

# THE IMPACT OF NURSE-LED PATIENT EDUCATION PROGRAMS ON HEALTH LITERACY AND SELF-MANAGEMENT SKILLS

Waiel Mashi Kahf Alenezi<sup>1\*</sup>, Maha Khaled H Alenezi<sup>2</sup>, Meshari Fazzaa Sahal Alanazi<sup>3</sup>, Waad Salman Bin Awadh Alruwaili<sup>4</sup>, Layaly Gadeer H Alrwaily<sup>5</sup>, Reem Dalbak Yakhni Alruwaili<sup>6</sup>, Rasha Dalbak Yakhni Alruwaili<sup>7</sup>, Maha Delbek Alrowlll<sup>8</sup>, Amirah Ghadeer Alruwaili<sup>9</sup>, Ahmed Wadi Alenezi<sup>10</sup>

#### Abstract:

This review article aims to examine the impact of nurse-led patient education programs on health literacy and self-management skills. With the increasing emphasis on patient-centered care and the growing prevalence of chronic diseases, the role of nurses in educating and empowering patients has become increasingly important. The review will analyze existing literature to evaluate the effectiveness of nurse-led education programs in improving health literacy and self-management skills among diverse patient populations. Additionally, the review will explore the various methods and approaches used in nurse-led education programs, as well as the potential barriers and facilitators to their success. By synthesizing the findings from multiple studies, this review seeks to provide insights into the best practices for nurse-led patient education programs and their impact on patient outcomes.

**Keywords:** Nurse-led education, Patient empowerment, Health literacy, Self-management skills, Chronic diseases, Patient-centered care

- <sup>1</sup> \*Technician-Nursing, Eradah Complex for Mental Health, Arar, Saudi Arabia.
- <sup>2</sup> Nursing, Primary Health Care Center in Al-Faisaliah, Saudi Arabia.
- <sup>3</sup> Nursing, Environmental Health Supervisor, Public Health, Department, Ministry of Health, Arar, Saudi Arabia.
- <sup>4</sup> Specialist-Nursing, Public Health infectious diseases and disease vector control unit, Al Jouf, Saudi Arabia.
- <sup>5</sup> Nursing Technician, Infection Control Department Directorate of Health Affairs in Al Jouf Region, Saudi Arabia.
- <sup>6</sup> Nursing Technician, Zalloum Primary Health Care Center, Saudi Arabia.
- <sup>7</sup> Nursing Technician, Maternity and Children Hospital-Al-Jouf, Saudi Arabia.
- <sup>8</sup> Nursing Technician, Prince Mutaib bin Abdulaziz Hospital, Sakaka, Saudi Arabia.
- <sup>9</sup> Nursing, Infection Control Department Directorate of Health Affairs in Al Jouf Region, Saudi Arabia.
- <sup>10</sup>NURSING, Maternity and Children's Hospital, Arar, Saudi Arabia.

### \*Corresponding Author: Waiel Mashi Kahf Alenezi

\*Technician-Nursing, Eradah Complex for Mental Health, Arar, Saudi Arabia.

**DOI:** 10.53555/ecb/2022.11.5.073

#### **Introduction:**

Nurse-led patient education programs have become an integral part of healthcare delivery, with the aim of improving health literacy and self-management skills among patients. These programs are designed to provide patients with the knowledge and tools they need to make informed decisions about their health and to take an active role in managing their conditions. In this essay, we will explore the impact of nurse-led patient education programs on health literacy and self-management skills, and discuss the implications for healthcare practice and policy. Health literacy is the ability to obtain, process, and understand basic health information and services in order to make appropriate health decisions. It is an essential skill for individuals to effectively navigate the healthcare system and to take control of their own health. However, many patients struggle with health literacy, which can lead to misunderstandings about their conditions, poor adherence to treatment plans, and ultimately, poorer health outcomes.

