#### **REVIEW ARTICLE**



# Concept analysis of nurse retention

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#### **Abstract**

Nurse retention is widely acknowledged as a crucial international workforce issue, yet the concept remains ambiguous. This study focuses on a concept analysis in an effort to clarify the attributes of nurse retention, including its antecedents and consequences. The Walker and Avant approach was applied to analyze the concept of nurse retention. Four key attributes of nurse retention were identified in the analysis, specifically motivation, intention, and individual decision; strategy and intervention; geographic context; and attachment to work. Antecedents of nurse retention included the healthcare system at the macro level, the health care facility, health personnel, and living conditions. Retention has consequences for individual nurses, the healthcare organization, and the overall health system. Our concept analysis provides clarification to better understand nurse retention along with its implications for the healthcare workforce. The analysis further emphasizes the importance of retention as a comprehensive priority issue for human resources when recruiting and maintaining the nursing workforce internationally.

#### KEYWORDS

nurse retention, concept analysis, health workforce, retention

#### 1 INTRODUCTION

Globally, the health workforce is vital to support the functioning of a strong healthcare system. The lack of a competent workforce adversely affects individuals and populations that need services, and ultimately influences attainment of the sustainable development goals (World Health Organization, 2016). Currently, many nations are experiencing shortages of skilled health workers particularly of nurses. The World Health Organization (2016) estimated a global shortage of approximately 14.5 million doctors, nurses, and midwives, which by 2030 might hamper essential health-related interventions. Focusing specifically on the nursing workforce, a needs-based assessment estimates that by 2030 the shortage could be nearly 7.6 million (World Health Organization, 2016). Nurse workforce retention is acknowledged as a critical issue internationally to meet existing and emerging healthcare needs (Buchan, Shaffer, & Catton, 2018).

Contributing factors for the global nursing shortage include an aging population and workforce, burnout, competing career and family responsibilities, emergent geographic and environmental health influencing situations, and violence in healthcare settings (Haddad & Toney-Butler, 2019). It is important to note, however, that addressing a critical shortage of nurse professionals might not always involve an increase in the number of graduates. Rather, consideration must focus on reducing staff turnover rates through improved retention efforts, such as selective recruitment, employee health initiatives, and reducing inefficiency associated with absenteeism and "ghost" workers (World Health Organization, 2016).

However, confusion regarding the extent of the problem is evidenced in many studies that use the term "nurse retention" interchangeably with terms such as "turnover", "intention to leave", and "intention to stay" (Dotson, Dave, Cazier, & Spaulding, 2014). Imprecise terms and definitions perpetuate ambiguity in understanding of the concept of nurse retention. A very recent policy brief focusing on

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nurse retention by Buchan et al. (2018) states that extent and supporting evidence associated with nurse retention restricts generalizability associated with the lack of consensus on the definition and the narrow scope of most studies. For example, some studies focus on turnover as an indicator of retention; that is, focusing on those who plan to leave the organization or profession (Buchan et al., 2018). Dieleman, Kane, Zwanikken, and Gerretsen (2011) focused on retention in rural areas, which must take into consideration other factors, such as the number of competing organizations, the number of available nurses in the community, the number of resignations, the number of workers intending to stay versus those who plan to leave, and the average number of years employed in a particular institution. Also of importance is the total number of nurses in an organization and the percentage of registered nurses (RN) that leave a facility in a given year (Buchan et al., 2018), and the average length of time employees remain employed within an organization (Hogan, 2012). To the best of our knowledge, no concept analysis on nurse retention has been developed to clarify the meaning, despite numerous studies, reviews, and policies on the health workforce issue. Given the variability of terms and definitions that are used, a concept analysis of nurse retention is needed to achieve clarity and better understand this phenomenon.

