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THE INFLUENCE OF NURSE EDUCATION LEVEL ON HOSPITAL READMISSIONS

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Abstract:

Background: Hospital readmissions are a significant concern globally, with rates varying across different healthcare systems. In Poland, the readmission rate for patients returning to the same hospital and ward within 30 days is notably high at 19.2%. The lack of continuity of care between in-hospital and post-hospital settings is a key risk factor for readmissions, with studies indicating that a substantial percentage of patients do not adhere to discharge recommendations due to inadequate communication between inpatient and outpatient care providers. Preventing readmissions has become a priority in healthcare policy, with financial penalties imposed in some countries to incentivize hospitals to reduce readmission rates.

Objective: This research aims to investigate the relationship between nurse education level and hospital readmission rates. The objectives include assessing the impact of nurse education on patient outcomes and care quality, identifying potential disparities in readmission rates based on nurse education level, exploring the role of nurse education in reducing healthcare costs related to readmissions, and identifying strategies to enhance nurse education levels to improve patient care.

Conclusion: Nurse education plays a critical role in reducing hospital readmission rates and enhancing patient outcomes. Nurses with higher levels of education are better equipped to provide quality care, engage in evidence-based practice, facilitate effective communication and collaboration within healthcare teams, and empower patients through education and self-management skills. Factors influencing nurse education level and readmission rates are interconnected, underscoring the importance of investing in nurse education to elevate the overall quality of patient care. Strategies such as continuous professional development, promoting academic achievement, and fostering collaboration with academic institutions can aid in increasing nurse education levels and driving

positive changes in healthcare delivery to benefit both nurses and patients. Prioritizing nurse education can lead to improved healthcare outcomes and decreased readmission rates.

Keywords: education level, nurse staffing, readmissions, missed care.

Introduction:

Hospital readmissions, a concerning issue affecting one in every five hospitalized patients, have been a significant problem in healthcare systems worldwide. In Poland, the readmission rate for patients returning to the same hospital and ward type within 30 days stands at 19.2%, with an overall 90-day readmission ratio exceeding 30% [1]. Defined as an unplanned return to the hospital within 30 days of discharge, readmissions often stem from a lack of continuity in care between in-hospital and post-hospital settings, posing a substantial risk to patient well-being [2].

The transition from hospital to home is a critical period, where patients may experience changes in medication, treatment plans, and limited guidance, leading to potential readmission. High rates of patients returning shortly after discharge may signal deficiencies in in-hospital care quality or inadequate post-discharge coordination [3]. Efforts to mitigate readmissions have become a focal point of healthcare policies globally, with countries like the USA implementing initiatives to reduce readmission rates through financial penalties, such as those imposed by Medicare [4].

Research by Feigenbaum et al. suggests that nearly half of 30-day readmissions and 11% of total readmissions could be preventable, highlighting the potential for significant cost savings and improved patient outcomes [5, 6]. Hospitals are actively adopting strategies to curb readmissions, emphasizing enhanced care coordination, effective communication with patients and caregivers, and patient education [7]. The role of advanced nursing practices and education has gained prominence in recent literature, with studies showing that clinical nurse specialist (CNS) care can positively impact caregiver well-being, reduce readmission rates, and lower healthcare costs for elderly patients [8, 9].

Moreover, studies underscore the association between higher nurse education levels and improved patient outcomes, emphasizing the need for longitudinal research to establish optimal thresholds for minimizing risks and enhancing care quality [10]. These findings underscore the importance of collaborative efforts among healthcare providers, policymakers, and educators to address the complex challenges surrounding hospital readmissions and improve the overall quality of care delivery.

Objectives:

The main objectives of this review are:

1. To determine if there is a correlation between nurse education level and hospital readmission rates.
2. To assess the impact of nurse education level on patient outcomes and quality of care.
3. To identify any potential disparities in readmission rates based on nurse education level.
4. To investigate the role of nurse education level in reducing healthcare costs related to hospital readmissions.
5. To identify the strategies for increasing nurse education levels to improve patient care.

Relationship between Nurse Education and Hospital Readmissions:

The correlation between the educational background of nurses and the rates of hospital readmissions is a multifaceted and crucial aspect of healthcare provision that has been increasingly highlighted in recent years. Nurses hold a pivotal position in patient care, acting as the primary point of contact for individuals seeking medical attention within a hospital environment [11]. Consequently, the quality of education and training that nurses undergo significantly influences patient outcomes, including the probability of hospital readmissions. Various research studies have demonstrated that nurses with higher educational attainment, such as those holding bachelor's or master's degrees, are better

equipped to deliver top-notch care that can mitigate the risk of readmission. These nurses possess a more profound comprehension of complex medical conditions, advanced clinical skills, and critical thinking capabilities that enable them to make well-informed decisions and interventions [12]. Furthermore, nurses with advanced education are more inclined to engage in evidence-based practice and leverage the latest research findings to guide their care decisions, resulting in improved patient outcomes and decreased readmission rates. Additionally, nurse education plays a crucial role in fostering effective communication and collaboration among members of the healthcare team, which are fundamental elements in preventing hospital readmissions [13].

