



Understanding and Empowering the Determinants of Nurse Retention in a Clinical Environment

Klinik Ortamda Hemşire Tutmanın Belirleyicilerini Anlama ve Güçlendirme

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Abstract: The loss of the nursing workforce is an essential human resources issue threatening healthcare systems worldwide. The factors affecting nurses leaving their employment or the profession include a stressful work environment, an imbalance between authority and responsibilities, physical or psychological violence, burnout, lack of leadership support, and communication issues. A high turnover rate in patient care services increases the cost of human resources, lowers productivity and efficiency, and negatively impacts patient safety and quality of patient care. A positive and healthy environment for nursing practice is essential for nursing retention and the quality of nursing care. The studies have shown that good governance and nursing leadership, professional development and autonomy, multidisciplinary working group and colleague relations, adequate nursing staffing and resources, and a work environment free from bullying and violence are essential components of positive work environments. Organizations with good governance climate in clinical systems and improved work environments have higher nurse retention rates.

Keywords: Nurse, Nursing, Clinical, Environment, Empowerment

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Öz: Hemşirelik işgücünün kaybı, dünya çapında sağlık sistemlerini tehdit eden önemli bir insan kaynakları sorunudur. Hemşirelerin işini veya mesleğini bırakmasını etkileyen faktörler arasında stresli bir çalışma ortamı, yetki ve sorumluluklar arasındaki dengesizlik, fiziksel veya psikolojik şiddet, tükenmişlik, liderlik desteği eksikliği ve iletişim sorunları sayılabilir. Hasta bakım hizmetlerinde yüksek devir hızı insan kaynakları maliyetini artırmakta, üretkenliği ve verimliliği düşürmekte, hasta güvenliğini ve hasta bakım kalitesini olumsuz yönde etkilemektedir. Hemşirelik uygulamaları için olumlu ve sağlıklı bir ortam, hemşirelik bakımı ve hemşirelik bakımının kalitesi için esastır. Çalışmalar, iyi yönetim ve hemşirelik liderliği, mesleki gelişim ve özerklik, multidisipliner çalışma grubu ve meslektaş ilişkileri, yeterli hemşire kadrosu ve kaynaklar ile zorbalık ve şiddetten uzak bir işyeri, pozitif çalışma ortamlarının temel bileşenleri olduğunu göstermiştir. Klinik sistemlerde iyi yönetim iklimine sahip ve çalışma ortamlarını iyileştirmiş kuruluşlar daha yüksek hemşire tutma oranlarına sahiptir.

Anahtar Kelimeler: Hemşire, Hemşirelik, Klinik, Ortam, Güçlendirme

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Introduction

A qualified healthcare workforce is vital for a robust healthcare system (1). As essential members of the healthcare team, nurses leaving healthcare for various reasons has become an important global problem for health systems (2–6). The World Health Organization (WHO) estimates that between 2016-2030, there will be a 7.6 million nursing shortage in the world, especially in low and middle-income countries (1). In terms of individual countries, the official nursing shortage in the United States (USA) will increase to 918,000 (7) from 2009 to 2030 and 109,490 in Australia from 2016 to 2025 (8). The International Council of Nursing (2022) reported that the COVID-19 pandemic has further increased the need for emergency nurses in all countries and that this demand will continue to rise in the next few years (6). Although there is no national data on the nurse turnover rate in Turkey, there is a growing trend of contracted nursing employment and increased nurse issues with the privatization of healthcare services (9). The main factors contributing to the loss of nurses in health services include unhealthy and stressful work environments, physical or psychological violence, burnout, career problems, lack of work-life balance, and financial issues (2, 10–13). WHO (2016), to maintain the number of nurses, emphasized the selection of qualified staff and focused on initiatives to address employee absenteeism and improve employee health. The report stressed the importance of creating initiatives to keep nurses in the healthcare field in high-income countries while focusing on strategies to reduce the migration of nurses from low-income countries (1). According to WHO 2021 report, *“the environment in which healthcare professionals work, their motivation level, work organization, management capacity, division of labor and availability of resources have significant implications for improving healthcare worker productivity and the health outcomes of the population”* (14). The fundamental focus on the strategies to keep the nursing workforce has been around maintaining and strengthening the positive clinical practice environment (2, 12, 13, 15). Empowered and shared responsibilities in the workplace increase nurses' professional autonomy and job satisfaction and improve safe and quality patient care (16).