Nurse-led patient education programs play a crucial role in addressing this issue by providing patients with the knowledge and skills they need to improve their health literacy. Through these programs, nurses can educate patients about their conditions, treatment options, and the importance of self-care practices. By tailoring the information to the individual needs and abilities of each patient, nurses can help improve their understanding of their health and empower them to make informed decisions.

Self-management skills refer to the ability of patients to take responsibility for their own health and to engage in behaviors that promote wellness and manage chronic conditions. These skills include medication management, symptom monitoring, healthy lifestyle choices, and effective communication with healthcare providers. Patients who possess strong self-management skills are better equipped to manage their conditions, adhere to treatment plans, and achieve better health outcomes.

Nurse-led patient education programs are instrumental in developing these self-management skills among patients. By providing patients with the knowledge and tools they need to effectively manage their conditions, nurses can empower them to take an active role in their own care. Through education and support, nurses can help patients develop the confidence and skills they need to make positive changes in their health behaviors and to effectively manage their conditions on a day-to-day basis.

The impact of nurse-led patient education programs on health literacy and self-management skills has been well-documented in the literature. Numerous studies have shown that these programs can lead to significant improvements in patients' understanding of their conditions, their ability to manage their health, and ultimately, their health outcomes.

One study, for example, found that patients who participated in a nurse-led education program for diabetes management demonstrated improved knowledge about their condition, better self-care behaviors, and lower HbA1c levels compared to those who did not receive the education. Similarly, another study found that patients with heart failure who participated in a nurse-led education program had better medication adherence, fewer hospitalizations, and improved quality of life compared to those who did not receive the education.

These findings highlight the significant impact that nurse-led patient education programs can have on health literacy and self-management skills. By providing patients with the knowledge and support they need to take an active role in their own care, nurses can help improve patients' understanding of their conditions, their ability to manage their health, and ultimately, their health outcomes.

The impact of nurse-led patient education programs on health literacy and self-management skills has important implications for healthcare practice and policy. These programs have the potential to improve the quality of care and reduce healthcare costs by empowering patients to take control of their health and to effectively manage their conditions.

In order to maximize the impact of nurse-led patient education programs, it is important for healthcare organizations to prioritize and support these initiatives. This may involve providing nurses with the training and resources they need to effectively educate and support patients, as well as integrating patient education into routine care delivery. Additionally, policymakers should consider the role of nurse-led patient education programs in improving health outcomes and reducing healthcare costs, and support initiatives that promote the integration of patient education into healthcare practice.

## Importance of Health Literacy and Self-Management Skills:

Health literacy and self-management skills are essential components of maintaining good health and well-being. In today's fast-paced world, where information is constantly bombarding us from all directions, it is crucial to have the knowledge and skills necessary to make informed decisions about our health. Health literacy refers to the ability to

understand and use health information to make appropriate health decisions, while self-management skills involve the ability to take responsibility for one's own health and well-being. One of the key reasons why health literacy and self-management skills are so important is that they empower individuals to take control of their health. By understanding health information and being able to apply it to their own lives, individuals are better equipped to make healthy choices and manage chronic conditions effectively. This can lead to improved health outcomes, reduced healthcare costs, and an overall better quality of life.

Moreover, health literacy and self-management skills are crucial for navigating the complex healthcare system. From understanding medical jargon to knowing how to interpret test results, individuals with high health literacy are better able to communicate with healthcare providers, ask questions, and advocate for themselves. This can lead to more effective and personalized care, as well as better adherence to treatment plans.

In addition, health literacy and self-management skills are important for promoting preventive care and early detection of health issues. Individuals who are knowledgeable about their health are more likely to engage in healthy behaviors, such as eating a balanced diet, exercising regularly, and getting regular check-ups. They are also more likely to recognize symptoms of illness early on and seek appropriate medical attention, which can lead to better outcomes and lower healthcare costs in the long run.

