

Harnessing Technology to Reduce Nursing Turnover in Saudi Arabia: Strategic Alignment with Vision 2030

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Abstract

Nursing turnover is a major challenge for global healthcare systems. In Saudi Arabia, nursing turnover is increasing with the reliance on non-Saudi nurses. This review explores the factors that contribute to nursing turnover, including organizational, social, cultural, and economic influences, and highlights the impact of job satisfaction on nurse retention. In addition, it examines the transformative role of technology in improving operational efficiency, reducing work-related stress, enhancing communication, and supporting professional development. By aligning healthcare reforms with the goals of Vision 2030, this research underscores the need for strategic leveraging technology and promoting inclusive work environments to effectively address these challenges. policies to retain nurses, ensure system sustainability, and improve patient outcomes. Recommendations include adopting supportive leadership practices, leveraging technology, and promoting inclusive work environments to effectively address these challenges.

Keywords: Nursing turnover, Job satisfaction, Saudi Arabia, Vision 2030, Technology in healthcare.

Introduction

In our current era, health systems are facing many challenges and obstacles that affect their ability to confront health crises and disasters, meet the needs of patients, and provide quality healthcare services that enhance the public health [1,2].

Nursing turnover is one of the most important challenges facing health systems globally, which is referred to as the rate of nurses leaving their jobs, whether voluntarily or involuntarily [3,4]. Nursing turnover is associated with a shortage of nurses and increased pressure on nurses, which leads to higher health care costs and lower quality of health services, which negatively affects the continuity of providing services to patients and patient outcomes [5].

According to the International Council of Nurses (ICN), the nursing turnover rate is constantly increasing, with a nursing deficit of 13 million nurses to fill the global nursing deficit [6]. The nursing turnover rate in the Kingdom of Saudi Arabia is 20% [7], compared to 15% in Australia and the United States [8]. Turnover rates are influenced by a variety of factors including individual aspects, work-related factors, interpersonal relationships, and the organizational environment [9]. The literature suggests that key factors in nursing turnover include salaries, stress, working conditions, and organizational culture [10,11]. Furthermore, Saudi Arabia's reliance on expatriate nurses contributes to increased nurse turnover due to language and cultural barriers and return home during health crises [12].

Global health systems, and the Saudi health system in particular, are witnessing an expansion in geographic area, population growth, and an increase in the spread of chronic and infectious diseases, which leads to an increase in demand for health and nursing services and patient expectations, causing professional fatigue for patients and thus nursing turnover [12,13]. Accordingly, the Kingdom of Saudi Arabia, within the framework of Vision 2030 and the National Transformation Program 2020, seeks to raise the level of health of individuals and advance the Saudi health sector by qualifying, training and retaining the health workforce and localizing the health sector [14]. Therefore, a comprehensive understanding of the factors affecting nurse turnover in the Kingdom of Saudi Arabia is essential to develop effective strategies to address challenges, retain nurses and improve the quality of health care.

Accordingly, this review aims to study and analyze the factors affecting nursing turnover in the Kingdom of Saudi Arabia, and to develop policies and strategies aimed at improving nurse retention, ensuring the sustainability of the health system, and enhancing the quality of health care provided.

The Saudi Arabian Health System and the Nursing Workforce

The Saudi health system faces major challenges in meeting the growing needs of the population in light of rapid population growth and the increasing prevalence of chronic and infectious diseases [12,13]. The focus on health care in the Kingdom, especially with Vision 2030, directs efforts towards improving the quality of health services and raising the health level of Saudi society. In addition, the localization of the Saudi health sector [14].

According to statistics from the Saudi Ministry of Health, the non-Saudi nursing workforce dominates the total nursing workforce [15]. This reliance reflects the urgent need to enhance training and qualification programs for Saudi nurses and localize the Saudi health sector within Vision 2030 to enhance the ability of the Saudi health system to confront crises and epidemics and the sustainability of the Saudi health system. The Saudi health system has witnessed an increase in the number of nursing staff, as statistics indicate an increase in the nursing staff during 2023 by more than 23% since 2016. The strategy encourage the nursing profession, as one of the initiatives of the Health Sector Transformation Program and Saudi Vision 2030 in supporting health cadres in the Kingdom to improve the provision of high-quality health services [16].

Nursing Turnover: Concept and Influencing Factors

Nursing Turnover Concept

Nursing turnover is one of the most important challenges facing health systems, which threatens their ability to continue providing health care services and meet the needs of patients. In addition to increasing the burden on the health workforce and increasing health care costs [17]. Nursing turnover is associated with a number of factors that affect the ability of health systems to attract and retain nurses. Nursing turnover is defined as the rate at which nurses leave their jobs, whether by changing jobs within the organization (internal turnover) or leaving the organization entirely (external turnover) [18]. This concept is a key indicator of the quality of the work environment and the stability of the nursing workforce in health care institutions.

Factors affecting nursing turnover

Factors affecting nursing turnover are divided into:

Organizational environment factors:

Include work pressure, poor professional appreciation, uncompetitive salaries, and ineffective leadership. Therefore, health systems that suffer from a lack of fairness in the distribution of jobs and incentives experience high rates of nursing turnover [19].

Social and psychological factors:

Nurses often face challenges related to work-life balance, especially with increased working hours, sleeping in hospitals, and exposure to harassment from patients. Therefore, work pressure and low social support can lead to increased rates of employee turnover [20].