Only a few studies in the literature describe nurse retention strategies in detail or explain the effect of the practice environment on improving retention. Studies discussing the topic can provide a useful starting point for reflecting on current practices and evaluating interventions at the organizational level. However, additional research needed to focus on the definition and measurement of the concept of “retention of nurses” for the continuity of health care (16).

This study aims to identify the factors that determine the retention of nurses in the clinical setting and raise awareness about the strategies that strengthen nurses' intention to stay. It is believed that this study will contribute to the development of understanding and effectively addressing current and anticipated nursing workforce deficiencies and the use of evidence-based retention strategies in healthcare settings.

Literature Review

In the literature, it is possible to come across various studies titled: "retention of nurse," "intention to stay at work," and "nurse turnover rate." A study by Tourangeau and Cranley (2006) on 13,000 nurses in Canada concluded that job satisfaction, work group cohesion and cooperation, organizational commitment, and personal characteristics are important determinants of nurse retention (17). Chen et al. (2008), in a study conducted on 412 nurses in Taiwan, determined a strong relationship between nurses' intention to leave and fair resource allocation, workload, resource adequacy, managerial support, and job satisfaction (18). In the study conducted by Johnson and Rea (2009) on 249 nurses who are members of the Emergency Nurses Association in the USA, it was reported that mobbing in the workplace is an important factor in leaving both the organization and the nursing profession (19). Dawson et al. (2014), in a qualitative study involving 362 nurses in Australia, identified improving performance appraisal, responsive teaching and mentoring, and flexible employment options as important strategies that increase nurse retention (16). A study conducted by Heidari et al. (2017) on 500 nurses in Iran showed that job stress, social support, job satisfaction, and organizational satisfaction are the major factors affecting the intention to stay on the job (3). Satoh et al. (2018), in a study they conducted on 713 nurses in Japan, the factors that strengthen nurses' intention to stay in a job include: *“comfortable workplace environment, passive motivational factors, hospital location (ease of transportation), appropriate work-life balance, and success in nursing”* (4). Nurdiana and Hariyati (2018) conducted a systematic review of 22 articles on nurses' intention to leave and identified five nurse retention strategies: positive work environment, leadership, nursing staffing,

orientation, teaching and mentoring, and professional development (20). Alzahrani (2022), in his systematic review of 21 articles, identified seven main themes: recruitment, financial issues, personnel, career development opportunities, peer relations, nursing leadership and management, work-related issues, and experience of abuse at the workplace (11). In a study conducted by Aydoğmuş and Özlük (2022) on 547 nurses in Turkey, 50.6% of the nurses who participated in the study reported that they intended to quit their job due to the negative perception of the working environment (21).

The Concept of Nurse Retention and Nurse Turnover

The concept of “retention” is the ability to retain the personnel as a working member by increasing the length of stay in the services of an institution or organization (11). “Nurse retention”; is defined as “keeping nurses in their jobs” (22) or “the degree to which nurses stay in their current job” (23). Nurse turnover rate, on the other hand, is a concept that expresses the transfer of nurses from a voluntary primary employment position to another position in nursing or another profession. A high turnover rate can be defined as a turnover occurring at 12-50 % (16). The reasons for the loss or shortage of the nurse workforce are multifactorial, complex, and independent of each other. While several factors aggravate the problem, the main factor is experienced on both the supply and demand side. It is stated that globalization in health services, aging of the population, shorter hospital stays, a transition from hospital to outpatient and home care, re-emergence of infectious diseases such as tuberculosis, HIV, malaria, and global epidemics such as COVID-19 will increase the demand for nurses. Nursing supply is not at the desired level when proportional to demand (24). On the other hand, the increasing loss of qualified workforce due to unfavorable working conditions in health services, misuse, and problems related to unfair resource distribution make this picture even more difficult (20,25).

