process in which the patient's independence is honored, enabling them to make informed choices after taking into account the guidance given by healthcare professionals [17,21,53].

The level of engagement between healthcare professionals and patients is a crucial factor in facilitating the advancement of patient-centered care. Many believe that the nature of the relationship directly affects the quality of care and is crucial for the effectiveness of nursing practice [12,54].

It analyzed the relationship between nurses and patients to the difficulties nurses encounter while trying to accurately determine the patient's genuine needs in the absence of clinical practice guidelines or evidence-based practice support [22]. Furthermore, this condition of impotence occurs when the patient is unable to receive the expected standard of care from healthcare professionals [52].

An idea that is commonly addressed in literature is the concept of power. The notion was formed as bilateral, with the professional gaining a "reference power" over the patient, while the patient sees the professional as a "frame of reference" [53]. The patient's perception of the professional will be influenced. An adept individual who exercises authority in the decision-making process within the field of caregiving. The healthcare system has implemented strategies aimed at improving the humanization of care and raising the standard of healthcare. Presently, the management techniques fail to provide the patient with genuine autonomy in decision-making [16,31,54].

The nurse-patient relationship is a determinant that impacts the patient's autonomy. Analyzing the different types of encounters allows us to cultivate novel viewpoints on patients' capacity to make decisions in a healthcare setting [55]. An analysis of nursing records and conversations among nurses has uncovered that our professional practice does not completely prioritize the needs and welfare of the patients [56].

Efficient nurse-patient contact reduces the length of hospital stay and improves the quality and satisfaction of both individuals involved [39]. Nevertheless, even though the patient has a greater degree of participation in their decisions, the quality of the relationship relies on the patient's subordinate position [57].

A detrimental nurse-patient relationship has an adverse effect on the quality of care and limits the patient's autonomy [58]. A challenging patient is defined as an individual who exhibits a strong inclination to seek information, seeks autonomy in decision-making, occasionally disregards expert opinions, and experiences a strained relationship with healthcare practitioners [59]. The main trust in nurse-patient relationship characteristics

#### Trust is the critical item for building relationships

The process of establishing trust was described as a constant and dynamic progression, beginning with a feeling of comfort and evolving into the development of a robust bond, which cannot be accelerated [16]. The process of cultivating trust between nurse practitioners and black female patients involves the mutual understanding, customization, and reciprocal sharing of personal information. Patients with chronic illnesses see a shift in their trust from a general state of innocence to a more focused and restructured state [60]. The restored trust was no longer characterized by blind faith in the system's kindness; rather, it was defined by a confident expectation of what the healthcare professional might offer. Elderly individuals exhibit a level of confidence in nurses that might be characterized as "naive trusting [41]." However, the patient's satisfaction with the high standard of nursing care resulted in a substantial growth in trust, leading to the formation of strong and deep trusting relationships [53]. Trust is established by the assessment of the alignment between the anticipated and observed behaviors of another person. This evaluation encompasses dynamic encounters, encountering ambiguity and erosion of confidence, and ultimately reestablishing trust [61]. The process that home care nurses and elderly consumers undergo was identified as consisting of four distinct phases: initial trustbuilding, establishing a connection, negotiating, and assisting [16,44,60].

## Trust is a phenomenon that occurs inside relationships

Trust was regarded as the fundamental basis of every therapeutic encounter and an essential element of nurse-patient partnerships [62]. A generally acknowledged trait is present in the contact between a nurse and children, as well as between a nurse and parents. The nurse's responsibility in cultivating a trusting rapport with patients was seen as vital for continuous care and treatment [56]. Trust is not an innate attribute possessed or granted to nurses; instead, it is something they must attain via continuous exertion and perseverance. For trust to be built, a reciprocal connection is required, where one individual exhibits trustworthiness and the other individual places their trust in them [59]. The trust in nurse-patient relationships was described as a mutual and reciprocal phenomenon. The importance of reciprocity in nurse-patient relationships in palliative care was acknowledged [63]. Their research has demonstrated that nurse-patient interactions evolve from a purely professional association to a reciprocal comprehension, where the professional dimension involves fulfilling mandatory responsibilities and expectations, and gradually transforms into a relationship of trust and interdependence [64]. The nurse-patient relationship is defined by the nurse valuing the patient's humanity above their function as patient while maintaining a professional а perspective [26]. Conversely, the patient exhibits deference toward the nurse's specialized knowledge and gladly confides in them [57].

