



IMPACT OF NURSE-PATIENT COMMUNICATION ON MEDICATION ADHERENCE: A NARRATIVE REVIEW

Entesar Agil Alenezi^{1*}, Tayasser Dakheil Alenazi¹, Alanoud Hamoud Suahyl Alanazi¹, Sharwq Saleh Dhwi Alhazmi², Amani Mallah Hejji Alanazi², Amani Adid Hadi Alenazi²

Abstracts

This narrative review explores the intricate relationship between nurse-patient communication and medication adherence, delving into the significant impact of effective communication strategies on patient outcomes. Nurse-patient communication serves as a fundamental aspect of healthcare delivery, encompassing verbal and non-verbal exchanges that facilitate understanding, empathy, and collaborative decision-making. The review examines theoretical models, communication techniques, and challenges encountered in nurse-patient interactions, emphasizing the importance of clear, empathetic communication in promoting medication adherence. Medication adherence, defined as the extent to which patients follow prescribed medication regimens, plays a crucial role in disease management and treatment outcomes. Factors influencing adherence, consequences of non-adherence, and strategies for improving adherence are discussed, highlighting the complexity of medication adherence behaviors and the need for tailored interventions. Findings reveal a positive correlation between effective nurse-patient communication and medication adherence, underscoring the role of communication skills, patient education, and cultural competence in enhancing patient engagement and treatment adherence. The review also addresses implications for nursing practice, limitations of the review, and future research directions aimed at optimizing medication management and improving patient outcomes.

Keywords: Nurse-patient communication, Medication adherence, Effective communication, Therapeutic relationship, Communication strategies, Healthcare outcomes.

¹*Nursing Technician, Maternity and Children Hospital of Arar, Northern Border Health Cluster, Arar, Saudi Arabia

²Nursing Specialist, North Medical Tower, Northern Border Health Cluster, Arar, Saudi Arabia

***Corresponding Author:** Entesar Agil Alenezi

*Nursing Technician, Maternity and Children Hospital of Arar, Northern Border Health Cluster, Arar, Saudi Arabia

DOI: 10.53555/ecb/2022.11.10.166

I. Introduction

Nurse-patient communication serves as a cornerstone in healthcare delivery, playing a vital role in establishing rapport, understanding patient needs, and facilitating effective care [1]. Effective communication between nurses and patients has been recognized as a critical factor in enhancing patient satisfaction, improving health outcomes, and promoting patient safety. It encompasses verbal and non-verbal exchanges, active listening, empathy, and clear information sharing [2-4]. Over time, healthcare systems have increasingly emphasized the importance of nurturing strong communication skills among healthcare professionals, particularly nurses, to ensure patient-centered care [5,6].

Medication adherence refers to the extent to which patients follow medical advice and take prescribed medications as intended by healthcare providers [7]. It is a fundamental aspect of disease management and treatment outcomes across various medical conditions. Non-adherence to medications can lead to suboptimal health outcomes, increased healthcare costs, and higher risks of complications or disease progression [8,9]. Understanding the factors influencing medication adherence is crucial in developing interventions and strategies to improve patient compliance and overall health outcomes [7,10].

The purpose of this review is to examine the impact of nurse-patient communication on medication adherence. By synthesizing existing literature, this review aims to explore the relationship between effective communication strategies employed by nurses and patients' adherence to prescribed medications. The review will delve into various aspects of nurse-patient communication, medication adherence, and their interplay within healthcare settings.

II. Nurse-Patient Communication

A. Definition and Components

Nurse-patient communication encompasses a range of interactions between nurses and patients aimed at building therapeutic relationships, promoting patient-centered care, and achieving positive health outcomes. It involves verbal communication, which includes spoken words, explanations of medical procedures, and discussions about treatment plans [2]. Non-verbal communication such as body language, facial expressions, and gestures also plays a significant role in conveying empathy, understanding, and support [3].

Effective nurse-patient communication comprises several key components, including active listening, empathy, clarity, and mutual respect. Active listening involves attentive and non-judgmental

listening to patients' concerns, allowing nurses to understand their perspectives and address their needs effectively [4]. Empathy, on the other hand, involves the ability to comprehend and share patients' feelings, demonstrating compassion and emotional support. Clarity in communication ensures that information is conveyed accurately and comprehensively, reducing the likelihood of misunderstandings or confusion. Mutual respect fosters a collaborative and trusting relationship between nurses and patients, enhancing communication and patient engagement in their care [3,4,6].