Creating an organizational culture that is committed to retaining the nursing workforce in a healthcare facility is an important strategy for reducing nursing turnover. Duxbury and Armstrong (1981) and Hoffman (1982), who studied staff turnover, defined measurement indicators that facilitate the calculation of turnover rate (26, 27). The "Nursing Turnover Measurement Form" obtained by combining these indicators is given in **Table 1** (28). With the help of this form, nurse managers can calculate the institutional nurse turnover rate in certain periods (6 months or annually) with the data obtained from the personnel records of the employees (28).

Table 1. Nursing Turnover Rate Measurement Form.

Measure	Description	Formula
Retention rate (%)	Rate on nurses who stayed with the organization at the given time.	Number of newly hired nurses/ Average number of working nurses X100
Rate of nurses left (%)	Rate of nurses who left the organization at the given period.	Number of nurses who left the organization/Average number of working nurses X 100
Work stability rate (%)	It is the proportion of nurses who were hired at the beginning of the term and continue to work after a certain period.	Number of nurses at the beginning who stayed/Total number of nurses at the beginning X100
Job instability rate (%)	Percentage of nurses who were hired at the beginning of period who left by the end of the certain period.	Number of nurses who left at the beginning/Number of nurses at the beginning X100
Job durability Rate	Newly hired nurses who survived during the certain period.	Newly hired nurses/Total number of nurses X100
Loss Rate	Newly hired nurses who left before the certain period.	Newly hired nurses who left/Total number of nurses X100

The "Expected Turnover Scale" developed by Hinshaw and Atwood (1984), is recommended for understanding the newly hired nurses continued intentions and their level of satisfaction with the institution and to determine the actions to be taken to address the results. The “Expected Turnover Scale”

that nurses self-reported is shown in **Figure 1** (29). Nurse Managers can predict their intention to leave by monitoring newly recruited nurses at 6-month intervals during the first year and then annually during their time in the organization (28).

Please check the most appropriate one for you from the options below
<ul style="list-style-type: none"> • I intend to stay in my current position for a while • I am very confident that I will leave my current position in the foreseeable future • Staying or leaving my position staying in the same position is not an essential issue for me • I will decide soon whether or not to leave the organization • If a new job offer comes in, I will seriously consider it • I have not thoughts of leaving my current position • I have been in a position I wanted for a long time • I am very sure I will stay here for a while • I have no idea how long I wil stay here • I play to stay in his job for a while • I have great doubts about whether I will stay in his organization • I plan to leave my current position in a near future
<p>Scoring: Each choice is scored from 1 = strongly disagree to 7 = strongly agree. The scores of the answers are summed up and divided by 12. This calculation obtained a score between 1=strongly disagree and 7=strongly agree</p> <p>The following result is obtained with the reverse scoring choices, items 1, 3, 6, 8, 9, and 10.</p> <p>7= Strongly disagree 6= Moderately disagree 5= Slightly disagree 4= Not sure 3= I somewhat agree 2=Moderately agree 1=Strongly agree</p>

Figure 1. Turnover Probability Scale.

Determinants of Nurse Retention in a Clinical Environment

The nursing staff's work environment is "*the organizational characteristics of a work environment that facilitate or constrain professional nursing practice*" (14). Research results support that improving working environments can improve patient outcomes in terms of general adults (11, 14, 20), pediatrics, and infants (14). On the other hand, a dysfunctional and negative work environment in a health organization significantly affects both patient outcomes and the employment process of nurses (10). Studies have identified a positive relationship between nurses' intention to stay in the clinical area and positive practice environments (2, 4, 11, 14, 30, 31). Strategies that support a positive and healthy work environment at work include; governance and nurse leadership, professional development and autonomy (24, 25, 32, 33), multidisciplinary working group and colleague relations (2, 10, 16, 30), nurse personnel and resource adequacy (9, 10, 24), and prevention of bullying and violence in the workplace (10, 34, 35). The determinants and empowerment strategies that effectively retain nurses and create a healthy and positive work environment are summarized in **Table 2**.