The purpose of this analysis was to examine the concept of nurse retention in order to identify its defining attributes, antecedents, and consequences (Table 1). A comprehensive analysis will contribute to increased awareness of its uses in health care and the nursing profession, as well as for future research studies. Potentially, enhanced understanding will lead to the development and adoption of evidence-based recruitment and retention initiatives in healthcare facilities that effectively address the current and projected nursing workforce shortages.

#### 1.1 | Concept analysis of nurse retention

In analyzing the concept of "nurse retention", a systematic eight stage analytical procedure was conducted using the concept analysis approach of Walker and Avant (2004). This approach includes: (i) selecting a concept; (ii) determining the purposes of analysis; (iii) identifying of all uses of the concept; (iv) determining of the

**TABLE 1** Concept of nurse retention: Attributes, antecedents, and consequences

Attributes	Antecedents	Consequences
<ul> <li>Motivation, intention, and individual decision</li> <li>Strategy and intervention</li> <li>Geographic context</li> <li>Attachment to work</li> </ul>	Factors driving nurses to remain in present jobs:  Health system at the macro level Healthcare facility Health personnel Living conditions	Impacts on: Individual/nurse Healthcare organization Health system

defining attributes; (v) identifying a model case; (vi) identifying additional cases; (vii) identifying antecedents and consequences; and finally (viii) defining empirical referents. Steps i and ii of Avant and Walker's approach are addressed in the Introduction; the remaining steps are elaborated on in the following sections.

The concept of interest for the analysis was nurse retention, which is expressed in various terms in the literature, including "retention" and "intention to stay" in the nursing workforce. These terms were considered to have something in common with the chosen concept. For the analysis, the literature search was restricted to nursing literature from the following bibliographic databases: Web of Science, CINAHL, and PubMed. Retrievable, peer-reviewed research articles published between 2000 and 2018 and written in the English language were identified and reviewed. Other relevant documents that complemented and enhanced the research articles were also reviewed. The initial literature search resulted in approximately 230 publications. After removing duplications using Endnote, the relevancy of the title and abstract was assessed. Forty one articles were retrieved that met the inclusion criteria; subsequently, these were reviewed and carefully analyzed to identify the attributes, antecedents, and consequences of nurse retention.

## 1.2 | Identifying uses of the concept

The initial step was examining the definition of the general term "retention" in the dictionary and in relevant published literature. Based on the Oxford Dictionary (2010), the word "retention" refers to "the continued possession, use, or control of something". Researchers have not examined retention in much detail; therefore, the broad definition lacks specificity and empirical referents. The WHO Regional Office for Europe (2011) defines retention as an organized effort to build an environment that motivates an employee to stay in their job by applying appropriate policies and interventions designed to attract and recruit health workers who are recent graduates, out of work, working in other professions, or retired. Specifically, nurse retention is defined as "keeping nurses in their jobs" (Dotson et al., 2014) or "the extent to which nurses stay in their present job" (Ellenbecker, Porell, Samia, Byleckie, & Milburn, 2008), Eventually, the definitions on retention addressed others dimensions, such as actions to keep employees for a particular period, the number of employees who stayed (vs those who left), and length of stay (i.e. employment in an organization).

#### 1.3 | Determining the defining attributes

According to Walker and Avant (2004), this stage is central to any concept analysis and involves defining attributes and characteristics of the concept. Based on a review of the relevant literature, four common attributes of nurse retention were noted: (i) motivation, intention, and individual decision; (ii) strategy and intervention; (iii) geographic context; and (iv) attachment to work.

#### 1.3.1 | Motivation, intention, and individual decision

Motivation and intention are critical characteristics in nurse retention that impact an individual's decision to remain in the organization as opposed to leaving their job. The level of one's motivation is an important factor that can be used to predict employee intention to stay in their job (Basit & Duygulu, 2018).