B. Models and Theories

Several theoretical models and frameworks have been proposed to understand and guide nurse-patient communication. The Transactional Model of Communication, proposed by Shannon and Weaver, emphasizes the exchange of messages between senders (nurses) and receivers (patients), considering factors such as encoding, decoding, noise, and feedback. This model highlights the dynamic nature of communication and the importance of feedback in ensuring message clarity and understanding [11,12].

The Therapeutic Communication Model, rooted in nursing theory, focuses on establishing therapeutic relationships between nurses and patients through effective communication techniques [13]. It emphasizes active listening, empathy, trust, and open-ended questioning to facilitate meaningful interactions and promote patient-centered care. Additionally, the Health Belief Model and Social Cognitive Theory provide insights into patient behaviors, attitudes, and beliefs related to healthcare decisions and adherence to medical recommendations [14,15].

C. Importance in Healthcare Settings

In healthcare settings, effective nurse-patient communication is crucial for several reasons. It serves as a vehicle for assessing patients' physical, emotional, and psychological needs, enabling nurses to provide individualized and holistic care [16]. Clear and concise communication helps patients understand their diagnoses, treatment options, and self-care instructions, empowering them to actively participate in their healthcare journey [17]. Moreover, strong communication skills contribute to patient satisfaction, trust in healthcare providers, and adherence to treatment plans, ultimately leading to improved health outcomes and reduced healthcare disparities [16,18].

D. Challenges and Barriers

Despite its importance, nurse-patient communication faces various challenges and barriers in practice. Time constraints in busy healthcare settings often limit the opportunities for in-depth communication and meaningful interactions with patients [19]. Language barriers, cultural differences, and health literacy issues can hinder effective communication and comprehension of medical information. Additionally, patients' emotional distress, anxiety, or fear may impede communication, requiring nurses to employ additional strategies to establish rapport and trust [20].

Navigating these challenges requires ongoing training, education, and support for healthcare professionals to enhance their communication skills and address patients' diverse needs effectively [21]. Incorporating technology-based communication tools, providing language interpretation services, and promoting cultural competence are among the strategies employed to overcome barriers and facilitate optimal nurse-patient communication [20-22].

III. Medication Adherence

A. Definition and Significance

Medication adherence, also known as medication compliance, refers to the extent to which patients follow prescribed medication regimens as directed by healthcare providers [7]. It encompasses the timing, dosage, frequency, and duration of medication use according to medical recommendations. Adherence to medication plays a crucial role in achieving therapeutic outcomes, managing chronic conditions, preventing disease progression, and improving patients' quality of life [8,23].

The significance of medication adherence extends beyond individual patient benefits to broader public health outcomes. Poor medication adherence contributes to medication errors, treatment failures, increased healthcare utilization, and economic burdens on healthcare systems [24]. Therefore, promoting and maintaining optimal medication adherence is a priority in healthcare delivery, requiring collaborative efforts among healthcare providers, patients, caregivers, and policymakers [8,9,25].

B. Factors Affecting Adherence

Several factors influence patients' adherence to prescribed medications, including patient-related factors, medication-related factors, healthcare system factors, and socioeconomic factors [10]. Patient-related factors such as health beliefs, attitudes, knowledge about medications, and

cognitive abilities can impact adherence behaviors. Medication-related factors such as complexity of regimens, side effects, pill burden, and route of administration also influence patients' adherence [26].

Healthcare system factors such as access to healthcare services, continuity of care, medication affordability, and communication between healthcare providers and patients play a role in medication adherence [25,27]. Socioeconomic factors such as income, education, social support, and cultural beliefs contribute to variations in adherence rates among different populations. Understanding these factors is essential in developing tailored interventions and strategies to improve medication adherence and optimize health outcomes [28].

IV. The Relationship Between Nurse-Patient Communication and Medication Adherence

A. Positive Impact of Effective Communication

Effective communication between nurses and patients has been consistently associated with improved medication adherence. When nurses employ clear, empathetic communication strategies, patients are more likely to understand their medication regimens, adhere to prescribed dosages, and adhere to treatment plans [29]. Studies have shown that patients who perceive their healthcare providers as good communicators are more motivated to follow medical advice, leading to better health outcomes and reduced risks of medication non-adherence [29,30].