Cultural challenges:

Female nurses face difficulty in society accepting their work in the nursing profession, so cultural misunderstandings and language challenges pose an additional challenge, making the process of adapting to the work environment more difficult and affecting the shortage of nursing staff and nursing turnover [21].

Job Satisfaction and its Impact on Nurse Turnover

Job satisfaction is the positive feeling or psychological satisfaction that an employee gets as a result of his or her work experience. This feeling revolves around a set of factors such as the nature of the work, administrative support, and job recognition. In healthcare, job satisfaction is considered one of the main pillars that enhance nurses' continuity in their jobs [22]. Literature indicates that job satisfaction is directly related to lower nursing turnover rates and improved healthcare quality [23].

Key factors that influence job satisfaction include:

Organizational Leadership

Organizational leadership plays a fundamental role in enhancing employee satisfaction through transformational leadership styles that focus on empowerment and effective communication. These styles enhance employees' sense of appreciation and belonging, which reduces turnover rates and raises levels of organizational commitment [24]. Supportive leadership also contributes to creating a stimulating work environment that facilitates the achievement of professional goals.

Working Conditions

Working conditions include equitable distribution of resources, a supportive work environment, and flexible working hours. These factors provide a sense of fairness and efficiency, which enhances employee satisfaction [25]. In Saudi Arabia, research shows that organizations that focus on improving working conditions achieve higher rates of nurse satisfaction, which contributes to nurse retention and improved healthcare [26].

Social Support

Social support is a key factor in improving the work experience, as support from colleagues and management helps reduce work stress and increase employees' sense of security. The absence of this support leads to a sense of professional isolation, especially among expatriate nurses, which leads them to consider leaving their jobs [27].

Factors affecting nurse turnover globally

In general, environmental, organizational, personal, cultural, economic, and psychological factors globally influence nurse turnover and intention to leave. Addressing these factors in an integrated manner can improve nurse retention rates, reduce nurse turnover rates, and improve healthcare.

Environmental factors: Include work pressure, lack of health facilities, and shortage of nursing staff, which increases occupational stress and prompts nurses to leave. Therefore, providing supportive work environments and adequate resources enhances job satisfaction and reduces turnover rates [28].

Organizational factors: Includes salaries, incentives, and promotion opportunities. Transformational leadership and professional recognition contribute to enhancing job commitment and reducing nurses' intention to leave [29].

Personal factors: Factors such as marital status and experience have a significant impact; as novice nurses tend to stay longer, while family pressures prompt some to leave, especially nurses in rural areas. Therefore, achieving a balance between work and personal life helps reduce this phenomenon [20].

Cultural factors: Adapting to the local culture is a challenge, especially for expatriate nurses. Promoting inclusive work environments that support cultural diversity improves the work experience and reduces turnover rates [30].

Economic factors: Salaries and cost of living influence nurses' decisions; Competitive salaries and additional incentives encourage retention, while unfavorable economic conditions encourage departure [29].

Health and psychological factors: Burnout and psychological stress increase nurses' intention to leave. Psychological support and well-being programs help reduce stress and improve retention rates [20,25].

Education and professional development opportunities: The lack of professional development opportunities pushes nurses to seek other opportunities. Therefore, health systems must invest in training, professional growth, and attracting and retaining talent [31].

The Role of Technology in Reducing Nursing Turnover

Modern healthcare systems increasingly rely on technology, which contributes significantly to improving the work environment and enhancing nurse retention. With challenges such as nurse turnover and job stress on the rise. In Saudi Arabia, enhancing the use of technology is in line with the goals of Vision 2030 to improve the health system.

Improving operational efficiency

Technology helps improve operational efficiency within hospitals by streamlining the daily operations of nurses. Advanced work management systems facilitate shift scheduling and reduce errors resulting from uncoordinated interactions. Automation plays a pivotal role in routine tasks such as dispensing medications and managing records, allowing nurses enough time to focus on providing direct patient care. This reduces wasted time and increases productivity, making the work environment more attractive [32].

Reducing work stress

Technology reduces the work stress experienced by nurses by using advanced systems that support their daily work. Telehealth platforms reduce the need to attend patients intensively in hospitals, reducing the workload. In addition, decision support systems provide smart solutions that help nurses make informed and rapid decisions based on accurate data, reducing the psychological stress associated with making decisions under complex circumstances [33].

Enhancing education and professional development

Technology provides innovative opportunities for nurses to learn and develop continuously. Online training allows them to improve their skills at any time without having to stop work. Simulation programs are an effective tool in enhancing practical experience by simulating real-world scenarios in a safe environment. This type of training increases nurses' confidence in their abilities and reduces potential errors, which enhances nursing staff retention [34].

Improving communication

Technology enhances communication between medical teams through innovative tools such as mobile devices that enable rapid communication between nurses and doctors or other departments [34]. Electronic medical records play an important role in providing accurate and immediate information about patients, facilitating quick decision-making and improving the quality of healthcare. These systems make work smoother and reduce the frustration caused by miscommunication [35].

Conclusion

Saudi Arabia faces significant nursing turnover challenges due to reliance on expatriate staff and occupational stress. This review identifies organizational, social, and cultural factors as key influencers of nurses' intention to leave. Technology emerges as a vital tool in enhancing work environments, reducing burnout, and supporting career development. Comprehensive strategies, including transformational leadership and inclusive work environments, are crucial for improving retention. Aligning with Vision 2030, investing in technology, training, and local nursing development is essential to sustain the health system and elevate care quality. Collaborative efforts are needed to implement innovative, sustainable solutions.

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