#### Trust is a delicate and uncertain phenomenon

Various research has indicated that trust is a delicate phenomenon [18]. The study uncovered the manifestation of distrust in the nurse-patient relationship inside a psychiatric department, as well as strategies for fostering trust in an environment marked by distrust. Both trust and distrust were revealed to be delicate phenomena that can readily transition towards their opposites [58]. Within healthcare environments, pediatric nurses' experiences have highlighted the presence of a paradoxical perspective of trust. While the significance of upholding trust is recognized, there is also a recognition that trust may need to be compromised to perform distressing or intimidating treatments on children [26]. According to Bricher18, this duality can be understood as two aspects of a trusting relationship: the trust that enables a procedure to be carried out with minimum discomfort, and the trust that enables the relationship to be restored after an unpleasant operation [59].

#### Facilitating nurse-patients trusted relationships

Promoting patient-centered care and communication can be achieved through a range of approaches, such as fostering strong nurse-patient relationships [60]. Effectively overcoming practical communication barriers in nurse-patient interaction is a crucial factor patient-centered in promoting care and Effective communication. therapeutic communication is of utmost importance in healthcare nursing [61]. Therefore, nurses, managers, caregivers, patients, and healthcare administrators must emphasize its use in the care process, as it is a vital component of the treatment itself [54]. Research has demonstrated that active listening is crucial for healthcare practitioners to overcome many obstacles to patient-centered care and successful communication [62]. While it is important to quickly address medical responsibilities while caring for someone, the ability to actively listen is essential, significant, and beneficial. Nurses possess the ability to effectively discern patients' care requirements and preferences, while also alleviating their anxieties and frustrations, by attentive listening to their problems [54,61].

Another factor that enhances patient-centered care is the ability to comprehend patients and their unique requirements, demonstrate empathy and attentive attitudes, convey warmth and respect, and treat patients and caregivers with dignity and compassion as equals. Attending, which involves nurses being present and attentive to patients, is considered a patient-centered care strategy [27,64]. Nurses are required to exhibit genuineness and compassion, particularly when managing challenging workloads. Engaging in empathy, attentively listening, demonstrating respect, and treating patients with dignity are fundamental elements of nursing and caregiving. The themes presented are acknowledged in the Code of Ethics for Nurses and are being

stressed more in the ongoing revision of the code [12,55,59].

Furthermore, involving patients and caregivers in the care process by sharing information, seeking their input, and working together with them is an additional element that promotes patient-centered [64]. care and communication Efficient communication and teamwork between patients and caregivers are essential to reduce misunderstandings and misconceptions during the care process [65]. Sharing information aids patients and caregivers in gaining further insights into their health conditions and the necessary treatment. Arguments suggest that fostering transparent communication between healthcare practitioners and patients, as well as their families, is crucial for improving patient-centered treatment [38]. Conflicts arise when patients or their families are deprived of knowledge or participation in the care process [67].

Essentially, the primary emphasis of health policy should be on enhancing healthcare practices and administration to foster patient-centered care and efficient communication. These limitations may require healthcare facilities to alter their management protocols [68], at the very least. Nurse managers and healthcare administrators must carefully assess nursing and care practices to guarantee the complete enforcement of the Nurses' Code of Ethics and the patients' rights [68]. The primary issues that impact care practices and decision-making include limitations in resources, insufficient staffing, and ethical quandaries. However, by prioritizing patients and providing them with dignity and respect, the majority of obstacles and limitations associated with patient-centered care will decrease [37,44]. To enhance patient-centered care, it is crucial to equip nurses with the requisite interpersonal communication skills through consistent in-service training, thereby empowering them. In addition, offering assistance to assist nurses in overcoming emotional obstacles and establishing distinct limits during nurse-patient interactions can further enhance patient-centered care practices [31].