Furthermore, effective communication fosters trust and rapport between nurses and patients, creating a supportive environment where patients feel comfortable expressing concerns, asking questions, and seeking clarification about their medications [31]. This open dialogue enhances patients' understanding of the benefits and potential side effects of medications, empowering them to make informed decisions about their healthcare. Additionally, clear communication about medication schedules, administration techniques, and follow-up instructions helps patients adhere to their treatment regimens consistently [29,32].

B. Role of Nurse-Patient Relationship

The nurse-patient relationship plays a pivotal role in medication adherence. A strong therapeutic relationship built on trust, respect, and empathy enhances communication effectiveness and promotes collaborative decision-making regarding medication management [18,30]. Nurses who establish rapport with patients through active listening, empathy, and patient-centered care are better equipped to address patients' concerns,

address barriers to adherence, and provide tailored support to improve medication adherence [33,34]. Moreover, the continuity of care facilitated by a positive nurse-patient relationship contributes to long-term adherence to medication regimens. Patients who feel valued and understood by their nurses are more likely to engage in self-care practices, adhere to lifestyle modifications, and adhere to medication protocols as part of their overall treatment plan. Therefore, nurturing a supportive nurse-patient relationship is essential in promoting medication adherence and optimizing patient outcomes [29,30,35].

C. Communication Techniques and Tools

Various communication techniques and tools play a pivotal role in enhancing nurse-patient communication and improving medication adherence [36]. One effective strategy involves the use of health literacy tools, which encompass written materials, visual aids, and multimedia resources designed to explain medication instructions in clear, simple language. These tools are instrumental in enhancing patients' understanding of their medications and promoting adherence to prescribed regimens [34,36].

Another valuable technique is motivational interviewing, where nurses engage patients in discussions to explore their motivations, concerns, and ambivalence regarding medication adherence [37]. This approach fosters collaborative goal setting and behavior change, empowering patients to take an active role in managing their medications and adhering to treatment plans [30].

Medication reconciliation is another essential practice that involves conducting thorough processes during patient encounters to identify discrepancies, address medication-related concerns, and ensure patients receive accurate and up-to-date medication information [33]. This helps prevent medication errors and improves medication adherence by providing patients with clear and consistent information about their prescribed medications [38].

Leveraging digital health solutions, such as mobile apps, telehealth platforms, and electronic reminders, also contributes significantly to medication adherence [32]. These technologies facilitate medication adherence monitoring, medication refill reminders, and real-time communication between nurses and patients, enhancing patient engagement and adherence to treatment protocols [36,37].

Moreover, cultural competence is crucial in tailoring communication strategies and promoting adherence among diverse populations. Recognizing and respecting patients' cultural

beliefs, values, and practices regarding healthcare and medication use enables nurses to establish trust, promote effective communication, and address cultural barriers that may impact medication adherence [33-35].

V. Improving Medication Adherence

A. Interpretation of Association

The association between nurse-patient communication and medication adherence underscores the importance of effective communication strategies in healthcare settings [29]. Studies have consistently demonstrated that clear, empathetic communication between nurses and patients correlates positively with medication adherence rates. Patients who perceive their healthcare providers as communicative, approachable, and supportive are more likely to adhere to prescribed medications and engage in self-care behaviors [30,31].

However, it is essential to recognize that the relationship between nurse-patient communication and medication adherence is multifaceted and influenced by various factors, including patient characteristics, healthcare system dynamics, and environmental factors [28]. Therefore, interpreting this association requires considering the complexity of healthcare interactions and the interconnectedness of communication processes with patient behaviors and outcomes [34,35].

B. Implications for Nursing Practice

The findings of this review have significant implications for nursing practice. Nurses play a central role in promoting medication adherence through effective communication strategies, patient education, and holistic care delivery [21]. Incorporating communication skills training, motivational interviewing techniques, and health literacy interventions into nursing education and practice can enhance nurses' ability to support patients in adhering to medication regimens and achieving optimal health outcomes [18,19].

Additionally, fostering collaborative relationships between nurses, patients, caregivers, and interdisciplinary healthcare teams is essential in addressing barriers to medication adherence and implementing tailored interventions [29,30]. By embracing a patient-centered approach, promoting cultural competence, and leveraging technology-enabled communication tools, nurses can empower patients to take an active role in managing their medications and overall health [35].