Nurses with higher educational qualifications are better prepared to communicate efficiently with physicians, specialists, pharmacists, and other healthcare professionals involved in a patient's care, ensuring that all team members are aligned regarding treatment plans, medication management, and follow-up care instructions. This interdisciplinary teamwork is essential for addressing the intricate needs of patients with chronic conditions or multiple comorbidities, who face an elevated risk of readmission due to the fragmented nature of healthcare delivery. By nurturing robust communication and teamwork skills, nurse education aids in streamlining care coordination efforts and diminishing the likelihood of gaps or errors in the transition of care, which can contribute to readmissions [14]. Furthermore, nurse education plays a pivotal role in promoting patient education and self-management skills, which are pivotal factors in averting hospital readmissions.

Nurses with advanced education are better equipped to educate patients about their health conditions, medications, lifestyle adjustments, and self-care strategies, empowering them to actively participate in managing their health and preventing complications that could lead to readmission [15]. By equipping patients with the knowledge and skills necessary to make informed decisions about their health, nurses can help reduce the occurrence of preventable readmissions associated with medication errors, missed follow-up appointments, non-adherence to treatment plans, or inadequate symptom management. Additionally, nurses with higher educational backgrounds are more proficient in evaluating patients' health literacy levels, cultural beliefs, and socioeconomic circumstances that may influence their ability to comprehend and comply with healthcare recommendations, enabling them to customize their education and support efforts to meet each patient's distinct needs and preferences [16].

Importance of Nurse Education in Reducing Readmission Rates:

Nurse education is pivotal in the realm of healthcare, exerting a significant influence on the reduction of readmission rates within medical facilities. The criticality of highly educated nurses cannot be emphasized enough, given their pivotal role in frontline patient care and their indispensable contribution to ensuring favorable health outcomes for individuals. Through the acquisition of comprehensive education and training, nurses are furnished with the requisite knowledge and competencies to proficiently evaluate, monitor, and oversee patients' health conditions. Consequently, this equips them to mitigate the likelihood of readmissions occurring [17].

An essential facet through which nurse education actively diminishes readmission rates is by championing evidence-based practice. Nurses who have undergone rigorous educational curricula are well-versed in the latest research findings and optimal healthcare methodologies. This knowledge empowers them to administer top-tier care grounded in scientific evidence, resulting in enhanced patient outcomes and a diminished risk of complications that might culminate in readmission. Furthermore, well-educated nurses possess the acumen to detect potential issues in their nascent stages, enabling prompt interventions that preclude the necessity for readmission [18].

Moreover, nurse education underscores the significance of effective communication and collaboration among healthcare teams. Educated nurses comprehend the intrinsic value of interdisciplinary teamwork in furnishing holistic care to patients. Through close collaboration with

other healthcare professionals like physicians, pharmacists, and social workers, nurses ensure that all facets of a patient's care are harmonized and optimized, thereby mitigating the likelihood of care gaps that could precipitate readmission [19].

In addition to honing clinical aptitudes, nurse education places a premium on cultivating critical thinking and problem-solving skills in nurses. These proficiencies are indispensable in the fast-paced and frequently unpredictable healthcare milieu, where nurses must make swift decisions and adapt to evolving circumstances. Educated nurses are better equipped to evaluate intricate scenarios, prioritize care judiciously, and implement suitable interventions to address patient needs, all of which conduce to a reduced risk of readmission [20].

Furthermore, nurse education assumes a pivotal role in advocating for patient education and self-management. Well-educated nurses can adeptly educate patients about their conditions, medications, and treatment regimens, empowering them to actively participate in their own care. By fostering patient comprehension and engagement, nurses facilitate individuals in better managing their health beyond the confines of the hospital, thereby lowering the likelihood of complications necessitating readmission [21].

Factors Influencing Nurse Education Level and Readmission Rates:

In the healthcare industry, the relationship between nurse education level and readmission rates holds immense importance, influencing patient outcomes and healthcare quality significantly. Nurse education level serves as a cornerstone in ensuring that nurses possess the requisite knowledge, skills, and competencies to deliver top-notch care to patients. Research indicates that higher education levels, such as a Bachelor of Science in Nursing (BSN) or a Master of Science in Nursing (MSN), are linked to enhanced patient outcomes, reduced mortality rates, and lower hospital readmission rates [22]. Nurses with advanced degrees are better equipped to engage in critical thinking, make evidence-based decisions, and communicate effectively with patients, families, and healthcare colleagues. Additionally, advanced education empowers nurses to stay abreast of the latest healthcare technologies, treatments, and patient care practices, crucial for administering safe and effective care.

Moreover, the educational attainment of nurses can impact their job satisfaction, professional growth, and career progression opportunities. Nurses who pursue further education often report heightened job satisfaction, feeling more self-assured in their ability to deliver quality care and positively influence patient outcomes. Advanced education can open up diverse career paths for nurses, including roles in nurse leadership, nurse education, or specialized advanced practice nursing fields. These avenues not only benefit individual nurses but also contribute to the enhancement of healthcare delivery and patient care quality [23].