Based on the previous discussion, it is clear that there are three crucial factors that nurses, patients, and caregivers must consider to improve patientcare: acknowledging centered the patient's individuality and recognizing the care provider as both an individual and a trustworthy advisor. Concerning the primary element [41,56,60], healthcare professionals are required to warmly receive patients, attentively listen to their concerns, effectively communicate relevant information, obtain their consent, and demonstrate respect while delivering care. Within the second dimension, it is imperative to acknowledge and value the healthcare provider as an individual [64-67], and it is necessary any unfavorable perceptions rectify to or misconceptions regarding care providers [68,69]. Care providers should prioritize the establishment of strong relationships with patients rather than excessively emphasizing their expertise. This technique allows them to fully understand the specific needs and concerns of each patient [70-72]. Patients and caregivers should regard care providers as reliable individuals who value patient confidence and promote patient involvement in treatment discussions. Patients and caregivers must understand that nurses and other care professionals prioritize the well-being of the patient and strive to meet their care needs and promote their recovery [8,73].

#### Conclusion

It is crucial to assess and construct a perfect nursepatient relationship as the nurse-patient relationship serves as a vital mechanism for aiding patients and improving compliance with treatment by establishing a link between the individual in need of care and the caregiver. It is imperative to employ all accessible tools to educate students on the optimal methods for managing this relationship at university. This is due to its crucial contribution to the nursing profession advancing in multiple areas. Moreover, the process of acquainting oneself with patients is a crucial contact as it lays the groundwork for the therapeutic nursepatient relationship. The expression of improved patient welfare. The organizational and working contexts and conditions have an impact on therapeutic interactions in nursing. A few limitations were reported as it has been found that there is a lack of quantitative research specifically focused on investigating trust in the nurse-patient connection. Assessing trust can be difficult because it is influenced by multiple factors that shape its definition, comprehension, and perception. Therefore, it is crucial to carry out much research discussing the organizational characteristics and their association with trust in nurse-patient relationships.

#### **Conflict of interest**

There are no competing financial interests declared by the authors.

#### Funding: none

#### References

- Molina-Mula J, Gallo-Estrada J. Impact of nurse-patient relationship on quality of care and patient autonomy in decision-making. International journal of environmental research and public health. 2020 Feb;17(3):835.
- Lee SE, Scott LD, Dahinten VS, Vincent C, Lopez KD, Park CG. Safety culture, patient safety, and quality of care outcomes: a literature review. Western journal of nursing research. 2019 Feb;41(2):279-304.
- Griffiths P, Maruotti A, Saucedo AR, Redfern OC, Ball JE, Briggs J, Dall'Ora C, Schmidt PE, Smith GB. Nurse staffing, nursing assistants and hospital mortality: retrospective longitudinal cohort study. BMJ quality & safety. 2019 Aug 1;28(8):609-17.
- Khan N, Jackson D, Stayt L, Walthall H. Factors influencing nurses' intentions to leave adult critical care settings. Nursing in critical care. 2019 Jan;24(1):24-32.
- Karaca A, Durna Z. Patient satisfaction with the quality of nursing care. Nursing open. 2019 Apr;6(2):535-45.

- Sturm H, Rieger MA, Martus P, Ueding E, Wagner A, Holderried M, Maschmann J, WorkSafeMed Consortium. Do perceived working conditions and patient safety culture correlate with objective workload and patient outcomes: A cross-sectional explorative study from a German university hospital. PloS one. 2019 Jan 4;14(1):e0209487.
- Jun J, Ojemeni MM, Kalamani R, Tong J, Crecelius ML. Relationship between nurse burnout, patient and organizational outcomes: Systematic review. International journal of nursing studies. 2021 Jul 1;119:103933.
- Hartley S, Raphael J, Lovell K, Berry K. Effective nurse-patient relationships in mental health care: A systematic review of interventions to improve the therapeutic alliance. International journal of nursing studies. 2020 Feb 1;102:103490.
- Cho SH, Lee JY, You SJ, Song KJ, Hong KJ. Nurse staffing, nurses prioritization, missed care, quality of nursing care, and nurse outcomes. International Journal of Nursing Practice. 2020 Feb;26(1):e12803.
- Joo JY, Liu MF. Nurses' barriers to caring for patients with COVID-19: a qualitative systematic review. International nursing review. 2021 Jun;68(2):202-13.
- Griffiths P, Saville C, Ball J, Jones J, Pattison N, Monks T, Safer Nursing Care Study Group. Nursing workload, nurse staffing methodologies and tools: A systematic scoping review and discussion. International journal of nursing studies. 2020 Mar 1;103:103487.
- Vahedian-Azimi A, Hajiesmaeili M, Kangasniemi M, Fornés-Vives J, Hunsucker RL, Rahimibashar F, Pourhoseingholi MA, Farrokhvar L, Miller AC. Effects of stress on critical care nurses: a national cross-sectional study. Journal of intensive care medicine. 2019 Apr;34(4):311-22.