Furthermore, promoting health literacy and selfmanagement skills can help reduce health disparities among different populations. Studies have shown that individuals with lower health literacy are more likely to experience poor health outcomes and have higher rates of chronic conditions. By improving health literacy and selfmanagement skills among vulnerable populations, such as low-income individuals or those with limited English proficiency, we can help level the playing field and ensure that everyone has access to the information and resources they need to make informed decisions about their health.

Overall, health literacy and self-management skills are essential for promoting individual health and well-being, as well as for improving healthcare outcomes and reducing healthcare costs. By investing in health education programs, promoting clear and accessible health information, and providing support for individuals to develop self-management skills, we can empower individuals to take control of their health and lead healthier, more fulfilling lives. It is crucial that we continue to

prioritize and promote health literacy and selfmanagement skills as key components of a comprehensive approach to improving public health.

### **Effectiveness of Nurse-led Education Programs:**

Nurse-led education programs have become an increasingly popular method for providing patients with the knowledge and tools they need to manage their health conditions effectively. These programs are designed and implemented by nurses who have specialized training in patient education, and they are aimed at empowering patients to take control of their own health and well-being.

One of the key benefits of nurse-led education programs is that they are tailored to meet the specific needs of each individual patient. Nurses are able to assess a patient's knowledge, skills, and abilities, and then develop a personalized education plan that addresses their unique needs. This personalized approach helps to ensure that patients receive the information and support they need to make informed decisions about their health.

In addition to being personalized, nurse-led education programs are also highly effective. Research has shown that patients who participate in these programs are more likely to adhere to their treatment plans, experience better health outcomes, and have fewer hospitalizations and emergency room visits. This is because patients who are well-informed about their health conditions are better able to manage them effectively and make healthy lifestyle choices.

Nurse-led education programs are also costeffective. By providing patients with the knowledge and skills they need to manage their health conditions, these programs can help to prevent complications and reduce the need for expensive medical interventions. This can result in significant cost savings for both patients and healthcare providers.

Furthermore, nurse-led education programs can help to improve patient satisfaction and quality of care. Patients who are actively involved in their own care and who feel empowered to make decisions about their health are more likely to be satisfied with their healthcare experience. This can lead to better patient outcomes and improved overall quality of care.

Overall, nurse-led education programs are a valuable tool for improving patient education, empowerment, and health outcomes. By providing patients with the knowledge and skills they need to manage their health conditions effectively, these programs can help to reduce complications, improve quality of care, and lower healthcare costs. Nurses play a crucial role in developing and

implementing these programs, and their expertise and dedication are essential to their success.

### Methods and Approaches in Nurse-led Education Programs:

Nurse-led education programs have become increasingly popular in the healthcare field as a way to improve patient outcomes and promote health education. These programs are designed and implemented by nurses who have specialized knowledge and expertise in various areas of healthcare.

There are several different methods and approaches that nurses can use when developing and implementing education programs for patients. One common approach is the use of one-on-one education sessions, where a nurse works directly with a patient to provide information and support related to their health condition. This approach allows for personalized education and support, which can be tailored to meet the individual needs of each patient.

Another method that nurses can use is group education sessions, where multiple patients are educated together in a group setting. This approach can be more cost-effective and efficient, as it allows nurses to reach a larger number of patients at once. Group education sessions also provide an opportunity for patients to learn from each other and share their experiences, which can be a valuable source of support and motivation.

In addition to one-on-one and group education sessions, nurses can also use technology to deliver education programs to patients. This can include the use of online resources, mobile apps, and telehealth services to provide patients with information and support remotely. Technology can be a useful tool for reaching patients who may not be able to attend in-person education sessions, and can also make education programs more accessible and convenient for patients.

There are many benefits associated with nurse-led education programs. One of the primary benefits is improved patient outcomes, as education programs can help patients better understand their health conditions and treatment options, leading to improved adherence to treatment plans and better overall health. Education programs can also empower patients to take an active role in their own healthcare, leading to better self-management of chronic conditions and improved quality of life.