Dotson, Dave, Cazier, and McLeod (2013) found that motivation intrinsically includes the elements of competence, self-determination, interest, excitement, curiosity, excitement, and high levels of task involvement, all of which can be influenced by internal and external forces in the workplace. Their study found that increased motivation could bring improvements in work performance and satisfaction, which also contribute to better retention. Reitz, Anderson, and Hill (2010) found that behavioral intention has a significant association with actual turnover and retention, whereas intention to stay had the most substantial relation with actual retention. The possibility of remaining employed in the present organization can be accurately ensured when nurses indicate they have an intention to stay (Tourangeau & Cranley, 2006). Willis-Shattuck et al. (2008) identified several factors which connect incentive, motivation, and retention, specifically monetary, career system, education, training, health facility infrastructure, availability of resources, leadership and management, and performance appraisal. Efendi, Purwaningsih, Kurniati, and Bushy (2014) confirmed that both financial and non-financial incentives are motivational factors and have a significant association with nurse intention to remain, particularly in rural areas. Other studies identify personal factors with intent to stay, such as satisfaction and commitment (Hairr, Salisbury, Johannsson, & Redfern-Vance, 2014), perceived barriers to patient care (Reeves, West, & Barron, 2005), and one's self-concept and professional status (L. S. Cowin, Johnson, Craven, & Marsh, 2008). These factors directly and indirectly influence the intention of nurses to remain employed in current position within an organization.

## 1.3.2 | Strategy and intervention

Effective nurse-retention strategies are essential for managers to ensure there are adequately qualified employees to provide highquality health care at an affordable cost (Humphreys et al., 2007). Responding to the world nursing shortage in general and inequitable urban-rural distribution in particular, the World Health Organization (2018) provided global recommendations to support nations in assessing workforce needs, as well as planning, implementing, and evaluating recruitment and retention strategies that address the unique sociocultural and economic dynamics in rural and remote areas. Kingma (2008) suggested developing strategies that encourage the willingness of nurse professionals to become and remain professionally active. Other studies identified specific recruitment and retention strategies, including effective leadership (Kleinman, 2004a, 2004b), the creation of a positive workplace environment (Price & Reichert, 2017), and changing an institutional culture through comprehensive new employee orientation programs (Kiel, 2012; Shermont & Krepcio, 2006). Janney, Horstman, and Bane (2001) found that a shared professional decision-making model through an ongoing employee retreat program successfully reduced the nurse vacancy rate to 6.2%, and also decreased mandatory overtime by 75%. In turn, these strategies were associated with improved employee retention and satisfaction. The retreat program comprised of two sequential events involving the hospital leaders and nurses participating in focus groups to identify problems, recommend solutions, and evaluate and implement the actions taken.

## 1.3.3 | Geographic context

Geographic context is another critical dimension of nurse retention. For example, recruiting and retaining professional nurses has always been more challenging in rural areas, especially in more remote areas and underserved regions of the world (Dieleman et al., 2011; World Health Organization, 2018). Additionally, compared to urban areas, rural healthcare facilities experience higher rates of nursing shortages along with greater challenges in retaining staff (Dotson et al., 2013). Internationally, nurses migrating from developing nations to industrialized countries further perpetuates nursing shortages in already underserved regions of the world. International migration patterns of nurses must be addressed in order for developing nations to retain a competent workforce that addresses the healthcare needs of its citizens (International Centre on Nurse Migration, 2015). For this reason, geographic factors must be taken into consideration by an organization when planning, implementing, and evaluating initiatives to address nurse retention, especially in developing nations.

## 1.3.4 | Attachment to work

Work passion or attachment to work relates to one's perceived value of the work, and is reflected by nurses who remain in their job (Shacklock & Brunetto, 2012). Attachment to work includes a sense of personal commitment as an underlying reason for employees to remain in current employment positions, and ultimately also impacts nurse retention rates (Reitz et al., 2010). Corresponding strategies are therefore essential to facilitate a feeling of commitment in order to retain an employee in an organization (i.e. job embeddedness); that is, developing employee commitment to the occupation, the employer, and organization (Gambino, 2010). As a strategy, being attached to "place" is an inherent component of a successful "rural workforce pipeline" model to improve current recruitment and retention strategies to assist the development of rural health workforce policy (Fisher & Fraser, 2010). For example, educating and supporting a local resident into the nursing profession can be an effective approach. These individuals often have community and familial connections, with a corresponding attachment to sustaining the local healthcare system.