- Chen YC, Guo YL, Chin WS, Cheng NY, Ho JJ, Shiao JS. Patient–nurse ratio is related to nurses' intention to leave their jobs through mediating factors of burnout and job dissatisfaction. International journal of environmental research and public health. 2019 Dec;16(23):4801.
- Hugelius K, Harada N, Marutani M. Consequences of visiting restrictions during the COVID-19 pandemic: An integrative review. International journal of nursing studies. 2021 Sep 1;121:104000.
- 15. Kackin O, Ciydem E, Aci OS, Kutlu FY. Experiences and psychosocial problems of nurses caring for patients diagnosed with COVID-19 in Turkey: A qualitative study. International Journal of Social Psychiatry. 2021 Mar;67(2):158-67.
- Lotfi M, Zamanzadeh V, Valizadeh L, Khajehgoodari M. Assessment of nursepatient communication and patient satisfaction from nursing care. Nursing open. 2019 Jul;6(3):1189-96.
- Kwame A, Petrucka PM. A literature-based study of patient-centered care and communication in nurse-patient interactions: barriers, facilitators, and the way forward. BMC nursing. 2021 Sep 3;20(1):158.
- 18. Asif M, Jameel A, Hussain A, Hwang J, Sahito N. Linking transformational leadership with nurse-assessed adverse patient outcomes and the quality of care: assessing the role of job satisfaction and structural empowerment. International journal of environmental research and public health. 2019 Jul;16(13):2381.
- Moorhead S, Swanson E, Johnson M. Nursing Outcomes Classification (NOC)-E-Book: Nursing Outcomes Classification (NOC)-E-Book. Elsevier Health Sciences; 2023 Mar 16.
- 20. Aiken LH, Sloane DM, Ball J, Bruyneel L, Rafferty AM, Griffiths P. Patient satisfaction

with hospital care and nurses in England: an observational study. BMJ open. 2021 Jan 1;8(1):e019189.

- 21. Lake ET, Sanders J, Duan R, Riman KA, Schoenauer KM, Chen Y. A meta-analysis of the associations between the nurse work environment in hospitals and 4 sets of outcomes. Medical care. 2019 May 1;57(5):353-61.
- Ulrich B, Barden C, Cassidy L, Varn-Davis N. Critical care nurse work environments 2018: findings and implications. Critical Care Nurse. 2019 Apr 1;39(2):67-84.
- Dall'Ora C, Ball J, Reinius M, Griffiths P. Burnout in nursing: a theoretical review. Human resources for health. 2020 Dec;18:1-7.
- 24. Hessels AJ, Paliwal M, Weaver SH, Siddiqui D, Wurmser TA. Impact of patient safety culture on missed nursing care and adverse patient events. Journal of nursing care quality. 2019 Oct 1;34(4):287-94.
- 25. Moura EC, Lima MB, Peres AM, Lopez V, Batista ME, Braga FD. Relationship between the implementation of primary nursing model and the reduction of missed nursing care. Journal of Nursing Management. 2020 Nov;28(8):2103-12.
- 26. Steindal SA, Nes AA, Godskesen TE, Dihle A, Lind S, Winger A, Klarare A. Patients' experiences of telehealth in palliative home care: scoping review. Journal of medical Internet research. 2020 May 5;22(5):e16218.
- 27. Babapour AR, Gahassab-Mozaffari N, Fathnezhad-Kazemi A. Nurses' job stress and its impact on quality of life and caring behaviors: a cross-sectional study. BMC nursing. 2022 Mar 31;21(1):75.
- 28. Karimi Z, Fereidouni Z, Behnammoghadam M, Alimohammadi N, Mousavizadeh A, Salehi T, Mirzaee MS, Mirzaee S. The lived experience of nurses caring for patients with COVID-19 in Iran: a phenomenological