Governance and Nursing Leadership

Shared Governance empowers nurses and allows them more control over their practice (44). The shared governance approach discussed to strengthen the working environment positively contributes to the nurse workforce, patient and organizational outcomes. Shared governance climate; It improves patient care outcomes, increases productivity by facilitating understanding of the purpose of organizational policies and procedures, and increases nurses' organizational commitment and job satisfaction by strengthening their participation in managerial decisions (16, 49). Dawson et al. (2014) drew attention to the fact that low

Table 2. Key Determinants of a Positive Work Environment and Strengthening Strategies.

Determinants	Strategies
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Governance and Nursing Leadership	<ul style="list-style-type: none"> • Adopting a flexible and decentralized organizational structure and facilitating employees' access to senior management (37). • Establishing and maintaining a shared governance system that supports participatory management (13, 38). • Support good communication between the manager and employees, establishing a supportive management structure (38, 39). • Support and mentor nurses' participation in managerial and supervisory programs and professional organizations (40). • Increasing nurses' access to information, technology, and resources (28) • Involving nurses in patient care decision-making (28). • Establishing and supporting a clinical governance system that allows collaboration and sharing responsibilities with other health disciplines in patient care and clinical settings (41, 42).
Professional development and autonomy	<ul style="list-style-type: none"> • Defining nurses' duties, authorities, responsibilities, and roles at the legal level clearly and unequivocally (16). • Developing standards of care at the level of health institutions by adhering to nurses' job descriptions and improving overall performance by creating performance indicators based on success (16). • To encourage and support the active participation of nurses in training programs, conferences, workshops, interdisciplinary practice groups, and critical thinking courses (2). • To define autonomous nurse practices at the unit and organizational levels and to discuss evidence-based practice results (2). • Strengthening the status of nursing as independent practitioners by improving nurses' rights (salary, leave, social benefits) (2). • To encourage research on nursing practices and to support evidence-based practices (2). • Establishing nursing research committees in the clinical field and ensuring active participation of nurses in the committees (43). • To create time and resources for scientific nursing practice (43). • Establishing clinical career ladder programs so nurses do not experience career stagnation and burnout (44). • To organize in-service training programs at regular intervals to allow nurses to make active presentations and to allow time (28). • To encourage nurses to share the knowledge and skills they have gained from scientific activities they participate in and outside the institution with other employees (28). • Ensuring that nurses participate in committees where patient rights, care rules, and critical care steps are discussed and decided (28). • Implementing, encouraging, and rewarding advice from nurses for better patient care (28)
Multidisciplinary working group and colleague relations	<ul style="list-style-type: none"> • Build consensus and foster strong communication by focusing team members on a clearly shared vision, common goals and objectives (17). • Establish collaborative practice guidelines and protocols to promote the independent practice and interprofessional collaboration (45). • To support the participation of nurses in in-clinic and external training with other health disciplines and to encourage cooperation (46). • To enable nurses to participate in patient visits with other disciplines and create platforms for discussing patient outcomes (47). • Being visible in the ward (unit) as the executive nurse and often communicating well with staff (28). • To encourage professional communication and cooperation between nurses and their colleagues in other units (28).
Appropriate staffing and resources	<ul style="list-style-type: none"> • Create policies regarding criteria to follow when hiring nursing staff (2,15,39). • Recruit a sufficient number of competent nurse staff with appropriate skills (15). • Developing corporate strategies to retain experienced staff (15). • To plan work schedules and working hours that take into account the demands of the personnel (2,16) • Recognizing staff achievements, giving importance to nursing recognition, and rewarding staff (2,16). • Identify new work schedules (flexible scheduling, new technology services, etc.) to encourage retention of older nurses (25). • Calculating and reporting the nurse turnover rate at the organizational and unit level at regular intervals and discussing it at the senior management level (28).
Prevention of bullying and violence	<ul style="list-style-type: none"> • Planning and implementing proactive programs to prevent and resolve conflicts in the workplace (48). • Develop strategies to promote workplace bullying awareness (48). • Organizing training programs to improve cooperation in preventing and coping with bullying, staff communication, and access to better health services (48). • Setting goals and targets for the prevention of workplace violence, providing resources, and assigning authorized managers (48). • Organizing training on identifying and controlling danger and what to do in an emergency (48). • Keeping records of incidents, injuries, illnesses, attacks, and dangers and taking preventive measures (48).