## 1.4 | Identifying a model case and a contrary case

Constructing a model case is the fifth step of Walker and Avant's concept analysis model and includes a description of its existing attributes

(Walker & Avant, 2004). A case can be developed from real situations, gleaned from the literature, or creatively invented. The following model case is adapted from the evaluation report of the Ministry of Health, Indonesia, on the implementation of the special assignment program for remote areas.

Budiman (pseudonym) was a 23 year old male with a diploma degree in nursing. He had been working as a nurse in a remote community health center for 2 years under a special assignment program for remote areas. He was hired on an annual basis with a salary of approximately USD 300 per month, approximately the same salary as civil servants in similar locations, with an additional incentive from the local government. Budiman wanted to be employed as a civil servant, which would ensure job security for him, and to pursue a bachelors degree in nursing. The local government had policies on civil servant employment and a bonded rural scholarship scheme prioritizing health workers from remote areas. Budiman liked his job, especially the outreach service, and maintained a good relationship with his colleagues and the local community. He told his director that he intended to continue his contract next year. He was determined to stay.

All four attributes emerge in this case and describe the complexity of the concept of nurse retention. Budiman was motivated to have a better future and his intention is the basis of his decision to continue his assignment in remote areas of Indonesia. His decision was supported by the government policy, being designated as a civil servant employee who has been the recipient of a rural work repayment loan (scholarship) program, coupled with his feelings of attachment to his job, work peers, employer, and the community.

A contrary case is where none of the defining attributes are present or a case that is not the concept (Walker & Avant, 2004). A contrary case for the concept of nurse retention in a rural setting is exemplified by the following story, which is based on the personal experience of the authors.

Dewi was a new graduate with a bachelors degree in nursing. As a new RN, she wanted to join the healthcare team in a big hospital in the city. However, her parents asked her to find a job in their hometown. She applied for a nursing job at the only available general hospital and was accepted. The head nurse of the hospital was a senior nurse with a nursing diploma. Dewi sensed that the head nurse felt threatened by her presence. The head nurse often said to her that experience mattered more in their nursing work and that, as a junior, Dewi should obey her supervisor, regardless of her educational background. Dewi survived working for 2 months and then resigned.

The first case exemplified Budiman's connection and commitment to his community. There was a good fit between his goals and the health facility's philosophy, mission and goals. The second case, however, did not present the defining attributes. Dewi's employment was not fully driven by her personal motivation. She did not feel accepted by her peers and was unable to establish a personal commitment to the job for which she was hired. The personal fit and the hiring institution conflicted. Consequently, Dewi's wanted to leave this nursing position, and even perhaps the nursing profession entirely. Comparing those two cases, the first one describes a successful approach to retention, both for the job as well as for the nursing profession.

However, the second case describes unsuccessful retention that reflects what often occurs in a rural setting when the nurse is unprepared or lacks knowledge about the rural practice setting.

## 1.5 | Identifying antecedents

Identification of antecedents helps to define attributes or events that emerge prior to the embodiment of the concept (Walker & Avant, 2004). For the concept of nurse retention, four antecedent categories were identified: health system at the macro level, healthcare facility, health personnel, and living conditions. At the macro level of the health system, antecedents could include reform, roles, and responsibility; policy and regulation; workforce development; and resource distribution (Dieleman et al., 2011). Driving factors for nurse retention at the health facility level include financial incentives, encouraging relationships, ICT (information, communication, and technology) support, teamwork and career opportunities (Mbemba, Gagnon, Paré, & Côté, 2013), supportive leadership of nurse managers and nurse administrators (AbuAlRub & Nasrallah, 2017; Cowden, Cummings, & Profetto-McGrath, 2011), and continuous education programs (Rambur, McIntosh, Palumbo, & Reinier, 2005). For nurse professionals, personal factors can directly, and sometimes indirectly, influence retention, such as age, extended family and children, education, ethnicity, length of first-time employment, changing life events (Buffington, Zwink, Fink, Devine, & Sanders, 2012; Robinson, Murrells, & Smith, 2005), and life experience (Gambino, 2010). The fourth category, living condition, includes a satisfactory work environment (Duffield, Roche, Blay, & Stasa, 2011; Erenstein & McCaffrey, 2007), along with infrastructure and services (World Health Organization, 2018).