study. Risk management and healthcare policy. 2020 Aug 20:1271-8.

- 29. Lu F, Xu Y, Yu Y, Peng L, Wu T, Wang T, Liu B, Xie J, Xu S, Li M. Moderating effect of mindfulness on the relationships between perceived stress and mental health outcomes among Chinese intensive care nurses. Frontiers in psychiatry. 2019 Apr 18;10:260.
- 30. Arnetz JE, Goetz CM, Sudan S, Arble E, Janisse J, Arnetz BB. Personal protective equipment and mental health symptoms among nurses during the COVID-19 pandemic. Journal of occupational and environmental medicine. 2020 Nov 1;62(11):892-7.
- 31. Rouleau G, Gagnon MP, Côté J, Payne-Gagnon J, Hudson E, Dubois CA, Bouix-Picasso J. Effects of e-learning in a continuing education context on nursing care: systematic review of systematic qualitative, quantitative, and mixed-studies reviews. Journal of medical Internet research. 2019 Oct 2;21(10):e15118.
- 32. Mathieson A, Grande G, Luker K. Strategies, facilitators and barriers to implementation of evidence-based practice in community nursing: a systematic mixed-studies review and qualitative synthesis. Primary health care research & development. 2019 Jan;20:e6.
- 33. Vaismoradi M, Tella S, A. Logan P, Khakurel J, Vizcaya-Moreno F. Nurses' adherence to patient safety principles: a systematic review. International journal of environmental research and public health. 2020 Mar;17(6):2028.
- 34. Cummings GG, Lee S, Tate K, Penconek T, Micaroni SP, Paananen T, Chatterjee GE. The essentials of nursing leadership: A systematic review of factors and educational interventions influencing nursing leadership. International journal of nursing studies. 2021 Mar 1;115:103842.

- 35. Strandås M, Bondas T. The nurse-patient relationship as a story of health enhancement in community care: A meta-ethnography. Journal of advanced nursing. 2018 Jan;74(1):11-22.
- Ozaras G, Abaan S. Investigation of the trust status of the nurse-patient relationship. Nursing ethics. 2018 Aug;25(5):628-39.
- Recio-Saucedo A, Dall'Ora C, Maruotti A, Ball J, Briggs J, Meredith P, Redfern OC, Kovacs C, Prytherch D, Smith GB, Griffiths P. What impact does nursing care left undone have on patient outcomes? Review of the literature. Journal of Clinical Nursing. 2018 Jun;27(11-12):2248-59.
- Salah, A. N. & Alwabsi, H. A. (2024b). An Overview of the Antimicrobial Activity of Some Microbial Enzymes. *American Journal* of Biochemistry and Biotechnology, 20(2), 140-150.

https://doi.org/10.3844/ajbbsp.2024.140.150

- 39. Coster S, Watkins M, Norman IJ. What is the impact of professional nursing on patients' outcomes globally? An overview of research evidence. International journal of nursing studies. 2018 Feb 1;78:76-83.
- 40. Aiken LH, Ceron C, Simonetti M, Lake ET, Galiano A, Garbarini A, Soto PA, Bravo D, Smith HL. Hospital nurse staffing and patient outcomes. Revista Médica Clínica Las Condes. 2018 May 1;29(3):322-7.
- 41. Mariee AA, Almulafekh M, Almahaid MA, Esmail WM, Alfraijat A, Ahmed MR, Alnfeeli FN, Al-Hazmi SM, Mohamed AF, Salah AN, El-Said HD. The Authentic Leadership Impact on the Locus of control of nurses among nurse managers at certain Primary Healthcare Centers. 2024; 11(1):307-315.
- 42. Edvardsson D, Watt E, Pearce F. Patient experiences of caring and personcentredness are associated with perceived

nursing care quality. Journal of advanced nursing. 2017 Jan;73(1):217-27.