nurse participation in the decision-making process causes a feeling of worthlessness and powerlessness in nurses. This situation increases the intention to leave the job (16). However, leadership support is critical in nursing practices to create a healthy working environment, provide safe and quality patient care, provide qualified personnel, facilitate teamwork, and secure human resources (40, 50). Nurse leaders are expected to have advanced skills in communication, conflict resolution, creating a vision, and motivating and inspiring nurse staff at all levels (31, 51).

Studies show that employees resign more often because of the perceived quality of the manager rather than the quality of the organization (52). Alzahrani (2022), in his review of 21 articles, emphasized the importance of leadership skills of nurse professionals in guiding nurse personnel, supervising medical processes, and providing quality patient care (11). Al-Ahmadi (2014) reported that inadequate nursing supervision and a lack of appreciation of nurses are important problems that increase the nurse turnover rate (53). Han et al. (2014) and Wang and Yuan (2018) stated that weak organizational commitment and management dissatisfaction are negative factors affecting nurse retention (54, 55).

Professional Development and Autonomy

Continuing education and development opportunities provided by the workplace have an important place in the professional development of nurses. Wang and Yuan (2018) and Nowrouzi et al. (2016) state that the nurse turnover rate increases in organizations where there is no personnel development in the organization or where there is a lack of training through continuous education and training (55, 56). Phuekphan et al. (2021) and Hung and Lam (2020) stated that a lack of professional development and career opportunities contributes to job dissatisfaction in nurses and strengthens the intention to leave the organization (57, 58).

Professional development is a structure that strengthens the professional autonomy of the nurse in care initiatives. (59). The concept of professional autonomy is a trait based on patient-based competence and self-confidence to improve patients' health and develop the best care plan through professional decision-making and professional interactions with other professional team members (38, 59). In her professional practice, an autonomous nurse is expected to be a professional who not only takes orders but also thinks, decides, and takes responsibility for her decisions in patient care. Therefore, autonomy in nursing seems necessary because of its important role in improving the quality of patient care by making timely decisions at the patient's bedside, reducing stress, increasing job satisfaction, and attracting and retaining nurses (59). Nursing leaders and health authorities can promote nurse autonomy by providing educational opportunities in critical thinking and evidence-based practice and by defining nurses' roles and status within the organization (2). Successful integration of nursing research and evidence-based practice into all nursing and organizational decision-making processes provides a strong framework for autonomous practice (13).

Multidisciplinary Working Group and Colleague Relations

The level of organizational commitment of nurses is closely related to workgroup cohesion (17). Studies have shown that positive work relationships and high level of workgroup commitment are important determinants of nurses' job satisfaction and intention to remain in their employment. Physician-nurse collaboration is especially important for the stability of the entire nursing team (17, 60, 61). A study conducted by Zhang et al. (2016) in a tertiary dental hospital in China showed a positive correlation between physician-nurse cooperation scores and job satisfaction and a negative correlation with the probability of quitting a current job (47).

Colleague relations refer to the relationship between nurses and their colleagues in patient care. El-Jardali et al. (2013), the fact that nurses have positive and satisfying relationships with their colleagues in the working environment significantly reduces their intention to leave (62). Similarly, the study by Breau and Rheaume (2014) showed that positive teamwork between nurses working in the intensive care unit with other colleagues positively impacted nurse retention (63). Phuekphan et al. (2021) and Hung and Lam (2020) revealed that conflict with a colleague in a clinical workplace creates a bad working environment and negatively affects nurses staying in their profession (57, 58).