#### 1.6 | Identifying consequences

Consequences are incidents or events that emerge and are related to the concept (Walker & Avant, 2004). Based on the literature, we found that nurse retention impacts three entities: individual/nurses who remain in their jobs, the healthcare organization, and the overall healthcare system of a nation or community. Nurse retention can have a positive impact on an individual/nurse, such as motivation to work productively and reduction of absenteeism (Dieleman et al., 2011), positive image of nursing (Zurn, Dolea, & Stilwell, 2005), and reduced workloads (Shields & Ward, 2001). For the healthcare organization, nurse retention can result in positive consequences, such as nurse satisfaction and loyalty (Janney et al., 2001), increased patient demand (Ellenbecker et al., 2008), lower risk-adjusted mortality and adverse patient outcomes, better quality of care, increased client satisfaction, reduced nurse burnout, and improved job satisfaction (Buchan et al., 2018). For the healthcare system, nurse retention contributes to a robust and adequate health workforce, which is essential to address the health-related needs of a nation or region (World Health Organization, 2018).

### 1.7 | Identifying empirical referents

The last stage of the concept analysis procedure is identifying empirical referents for the defining attributes (Walker & Avant, 2004). In Walker and Avant's opinion, when a concept is unclear, one must determine the existence of the concept through measurement. More specifically, various approaches have been used to measure nurse retention. According to Waldman and Arora (2004), retention measures should focus not only on the number of employees who are leaving but should also include the characteristics of those who have left; for example, the time taken to leave, length of stay, level of knowledge and skill, and the institutional impact (i.e. consequences). The retention rate was measured by following cohorts of specific employees over time. Meraviglia et al. (2008) used two measurements of nurse retention: analyzing fluctuations between the nurse turnover rates and vacancy rates for the duration of the project. Ellenbecker et al. (2008) measured nurse retention through self-reports of intention to leave or to remain and by tracking nurse turnover using variables, such as job satisfaction, personal characteristics of nurses, employer characteristics, labor market characteristics, and intention. Dolea (2010) identified several other indicators to assess retention, including length of service, proportion of health workers staying in rural areas, survival rates, turnover rates, and settlement rates. Additionally, the nurse retention index has been used to measure the intention of nurses to remain in their profession or to leave and find other work (retention plans) (Cowin, 2002).

One limitation of this concept analysis focusing on nurse retention relates to including only retrievable peer-reviewed articles written in the English language from 2000 to 2018. Our analysis of the literature for the most part revealed that nurse retention was associated with turnover, stability, staff engagement, attrition, job embeddedness, and intention to leave. Essentially, there is a lack of a precise definition and measurement for nurse retention. Additionally, most of the research focuses on nurse retention in hospital settings. There is a paucity of research focusing on nurse retention in extended and long-term care institutions, community/population-based institutions, as well as home health and hospice care organizations, in particular, institutions and organizations in the rural context. Additional research is needed that focuses on the manner in which nurse retention is defined and measured in settings and environments across the healthcare continuum. Of particular concern is the retention challenge of nurses in developing nations across the globe.

## 2 | CONCLUSION

Nurse retention is a complex and dynamic concept involving psychological, managerial, political, and healthcare aspects. The concept has four defining attributes: motivation, intention, and individual decision; strategy and intervention; geographic context; and attachment to work. Nurse retention is driven by external factors at the macro level of the health system and health facility, as well as personal/individual factors. The nurse retention rate has consequences for individual nurses, the healthcare organization where nurses work, and finally for national and international communities.