- 43. Shin S, Park JH, Bae SH. Nurse staffing and nurse outcomes: A systematic review and meta-analysis. Nursing outlook. 2018 May 1;66(3):273-82.
- 44. Ronquillo CE, Peltonen LM, Pruinelli L, Chu CH, Bakken S, Beduschi A, Cato K, Hardiker N, Junger A, Michalowski M, Nyrup R. Artificial intelligence in nursing: Priorities and opportunities from an international invitational think-tank of the Artificial Nursing and Intelligence Collaborative. Leadership Journal of advanced nursing. 2021 Sep;77(9):3707-17.
- 45. Ronquillo CE, Peltonen LM, Pruinelli L, Chu CH, Bakken S, Beduschi A, Cato K, Hardiker N, Junger A, Michalowski M, Nyrup R. Artificial intelligence in nursing: **Priorities** and opportunities from an international invitational think-tank of the Nursing and Artificial Intelligence Leadership Collaborative. Journal of advanced nursing. 2021 Sep;77(9):3707-17.
- 46. White EM, Aiken LH, McHugh MD. Registered nurse burnout, job dissatisfaction, and missed care in nursing homes. Journal of the American Geriatrics Society. 2019 Oct;67(10):2065-71.
- 47. Carthon JM, Hatfield L, Plover C, Dierkes A, Davis L, Hedgeland T, Sanders AM, Visco F, Holland S, Ballinghoff J, Del Guidice M. Association of nurse Engagement and nurse staffing on patient safety. Journal of Nursing care quality. 2019 Jan 1;34(1):40-6.
- 48. Butler M, Schultz TJ, Halligan P, Sheridan A, Kinsman L, Rotter T, Beaumier J, Kelly RG, Drennan J. Hospital nurse-staffing models and patient-and staff-related outcomes. Cochrane Database of Systematic Reviews. 2019(4).
- 49. Chaboyer W, Harbeck E, Lee BO, Grealish L. Missed nursing care: An overview of

reviews. The Kaohsiung journal of medical sciences. 2021 Feb;37(2):82-91.

- Wei H, Roberts P, Strickler J, Corbett RW. Nurse leaders' strategies to foster nurse resilience. Journal of nursing management. 2019 May;27(4):681-7.
- 51. Pourteimour S, Yaghmaei S, Babamohamadi H. The relationship between mental workload and job performance among Iranian nurses providing care to COVID-19 patients: A cross-sectional study. Journal of Nursing Management. 2021 Sep;29(6):1723-32.
- Burgener AM. Enhancing communication to improve patient safety and to increase patient satisfaction. The health care manager. 2020 Jul 1;39(3):128-32.
- 53. Ocloo J, Garfield S, Franklin BD, Dawson S. Exploring the theory, barriers and enablers for patient and public involvement across health, social care and patient safety: a systematic review of reviews. Health research policy and systems. 2021 Dec;19:1-21.
- 54. Salah AN, Al-Otaibi MB, Al-dhmashi AS, Mariee AA. Infection control practices and approaches in the dentistry field; a review. Journal of Bioscience and Applied Research. 2024 Mar 1;10(1):42-58.
- 55. Qudah B, Luetsch K. The influence of mobile health applications on patientprovider healthcare relationships: а systematic, narrative review. Patient education and counseling. 2019 Jun 1;102(6):1080-9.
- 56. Lu H, Zhao Y, While A. Job satisfaction among hospital nurses: A literature review. International journal of nursing studies. 2019 Jun 1;94:21-31.
- 57. Werner RM, Coe NB, Qi M, Konetzka RT. Patient outcomes after hospital discharge to home with home health care vs to a skilled

nursing facility. JAMA Internal Medicine. 2019 May 1;179(5):617-23.