Apart from nurse education level, readmission rates in healthcare facilities are influenced by various factors, such as the quality of care provided, patient education and involvement, care coordination, and post-discharge support services. Elevated readmission rates can have adverse consequences for both patients and healthcare institutions, leading to increased healthcare expenses, diminished patient satisfaction, and potential penalties from regulatory bodies. Nurses play a pivotal role in mitigating readmission rates by ensuring patients receive comprehensive education on their conditions, medications, and self-care practices during their hospitalization [24].

Furthermore, nurses are instrumental in facilitating care transitions and collaborating with interdisciplinary healthcare teams to devise personalized care plans addressing the patient's physical, emotional, and social requirements. By equipping patients with the necessary tools and resources to manage their health post-discharge, nurses can help avert complications, decrease readmission likelihood, and foster improved long-term health outcomes. Effective communication among nurses,

patients, families, and other healthcare providers is crucial for ensuring smooth care transitions and continuity of care, pivotal in preventing unnecessary hospital readmissions [25].

In summary, nurse education level and readmission rates are intertwined elements significantly impacting patient care quality and healthcare outcomes. Investing in nurse education and professional development not only benefits individual nurses but also elevates the overall care quality provided to patients. By addressing the multifaceted factors influencing readmission rates, healthcare organizations can bolster patient outcomes, cut costs, and enhance the overall patient experience. Nurses play a central role in realizing these objectives through their expertise, skills, and commitment to delivering patient-centric care that fosters health, well-being, and recovery.

Strategies for Increasing Nurse Education Levels to Improve Patient Care:

Nurse education is a critical factor in determining the quality of patient care delivery within the healthcare system. As healthcare systems continue to advance and grow in complexity, the necessity for well-educated and highly skilled nurses becomes increasingly evident. Implementing strategies that focus on elevating the educational levels of nurses has the potential to enhance patient outcomes, improve safety measures, and elevate the overall quality of healthcare services. One pivotal approach involves promoting continuous professional development among nurses through ongoing education and training initiatives. These programs are designed to help nurses stay updated with the latest advancements in healthcare practices, technologies, and evidence-based interventions, thereby enabling them to offer more efficient and effective care to patients [26].

Encouraging higher levels of academic achievement among nursing students is another effective strategy for enhancing nurse education levels. This can be accomplished by providing incentives for nurses to pursue advanced degrees, such as Master's or Doctoral programs. Advanced degrees not only deepen nurses' comprehension of intricate healthcare concepts but also equip them with critical thinking and leadership skills essential for instigating positive transformations within healthcare organizations. Moreover, fostering a culture of continuous learning within healthcare institutions can cultivate a sense of professional development and growth among nurses, motivating them to actively seek educational opportunities that enrich their clinical practice [27].

Collaborating with academic institutions stands out as another crucial strategy for boosting nurse education levels. By forming partnerships with universities and colleges, healthcare organizations can establish pathways for nurses to advance their education while still engaging in clinical practice. This may involve offering tuition reimbursement programs, flexible scheduling options, and on-site educational resources to support nurses in their academic pursuits. Furthermore, nurturing strong connections between academia and clinical practice can facilitate the integration of cutting-edge research findings into nursing education curricula, ensuring that nurses are equipped with the most current knowledge and skills required to deliver top-notch patient care [28].

In addition to formal education programs, mentorship and preceptorship initiatives can significantly contribute to enhancing nurse education levels. Pairing novice nurses with experienced mentors can provide invaluable guidance, support, and practical knowledge that complement formal education experiences. Mentorship programs aid new nurses in navigating the complexities of clinical practice, developing critical thinking skills, and building confidence in their ability to deliver safe and effective patient care. By fostering a culture of mentorship within healthcare organizations, nurses can benefit from continuous learning opportunities that enhance their professional development and contribute to improved patient outcomes [29].

Moreover, leveraging technology and innovation in nurse education can serve as a potent strategy for increasing education levels and enhancing patient care. Online learning platforms, simulation technologies, virtual reality tools, and other digital resources offer nurses interactive and engaging

educational experiences that refine their clinical skills and decision-making abilities. By integrating these technological advancements into nurse education programs, healthcare organizations can create dynamic learning environments that cater to diverse learning styles and preferences, ultimately producing more competent and confident nurses who are better equipped to address the complex needs of patients in the contemporary healthcare landscape [30].

Conclusion:

In conclusion, nurse education level plays a crucial role in reducing hospital readmission rates and improving patient outcomes. Nurses with higher levels of education, such as bachelor's or master's degrees, are better equipped to provide quality care, promote evidence-based practice, enhance communication and collaboration within healthcare teams, and empower patients through education and self-management skills. Factors influencing nurse education level and readmission rates are interconnected, highlighting the importance of investing in nurse education to enhance the overall quality of patient care. Strategies for increasing nurse education levels include promoting continuous professional development, encouraging academic achievement, and fostering collaboration with academic institutions. By prioritizing nurse education, healthcare organizations can drive positive changes that benefit both nurses and patients, ultimately leading to improved healthcare outcomes and reduced readmission rates.

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