Based on this concept analysis, it is apparent that comprehensive strategies are needed to effectively recruit and retain professional nurses within an organization. These strategies will vary depending on organizational culture and setting. Finally, a consistent definition allows measurement of characteristics of nurse retention to have an accurate picture of retention rates and strategies in various setting. This concept analysis can be used in the development of research instruments measuring nurse retention to generate more consistent findings and to address this international concern of nursing workforce strategies.

#### **AUTHOR CONTRIBUTIONS**

Study design: F.E. and A.K.

Data collection: F.E., A.K., and J.G. Data analysis: F.E., A.K., J.G. and A.B.

Manuscript writing and revisions for important intellectual content: F.E., A.K., J.G, and A.B.

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#### REFERENCES

- AbuAlRub, R. F., & Nasrallah, M. A. (2017). Leadership behaviours, organizational culture and intention to stay amongst Jordanian nurses. *International Nursing Review*, 64(4), 520–527.
- Basit, G., & Duygulu, S. (2018). Nurses' organizational trust and intention to continue working at hospitals in Turkey. Collegian, 25(2), 163–169.
- Buchan, J., Shaffer, F. A., & Catton, H. (2018). *Policy brief: nurse retention*. Geneva: ICN, ICNM, CGFNS.
- Buffington, A., Zwink, J., Fink, R., Devine, D., & Sanders, C. (2012). Factors affecting nurse retention at an academic Magnet<sup>®</sup> hospital. *Journal of Nursing Administration*, 42(5), 273−281. https://doi.org/10.1097/nna. 0b013e3182433812
- Cowden, T., Cummings, G., & Profetto-McGrath, J. (2011). Leadership practices and staff nurses' intent to stay: A systematic review. *Journal* of Nursing Management, 19(4), 461–477. https://doi.org/10.1111/j. 1365-2834.2011.01209.x
- Cowin, L. (2002). The effects of nurses' job satisfaction on retention: An Australian perspective. *Journal of Nursing Administration*, 32(5), 283–291. https://doi.org/10.1097/00005110-200205000-00008
- Cowin, L. S., Johnson, M., Craven, R. G., & Marsh, H. W. (2008). Causal modeling of self-concept, job satisfaction, and retention of nurses. *International Journal of Nursing Studies*, 45(10), 1449–1459. https://doi.org/10.1016/j.ijnurstu.2007.10.009
- Dieleman, M., Kane, S., Zwanikken, P. A., & Gerretsen, B. (2011). Realist review and synthesis of retention studies for health workers in rural and remote areas. Retrieved from https://research.vu.nl/en/publications/realist-review-and-synthesis-of-retention-studies-for-health-work
- Dolea, C. (2010). Increasing access to health workers in remote and rural areas through improved retention: Global policy recommendations. Geneva: World Health Organization.
- Dotson, M. J., Dave, D. S., Cazier, J. A., & McLeod, M. D. (2013). Nurse retention in rural United States: A cluster analytic approach. *Interna*tional Journal of Healthcare Management, 6(3), 184–191. https://doi. org/10.1179/2047971913y.0000000037
- Dotson, M. J., Dave, D. S., Cazier, J. A., & Spaulding, T. J. (2014). An empirical analysis of nurse retention: What keeps RNs in nursing? *Journal of*