VI. Conclusion

In conclusion, this review has highlighted the integral relationship between nurse-patient

communication and medication adherence in healthcare settings. Effective communication strategies, including active listening, empathy, clarity, and cultural competence, are essential in promoting patient engagement, shared decision-making, and adherence to medication regimens. By synthesizing existing literature, this review contributes to the growing body of evidence supporting the positive impact of nurse-patient communication on medication adherence and patient outcomes. It underscores the importance of incorporating communication skills training and patient-centered approaches into nursing practice to optimize medication management and improve healthcare delivery.

References

- McCabe C. Nurse-patient communication: an exploration of patients' experiences. *Journal of clinical nursing*. 2004 Jan;13(1):41-9.
- Pangh B, Jouybari L, Vakili MA, Sanagoo A, Torik A. The effect of reflection on nurse-patient communication skills in emergency medical centers. *Journal of caring sciences*. 2019 Jun;8(2):75.
- Marhamati S, Amini M, Mousavinezhad H, Nabeiei P. Design and validating the nurse-patient communication skills questionnaire. *Health Management & Information Science*. 2016 Apr 1;3(2):57-63.
- Jarrett N, Payne S. A selective review of the literature on nurse-patient communication: has the patient's contribution been neglected?. *Journal of advanced nursing*. 1995 Jul;22(1):72-8.
- Chan ZC, Lai CK. The nurse-patient communication: Voices from nursing students. *International Journal of Adolescent Medicine and Health*. 2017 Dec 20;29(6):20160023.
- Fleischer S, Berg A, Zimmermann M, Wüste K, Behrens J. Nurse-patient interaction and communication: A systematic literature review. *Journal of Public Health*. 2009 Oct;17:339-53.
- Ho PM, Bryson CL, Rumsfeld JS. Medication adherence: its importance in cardiovascular outcomes. *Circulation*. 2009 Jun 16;119(23):3028-35.
- Balkrishnan R. The importance of medication adherence in improving chronic-disease related outcomes: what we know and what we need to further know. *Medical care*. 2005 Jun 1;43(6):517-20.
- Yap AF, Thirumorthy T, Kwan YH. Medication adherence in the elderly. *Journal of Clinical Gerontology and Geriatrics*. 2016 Jun 1;7(2):64-7.
- Frishman WH. Importance of medication adherence in cardiovascular disease and the value of once-daily treatment regimens. *Cardiology in review*. 2007 Sep 1;15(5):257-63.
- Sheldon LK, Ellington L. Application of a model of social information processing to nursing theory: How nurses respond to patients. *Journal of advanced nursing*. 2008 Nov;64(4):388-98.
- Kasch CR. Toward a theory of nursing action: Skills and competency in nurse-patient interaction. *Nursing Research*. 1986 Jul 1;35(4):226-30.
- Sieger M, Fritz E, Them C. In discourse: Bourdieu's theory of practice and habitus in the context of a communication-oriented nursing interaction model. *Journal of Advanced Nursing*. 2012 Feb;68(2):480-9.
- Xue W, Heffernan C. Therapeutic communication within the nurse-patient relationship: A concept analysis. *International Journal of Nursing Practice*. 2021 Dec;27(6):e12938.
- McCarthy B, O'Donovan M, Trace A. A new therapeutic communication model "TAGEET" to help nurses engage therapeutically with patients suspected of or confirmed with COVID-19. *Journal of Clinical Nursing*. 2021 Apr;30(7-8):1184-91.
- McCabe C. Nurse-patient communication: an exploration of patients' experiences. *Journal of clinical nursing*. 2004 Jan;13(1):41-9.
- Tran TV, Tran TD, Nguyen AQ, Dinh TT, Le AT, Tran HB, Vu PT, Nguyen HT, Dang LV. Nurse-patient communication: A quality assessment in public hospital. *International Journal of Healthcare Management*. 2021 Oct 2;14(4):1127-33.
- Blackstone SW, Pressman H. Patient communication in health care settings: New opportunities for augmentative and alternative communication. *Augmentative and Alternative Communication*. 2016 Jan 2;32(1):69-79.