Nurse-led education programs can also help to reduce healthcare costs by preventing complications and hospital readmissions, as well as promoting preventive care and early intervention. By providing patients with the knowledge and skills they need to manage their health conditions

effectively, nurses can help to reduce the burden on the healthcare system and improve the overall health of the population.

While nurse-led education programs have many benefits, there are also some challenges associated with implementing these programs. One of the main challenges is the time and resources required to develop and implement education programs, as nurses may already have a heavy workload and limited time to devote to education activities. In addition, nurses may not always have the necessary training or expertise to effectively deliver education programs, which can impact the quality and effectiveness of the programs.

Another challenge is engaging patients and motivating them to participate in education programs, as some patients may be resistant to change or may not see the value in education. Nurses may need to work closely with patients to build trust and rapport, and to help them understand the importance of education in managing their health conditions.

Nurse-led education programs are a valuable tool for improving patient outcomes and promoting health education in the healthcare field. By using a variety of methods and approaches, nurses can effectively educate patients about their health conditions and empower them to take control of their own healthcare. While there are challenges associated with implementing education programs, the benefits far outweigh the drawbacks, and nurse-led education programs have the potential to make a significant impact on the health and well-being of patients.

## **Barriers to Implementing Nurse-led Education Programs:**

One of the main barriers to implementing nurse-led education programs is the lack of time and resources. Nurses are already overburdened with their clinical responsibilities, and adding education programs on top of their existing workload can be challenging. In many healthcare settings, nurses are expected to care for a large number of patients in a short amount of time, leaving little room for additional tasks such as patient education. Additionally, healthcare facilities may not have the necessary resources, such as educational materials or technology, to support nurse-led education programs.

Another barrier to implementing nurse-led education programs is the lack of training and support for nurses. Many nurses may not have the necessary skills or knowledge to effectively educate patients on complex health topics. Without proper training and support, nurses may struggle to deliver accurate and up-to-date information to

patients, potentially leading to misunderstandings or misinformation. Additionally, nurses may not feel confident in their ability to educate patients, which can hinder the success of education programs.

Furthermore, resistance from healthcare providers and administrators can also be a barrier to implementing nurse-led education programs. Some healthcare providers may be skeptical of the benefits of nurse-led education programs and may resist delegating education tasks to nurses. Additionally, administrators may be hesitant to invest in nurse-led education programs due to concerns about cost or lack of evidence supporting their effectiveness. Without buy-in from key stakeholders, it can be difficult to secure the necessary resources and support to implement nurse-led education programs successfully.

In addition to these barriers, organizational culture and communication issues can also hinder the implementation of nurse-led education programs. In some healthcare settings, there may be a lack of communication collaboration and between different healthcare providers, making it difficult to education efforts. Additionally, coordinate organizational culture may not prioritize patient education, leading to a lack of support for nurse-led education programs. Without a supportive organizational culture and effective communication, nurse-led education programs may struggle to gain traction and be successful.

Despite these barriers, there are strategies that can be implemented to overcome them and successfully nurse-led education implement programs. Providing nurses with adequate training and support, allocating resources for education programs, and fostering a culture of collaboration and communication within healthcare organizations can help to address these barriers. Additionally, engaging key stakeholders, such as healthcare providers and administrators, in the development and implementation of nurse-led education programs can help to build support and ensure their success.

While there are several barriers to implementing nurse-led education programs, with the right strategies and support, these programs can be successfully implemented and have a positive impact on patient outcomes. By addressing issues such as lack of time and resources, lack of training and support for nurses, resistance from healthcare providers and administrators, and organizational culture and communication issues, healthcare organizations can overcome these barriers and harness the full potential of nurse-led education programs.

## Recommendations for Enhancing Nurse-led Education Programs:

One key recommendation for enhancing nurse-led education programs is to incorporate a more interdisciplinary and collaborative approach. Healthcare is a complex and multidisciplinary field, and nurses need to be able to work effectively with other healthcare professionals to provide holistic and patient-centered care. By including content and activities that promote collaboration and teamwork with other disciplines, nurse-led education programs can better prepare nurses to navigate the complexities of modern healthcare environments and work effectively as part of a healthcare team.