- Lake ET, Narva AM, Holland S, Smith JG, Cramer E, Rosenbaum KE, French R, Clark RR, Rogowski JA. Hospital nurses' moral distress and mental health during COVID-19. Journal of advanced nursing. 2022 Mar;78(3):799-809.
- 59. Perry AG, Potter PA, Ostendorf WR, Laplante N. Clinical Nursing Skills and Techniques-E-Book: Clinical Nursing Skills and Techniques-E-Book. Elsevier Health Sciences; 2021 Mar 9.
- Garcia CD, Abreu LC, Ramos JL, Castro CF, Smiderle FR, Santos JA, Bezerra IM. Influence of burnout on patient safety: systematic review and meta-analysis. Medicina. 2019 Aug 30;55(9):553.
- 61. Friganović A, Selič P, Ilić B. Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: a literature review. Psychiatria Danubina. 2019 Apr 4;31(suppl. 1):21-31.
- 62. Salah AN, Elleboudy NS, El-Housseiny GS, Yassien MA. Cloning and sequencing of IsaE efflux pump gene from MDR Enterococci and its role in erythromycin resistance. Infection, Genetics and Evolution. 2021 Oct 1;94:105010.
- 63. White-Williams C, Rossi LP, Bittner VA, Driscoll A, Durant RW, Granger BB, Graven LJ, Kitko L, Newlin K, Shirey M, American Heart Association Council on Cardiovascular and Stroke Nursing; Council on Clinical Cardiology; and Council on Epidemiology and Prevention. Addressing social determinants of health in the care of patients with heart failure: a scientific from the American statement Heart Association. Circulation. 2020 Jun 2;141(22):e841-63.
- 64. Cross LA. Compassion fatigue in palliative care nursing: a concept analysis. Journal of

Hospice & Palliative Nursing. 2019 Feb 1;21(1):21-8.

- 65. Bergman L, Falk AC, Wolf A, Larsson IM. Registered nurses' experiences of working in the intensive care unit during the COVID-19 pandemic. Nursing in critical care. 2021 Nov;26(6):467-75.
- 66. Casafont C, Fabrellas N, Rivera P, Olivé-Ferrer MC, Querol E, Venturas M, Prats J, Cuzco C, Frías CE, Pérez-Ortega S, Zabalegui A. Experiences of nursing students as healthcare aid during the COVID-19 pandemic in Spain: A phenomenological research study. Nurse education today. 2021 Feb 1;97:104711.
- 67. Apsay, R., Alalag, H. The journey of nurse managers in the nursing workforce management during the Covid-19 pandemic. *Journal of Bioscience and Applied Research*, 2022; 8(4): 319-364. doi: 10.21608/jbaar.2022.273855
- 68. Afaya A, Hamza S, Gross J, Acquah NA, Aseku PA, Doeyela D. Assessing patient's perception of nursing care in medicalsurgical ward in Ghana. International Journal of Caring Sciences. 2017 Sep 1;10(3):1329-40.
- 69. Nightingale S, Spiby H, Sheen K, Slade P. The impact of emotional intelligence in health care professionals on caring behaviour towards patients in clinical and long-term care settings: Findings from an integrative review. International journal of nursing studies. 2018 Apr 1;80:106-17.
- 70. Salah A, El-Housseiny G, Elleboudy N, Yassien M. Antimicrobial stewardship programs: A review. Archives of Pharmaceutical Sciences Ain Shams University. 2021 Jun 1;5(1):143-57.
- 71. Hetland B, McAndrew N, Perazzo J, Hickman R. A qualitative study of factors that influence active family involvement with patient care in the ICU: Survey of

critical care nurses. Intensive and Critical Care Nursing. 2018 Feb 1;44:67-75.

- 72. Goedhart NS, van Oostveen CJ, Vermeulen H. The effect of structural empowerment of nurses on quality outcomes in hospitals: a scoping review. Journal of Nursing Management. 2017 Apr;25(3):194-206.
- 73. Randall S, Crawford T, Currie J, River J, Betihavas V. Impact of community based nurse-led clinics on patient outcomes, patient satisfaction, patient access and cost effectiveness: A systematic review. International journal of nursing studies. 2017 Aug 1;73:24-33.