Adequate Nursing Staffing and Resources

A sufficient number of competent (qualified) personnel with the right mix of skills in the health sector provides strength and leadership in the team (64). Clearly defined professional roles and expectations of health personnel working at different levels, high clinical skill proficiency of the personnel, and a strong sense of trust among the team have been defined as indicators of positive practice environments (2). On the other hand, the number of nurses and the number of patients per nurse is an important factors in determining and maintaining an adequate nurse workforce. In the study conducted by Heidari et al. (2017), the low number of nurse personnel in shifts was found to be an important determinant affecting nurse permanence (3). Ulrich et al. (2019), in a study conducted on 8080 nurses who are members of the American Association of Critical Care Nurses (AACN), it was reported that 60% of the nurses planned to leave the job due to unqualified personnel (65). Kelly et al. (2021) it has been shown that the nurse staff who do not have the appropriate knowledge and skills and the lack of personnel create an unhealthy working environment, which increases the workload and causes nurse burnout (66). Similarly, Aljohani and Alomari (2018) and, Dawson et al. (2014), Hairr et al. (2014) revealed that the lack of inadequate and qualified nurses leads to job dissatisfaction and increases the intention to leave the job (67, 16, 68).

Prevention of Bullying and Violence in the Workplace

In the literature, different types of abuse, such as off-duty and inappropriate use of personnel, verbal or physical and psychological harassment from colleagues or patients (bullying), violence, and discrimination, have been discussed (11). Studies have found a positive correlation between bullying and the intention to leave among colleagues in the work environment (54, 57). Muharrag et al. (2022), in a study conducted on 347 nurses in a tertiary healthcare hospital in Saudi Arabia, the rate of personal bullying was found to be 33.4%, and the rate of nurses who reported intention to quit their job due to bullying was 31.7% (69).

Exposure to violence in the work environment negatively affects psychological, emotional, and physical health, increasing the increasing workload and staff turnover. Nurses, typically colleagues, patients, and patient relatives, can be victims of violence (35). Numerous studies show that violence is a common event in nurses' clinical settings and that the presence of violence seriously affects nurses' intention to leave (36).

Conclusion and Recommendations

Positive and healthy practice environments are a factor that directly affects the retention of nurse staff and the quality of patient care. In the literature, among the leading strategies that support a positive and healthy work environment, Governance and nurse leadership, nurse staff and resource adequacy, professional development and autonomy, multidisciplinary working group and colleague relations and absence of bullying and violence are discussed. Creating positive practice environments reduces nurses' turnover intentions and health expenditures and improves patient care outcomes. Healthcare organizations with a shared governance climate and positive work environment have higher nurse retention rates. Shared governance structures that support nurses' participation in decisions affecting their practice environment and strengthen professional autonomy in care practices are of critical importance. However, nurse leaders and health managers have an essential role in creating and maintaining a positive work environment. Therefore, nurse leaders, healthcare organizations, and senior decision-makers should develop and implement strategies that increase nurse staff retention and promote an attractive work environment. Nurses will continue to leave their job or profession unless improvements are made. Some of the improvements recommended are; developing standards for a positive clinical environment, education, and skills of nurses matching clinical practice opportunities and responsibilities, providing professional autonomy, and facilitating collaboration and shared responsibilities and professional relationships.

Based on this concept analysis, it is clear that comprehensive retention strategies are needed to recruit and retain professional nurses in an organization effectively. Based on this concept analysis, it is clear that organizations need comprehensive retention strategies to recruit and retain professional nurses effectively. For this reason, while making nursing staffing plans, it is vital to review the study findings related to nursing turnover and the measurement of nurses' intentions to leave and apply the findings periodically to measure turnover and the potential for losing staff. The organization can identify those who have the intention to leave the organization and take measures to increase their potential to stay. There is a need at

the national level to measure the nurse turnover rate, provide opportunities to do extensive research to identify ways to retain nurses in clinical practice areas, conduct qualitative research to examine why nurses are leaving the institutions where they work, and create evidence-based healthy, and positive working environments

Ethic Declaration: During the process of this study, scientific and ethical principles were followed, and all the sources used for the article have been properly cited. The article was scanned by Turnitin software and no plagiarism was detected.

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