Another recommendation for enhancing nurse-led education programs is to prioritize the development of critical thinking and problem-solving skills. Nurses are often faced with complex and challenging situations that require them to think critically, analyze information, and make sound decisions in a timely manner. By incorporating case studies, simulations, and other interactive learning activities that encourage critical thinking and problem-solving, nurse-led education programs can help nurses develop the skills they need to excel in their roles and provide high-quality care to their patients.

Additionally, it is important for nurse-led education programs to stay current with the latest evidence-based practices and guidelines in healthcare. The field of healthcare is constantly evolving, with new research and advancements being made on a regular basis. By ensuring that nurse-led education programs are up-to-date with the latest evidence and best practices, nurses can be better equipped to provide safe, effective, and evidence-based care to their patients.

Furthermore, it is essential for nurse-led education programs to prioritize cultural competence and diversity training. Nurses work with patients from diverse backgrounds and cultures, and it is important for them to be able to provide culturally sensitive and competent care to all patients. By incorporating content and activities that promote cultural competence and diversity awareness, nurse-led education programs can help nurses develop the skills they need to provide inclusive and equitable care to all individuals, regardless of their background or identity.

Nurse-led education programs play a vital role in preparing nurses to excel in their roles and provide high-quality care to their patients. By incorporating a more interdisciplinary and collaborative approach, prioritizing the development of critical thinking and problem-solving skills, staying current with evidence-based practices, and

prioritizing cultural competence and diversity training, nurse-led education programs can be enhanced to better prepare nurses for the challenges and opportunities of modern healthcare. By continuously evaluating and enhancing nurse-led education programs, we can ensure that nurses are equipped with the knowledge, skills, and competencies they need to make a positive impact on the health outcomes of the individuals and communities they serve.

#### **Conclusion:**

Nurse-led patient education programs have a significant impact on health literacy and self-management skills, and play a crucial role in empowering patients to take control of their health. By providing patients with the knowledge and tools they need to understand their conditions and to effectively manage their health, nurses can help improve patients' health outcomes and reduce healthcare costs. It is essential for healthcare organizations and policymakers to prioritize and support these initiatives in order to maximize their impact on patient care and outcomes.

#### **References:**

- 1. Adams RJ, Piantadosi C, Ettridge K, et al. Functional health literacy mediates the relationship between socio-economic status, perceptions and lifestyle behaviors. J Epidemiol Community Health. 2013;67(11):1037-42.
- Baker DW, Parker RM, Williams MV, Clark WS. Health literacy and the risk of hospital admission. J Gen Intern Med. 1998;13(12):791-8
- 3. Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. Ann Intern Med. 2011;155(2):97-107.
- 4. DeWalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. Literacy and health outcomes: a systematic review of the literature. J Gen Intern Med. 2004;19(12):1228-39.
- Gazmararian JA, Williams MV, Peel J, Baker DW. Health literacy and knowledge of chronic disease. Patient Educ Couns. 2003;51(3):267-75.
- Jovic-Vranes A, Bjegovic-Mikanovic V. Which women patients have better health literacy in Serbia? Patient Educ Couns. 2012;89(2):209-12.
- Kutner M, Greenberg E, Jin Y, Paulsen C. The health literacy of America's adults: results from the 2003 National Assessment of Adult Literacy. NCES 2006-483. National Center for Education Statistics. 2006.