- Nursing Administration, 44(2), 111-116. https://doi.org/10.1097/nna. 0000000000000034
- Duffield, C. M., Roche, M. A., Blay, N., & Stasa, H. (2011). Nursing unit managers, staff retention and the work environment. *Journal of Clinical Nursing*, 20(1–2), 23–33. https://doi.org/10.1111/j.1365-2702.2010.03478.x
- Efendi, F., Purwaningsih, M., Kurniati, A., & Bushy, A. (2014). What do Indonesian nurses want? Retaining nurses in rural and remote areas of Indonesia. *Online Journal of Rural Nursing and Health Care*, 14(2), 32–42. https://doi.org/10.14574/ojrnhc.v14i2.260
- Ellenbecker, C. H., Porell, F. W., Samia, L., Byleckie, J. J., & Milburn, M. (2008). Predictors of home healthcare nurse retention. *Journal of Nursing Scholar-ship*, 40(2), 151–160. https://doi.org/10.1111/j.1547-5069.2008.00220.x
- Erenstein, C. F., & McCaffrey, R. (2007). How healthcare work environments influence nurse retention. *Holistic Nursing Practice*, 21(6), 303–307. https://doi.org/10.1097/01.hnp.0000298615.25222.de
- Fisher, K. A., & Fraser, J. D. (2010). Rural health career pathways: Research themes in recruitment and retention. *Australian Health Review*, 34(3), 292–296. https://doi.org/10.1071/ah09751
- Gambino, K. M. (2010). Motivation for entry, occupational commitment and intent to remain: A survey regarding registered nurse retention. *Journal of Advanced Nursing*, 66(11), 2532–2541. https://doi.org/10.1111/j.1365-2648.2010.05426.x
- Haddad, L. M., & Toney-Butler, T. J. (2019). Nursing shortage StatPearls [Internet]. Treasure Island, FL: StatPearls Publishing.
- Hairr, D. C., Salisbury, H., Johannsson, M., & Redfern-Vance, N. (2014). Nurse staffing and the relationship to job satisfaction and retention. Nursing Economics, 32(3), 142–147. https://www.ncbi.nlm.nih. gov/pubmed/25137811
- Hogan, P. J. (2012). Registered nurse understanding of organizational commitment and its link to retention: grounded theory study (Dissertation of Doctor Philosophy). Australia: Faculty of Sciences, Engineering and Health. CO University.
- Humphreys, J., Wakerman, J., Wells, R., Kuipers, P., Jones, J., Entwistle, P., & Harvey, P. (2007). Improving primary health care workforce retention in small rural and remote communities: How important is ongoing education and training. Canberra: Australian Primary Health Care Research Institute.
- International Centre on Nurse Migration. (2015). Nursing workforce sustainability: The international connection. Philadelphia, PA: International Centre on Nurse Migration.
- Janney, M. A., Horstman, P. L., & Bane, D. (2001). Promoting registered nurse retention through shared decision making. *Journal of Nursing Administration*, 31(10), 483–488. https://doi.org/10.1097/00005110-200110000-00012
- Kiel, J. M. (2012). An analysis of restructuring orientation to enhance nurse retention. *Health Care Manager (Frederick)*, 31(4), 302–307. https://doi.org/10.1097/hcm.0b013e31826fe298
- Kingma, M. (2008). Nurses on the move: Historical perspective and current issues. OJIN: The Online Journal of Issues in Nursing, 13(2), 1. https:// doi.org/10.3912/OJIN.Vol13No02Man01
- Kleinman, C. (2004a). The relationship between managerial leadership behaviors and staff nurse retention. Hospital Topics, 82(4), 2–9. https://doi.org/10.3200/htps.82.4.2-9
- Kleinman, C. S. (2004b). Leadership: A key strategy in staff nurse retention. The Journal of Continuing Education in Nursing, 35(3), 128–132. https://doi.org/10.3928/0022-0124-20040501-09
- Mbemba, G., Gagnon, M.-P., Paré, G., & Côté, J. (2013). Interventions for supporting nurse retention in rural and remote areas: An umbrella review. Human Resources for Health, 11(1), 44. https://doi.org/10. 1186/1478-4491-11-44
- Meraviglia, M., Grobe, S. J., Tabone, S., Wainwright, M., Shelton, S., Yu, L., & Jordan, C. (2008). Nurse-friendly hospital project: Enhancing nurse retention and quality of care. *Journal of Nursing Care Quality*, 23(4), 305–313; quiz 314-305. https://doi.org/10.1097/01.ncq.0000314728.65721.7c
- Oxford Dictionary. (2010). Oxford dictionary of English. London, UK: OUP.