- Alshammari M, Duff J, Guilhermino M. Barriers to nurse-patient communication in Saudi Arabia: an integrative review. *BMC nursing*. 2019 Dec;18:1-0.
- Norouzinia R, Aghabarari M, Shiri M, Karimi M, Samami E. Communication barriers perceived by nurses and patients. *Global journal of health science*. 2016 Jun;8(6):65.
- Shafipour V, Mohammad E, Ahmadi F. Barriers to nurse-patient communication in cardiac surgery wards: a qualitative study. *Global Journal of Health Science*. 2014 Nov;6(6):234.
- 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.
23. Raebel MA, Schmittiel J, Karter AJ, Konieczny JL, Steiner JF. Standardizing terminology and definitions of medication adherence and persistence in research employing electronic databases. *Medical care*. 2013 Aug 1;51:S11-21.
24. Julius RJ, Novitsky Jr MA, Dubin WR. Medication adherence: a review of the literature and implications for clinical practice. *Journal of Psychiatric Practice*. 2009 Jan 1;15(1):34-44.
25. Lehmann A, Aslani P, Ahmed R, Celio J, Gauchet A, Bedouch P, Bugnon O, Allenet B, Schneider MP. Assessing medication adherence: options to consider. *International journal of clinical pharmacy*. 2014 Feb;36:55-69.
26. Dawson LA. What factors affect adherence to medicines?. *Archives of Disease in Childhood-Education and Practice*. 2019 Feb 1;104(1):49-52.
27. Choi HY, Lee JA, Lim J, Kim YS, Jeon TH, Cheong YS, Kim DH, Kim MC, Lee SY. Factors affecting adherence to antihypertensive medication. *Korean Journal of Family Medicine*. 2018 Nov;39(6):325.
28. Davies MJ, Gagliardino JJ, Gray LJ, Khunti K, Mohan V, Hughes R. Real-world factors affecting adherence to insulin therapy in patients with Type 1 or Type 2 diabetes mellitus: a systematic review. *Diabetic Medicine*. 2013 May;30(5):512-24.
29. Owens RA. The caring behaviors of the home health nurse and influence on medication adherence. *Home Healthcare Now*. 2006 Sep 1;24(8):517-26.
30. Dearing KS. Getting it, together: how the nurse patient relationship influences treatment compliance for patients with schizophrenia. *Archives of psychiatric nursing*. 2004 Oct 1;18(5):155-63.
31. Jenkins K, Bennett L, O'Donoghue D, Lancaster L, Carillo F. Improving the nurse-patient relationship: a multi-faceted approach. *EDTNA-ERCA Journal*. 2002 Jul 9;28(3):145-50.
32. Campbell C, Scott K, Skovdal M, Madanhire C, Nyamukapa C, Gregson S. A good patient? How notions of 'a good patient' affect patient-nurse relationships and ART adherence in Zimbabwe. *BMC infectious diseases*. 2015 Dec;15:1-1.
33. Linn AJ, van Weert JC, van Dijk L, Horne R, Smit EG. The value of nurses' tailored communication when discussing medicines: Exploring the relationship between satisfaction, beliefs and adherence. *Journal of health psychology*. 2016 May;21(5):798-807.
34. Kwame A, Petrucka PM. Communication in nurse-patient interaction in healthcare settings in sub-Saharan Africa: A scoping review. *International journal of Africa nursing sciences*. 2020 Jan 1;12:100198.
35. ARUNGWA OT. EFFECT OF COMMUNICATION ON NURSE--PATIENT RELATIONSHIP IN NATIONAL ORTHOPAEDIC HOSPITAL, IGBOBI, LAGOS. *West african journal of nursing*. 2014 Nov 1;25(2).
36. Verloo H, Chiolero A, Kiszio B, Kampel T, Santschi V. Nurse interventions to improve medication adherence among discharged older adults: a systematic review. *Age and ageing*. 2017 Sep 1;46(5):747-54.
37. Fakhr-Movahedi A, Rahnavard Z, Salsali M, Negarandeh R. Exploring nurse's communicative role in nurse-patient relations: A qualitative study. *Journal of caring sciences*. 2016 Dec;5(4):267.
38. Idilbi N, Grimberg Z, Drach-Zahavy A. Haemodialysis patient's adherence to treatment: Relationships among nurse-patient-initiated participation and nurse's attitude towards patient participation. *Journal of Clinical Nursing*. 2023 Jul;32(13-14):3644-55.