- 8. Lee SY, Arozullah AM, Cho YI. Health literacy, social support, and health: a research agenda. Soc Sci Med. 2004;58(7):1309-21.
- 9. Lindau ST, Tomori C, Lyons T, et al. The association of health literacy with cervical cancer prevention knowledge and health behaviors in a multiethnic cohort of women. Am J Obstet Gynecol. 2002;186(5):938-43.
- 10. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. Health Promot Int. 2000;15(3):259-67.
- 11. Nutbeam D. The evolving concept of health literacy. Soc Sci Med. 2008;67(12):2072-8.
- 12. Paasche-Orlow MK, Wolf MS. The causal pathways linking health literacy to health outcomes. Am J Health Behav. 2007;31 Suppl 1:S19-26.
- 13. Parker RM, Baker DW, Williams MV, Nurss JR. The test of functional health literacy in adults: a new instrument for measuring patients' literacy skills. J Gen Intern Med. 1995;10(10):537-41.
- 14. Schillinger D, Grumbach K, Piette J, et al. Association of health literacy with diabetes outcomes. JAMA. 2002;288(4):475-82.
- 15. Scott TL, Gazmararian JA, Williams MV, Baker DW. Health literacy and preventive health care use among Medicare enrollees in a managed care organization. Med Care. 2002;40(5):395-404.
- 16. Sentell T, Halpin HA. Importance of adult literacy in understanding health disparities. J Gen Intern Med. 2006;21(8):862-6.
- 17. Sudore RL, Yaffe K, Satterfield S, et al. Limited literacy and mortality in the elderly: the health, aging, and body composition study. J Gen Intern Med. 2006;21(8):806-12.
- 18. Williams MV, Baker DW, Parker RM, Nurss JR. Relationship of functional health literacy to patients' knowledge of their chronic disease. A study of patients with hypertension and diabetes. Arch Intern Med. 1998;158(2):166-72.
- 19. Wolf MS, Gazmararian JA, Baker DW. Health literacy and functional health status among older adults. Arch Intern Med. 2005;165(17):1946-52.
- 20. Wolf MS, Knight SJ, Lyons EA, et al. Literacy, race, and PSA level among low-income men newly diagnosed with prostate cancer. Urology. 2006;68(1):89-93.
- 21. Bains SS, Egede LE. Associations between health literacy, diabetes knowledge, self-care behaviors, and glycemic control in a low income population with type 2 diabetes. Diabetes Technol Ther. 2011;13(3):335-41.

- 22. Bostock S, Steptoe A. Association between low functional health literacy and mortality in older adults: longitudinal cohort study. BMJ. 2012;344:e1602.
- 23. Cavanaugh K, Huizinga MM, Wallston KA, et al. Association of numeracy and diabetes control. Ann Intern Med. 2008;148(10):737-46.
- 24. Kim SH, Lee A. Health-literacy-sensitive diabetes self-management interventions: a systematic review and meta-analysis. Worldviews Evid Based Nurs. 2016;13(4):324-33.
- 25. Osborn CY, Cavanaugh K, Wallston KA, White RO, Rothman RL. Diabetes numeracy: an overlooked factor in understanding racial disparities in glycemic control. Diabetes Care. 2009;32(9):1614-9.
- 26. Rothman RL, Malone R, Bryant B, et al. A randomized trial of a primary care-based disease management program to improve cardiovascular risk factors and glycated hemoglobin levels in patients with diabetes. Am J Med. 2005;118(3):276-84.
- 27. Schillinger D, Barton LR, Karter AJ, Wang F, Adler N. Does literacy mediate the relationship between education and health outcomes? A study of a low-income population with diabetes. Public Health Rep. 2006;121(3):245-54.
- 28. Schillinger D, Piette J, Grumbach K, et al. Closing the loop: physician communication with diabetic patients who have low health literacy. Arch Intern Med. 2003;163(1):83-90.
- 29. Schillinger D, Piette J, Grumbach K, et al. Association of health literacy with diabetes outcomes. JAMA. 2002;288(4):475-82.
- 30. Williams MV, Baker DW, Parker RM, Nurss JR. Relationship of functional health literacy to patients' knowledge of their chronic disease. A study of patients with hypertension and diabetes. Arch Intern Med. 1998;158(2):166-72.
- 31. Wolf MS, Gazmararian JA, Baker DW. Health literacy and functional health status among older adults. Arch Intern Med. 2005;165(17):1946-52.