- Price, S., & Reichert, C. (2017). The importance of continuing professional development to career satisfaction and patient care: Meeting the needs of novice to mid-to late-career nurses throughout their career span. Administrative Sciences, 7(2), 17. https://doi.org/10.3390/ admsci7020017
- Rambur, B., McIntosh, B., Palumbo, M. V., & Reinier, K. (2005). Education as a determinant of career retention and job satisfaction among registered nurses. *Journal of Nursing Scholarship*, 37(2), 185–192. https://doi.org/10.1111/j.1547-5069.2005.00031.x
- Reeves, R., West, E., & Barron, D. (2005). The impact of barriers to providing high-quality care on nurses' intentions to leave London hospitals.

  Journal of Health Services Research & Policy, 10(1), 5–9. https://doi.org/10.1258/1355819052801750
- Reitz, O. E., Anderson, M. A., & Hill, P. D. (2010). Job embeddedness and nurse retention. *Nursing Administration Quarterly*, 34(3), 190–200. https://doi.org/10.1097/naq.0b013e3181e702b7
- Robinson, S., Murrells, T., & Smith, E. M. (2005). Retaining the mental health nursing workforce: Early indicators of retention and attrition. *International Journal of Mental Health Nursing*, 14(4), 230–242. https://doi.org/10.1111/j.1440-0979.2005.00387.x
- Shacklock, K., & Brunetto, Y. (2012). The intention to continue nursing: Work variables affecting three nurse generations in Australia. *Journal of Advanced Nursing*, 68(1), 36–46. https://doi.org/10.1111/j.1365-2648.2011.05709.x
- Shermont, H., & Krepcio, D. (2006). The impact of culture change on nurse retention. *Journal of Nursing Administration*, 36(9), 407–415. https://doi.org/10.1097/00005110-200609000-00007
- Shields, M. A., & Ward, M. (2001). Improving nurse retention in the National Health Service in England: The impact of job satisfaction on intentions to quit. *Journal of Health Economics*, 20(5), 677–701. https://doi.org/10.1016/s0167-6296(01)00092-3
- Tourangeau, A. E., & Cranley, L. A. (2006). Nurse intention to remain employed: Understanding and strengthening determinants. *Journal of Advanced Nursing*, 55(4), 497–509. https://doi.org/10.1111/j.1365-2648.2006.03934.x
- Waldman, J. D., & Arora, S. (2004). Measuring retention rather than turnover: A different and complementary HR calculus. *Human Resource Planning*, 27(3), 6–9.
- Walker, L. O., & Avant, K. C. (2004). Strategies for theory construction in nursing (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- WHO Regional Office for Europe (2011). In WHO Regional Office for Europe (Ed.), Technical meeting on health workforce retention in countries of the South-Eastern Europe health network. Copenhagen: WHO Regional Office for Europe.
- Willis-Shattuck, M., Bidwell, P., Thomas, S., Wyness, L., Blaauw, D., & Ditlopo, P. (2008). Motivation and retention of health workers in developing countries: A systematic review. *BMC Health Services Research*, 8(1), 247. https://doi.org/10.1186/1472-6963-8-247
- World Health Organization. (2016). Global strategy on human resources for health: Workforce 2030. Geneva: World Health Organization.
- World Health Organization. (2018). WHO recommendation on recruitment and retention of staff in rural and remote areas. Retrieved from https://extranet.who.int/rhl/topics/improving-health-system-performance/who-recommendation-recruitment-and-retention-staff-rural-and-remote-areas
- Zurn, P., Dolea, C., & Stilwell, B. (2005). Nurse retention and recruitment: Developing a motivated workforce. Geneva: International Council of Nurses, World Health Organization.

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