

CrossMark  
click for updates

# Experiences of Iranian Nurses that Intent to Leave the Clinical Nursing: a Content Analysis

Leila Valizadeh<sup>1</sup>, Vahid Zamanzadeh<sup>2</sup>, Hosein Habibzadeh<sup>3</sup>, Leyla Alilu<sup>2\*</sup>, Mark Gillespie<sup>4</sup>, Ali Shakibi<sup>5</sup>

<sup>1</sup>Department of Pediatric Nursing, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran

<sup>2</sup>Department of Medical Surgical Nursing, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran

<sup>3</sup>Department of Medical Surgical Nursing, Faculty of Nursing and Midwifery, Urmia University of Medical Sciences, Urmia, Iran

<sup>4</sup>Masters in Education, School of Nursing and Midwifery, University of the West of Scotland, Paisley, Scotland

<sup>5</sup>Registered Nurse, Medical Education Development Center, Urmia University of Medical Sciences, Urmia, Iran

## ARTICLE INFO

### Article Type:

Original Article

### Article History:

Received: 29 Apr. 2015

Accepted: 17 Sep. 2015

ePublished: 1 Jun. 2016

### Keywords:

Personnel turnover

Iran

Nurses

Qualitative research

## ABSTRACT

**Introduction:** Despite the current shortage of nurses, it is important to know the reasons nurses want to leave the clinical setting. The purpose of this study was to explore the experiences of nurses who intend to leave clinical nursing.

**Methods:** In a qualitative content analysis study, data obtained from 13 in-depth face-to-face semi-structured interviews with nurses working in hospitals affiliated to the Tabriz and Urmia University of Medical Sciences in Iran, selected through purposive sampling. A conventional content analysis was used for data analysis.

**Results:** Four categories and eleven subcategories emerged during data analysis. The extracted categories and sub categories consisted of (I) Entry routes into nursing (implicitly entry, targeted entry), (II) Defects in dignity (lack of professional vision toward the nurses, social status of nurses), (III) Work in non-ideal working environment (lack of support, discrimination, conflict, lack of opportunities for advancement), and (IV) Dissatisfaction with working conditions (heavy workload, lack of power, unusual working hours).

**Conclusion:** The findings of this qualitative study reflect professional turnover as a complex, ongoing, multidimensional process. By identifying the factors responsible, it could be possible to retain nurses in the field.

**Please cite this paper as:** Valizadeh L, Zamanzadeh V, Habibzadeh H, Alilu L, Gillespie M, Shakibi A. Experiences of Iranian nurses that intent to leave the clinical nursing: a content analysis. J Caring Sci 2016; 5 (2): 169-78. doi:10.15171/jcs.2016.018.

## Introduction

Nurses constitute the largest staff group within modern health care delivery systems.<sup>1</sup> The present and growing shortage of graduate nurses in the health care system is therefore a worldwide concern.<sup>2,3</sup> In fact, the Committee of Europe estimates that by 2020, this shortage will amount to some 590000 vacancies.<sup>4</sup>

Nursing work force forecasts in the United States show that the shortage of nurses there may exceed 500,000 vacancies by 2025,<sup>5</sup> and this phenomenon is expected to worsen due to the impending retirement of significant

numbers of current nurses.<sup>6</sup> A shortage of nurses has been reported in many Western countries<sup>7</sup> and this is also the case in Iran. In Iran, official figures on the shortage of nurses are not available, but formulae's suggest that approximately 240,000 nurses would be needed to support the 1974 population figure of 75 million in 2014. At present there are only 100,000 nurses employed, and even if that rate were doubled, patients would only be able to access the minimum standards of care. In reality the ratio is below 0.9 in Iran at present and would require being doubled.<sup>8</sup>

Shortages of nurses affect health care

\*Corresponding Author: Leyla Alilu (PhD), email: Aliluleyla@gmail.com. This study was approved and funded by deputy of research in Tabriz University of Medical Sciences (Project number: 462).



© 2016 The Author(s). This work is published by Journal of Caring Sciences as an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by-nc/4.0/>). Non-commercial uses of the work are permitted, provided the original work is properly cited.

continuity and have negative effects on patient outcomes<sup>9,10</sup> while reducing job satisfaction for nurses.<sup>11</sup> According to the World Health Organisation, health work force crises seriously impair the ability of many countries in fighting disease and improving health.<sup>12</sup>

Workforce shortages and a rapid staff turnover in nursing is causing problems for nursing and health care in the areas of cost, ability to take care of patients and the quality of care delivered.<sup>13,14</sup> A higher ratio of hours of nursing care provided by graduate nurses would enhance patient care.<sup>15</sup>

Several factors contribute to the global shortage of nurses; workforce projections predict large scale retirement in the profession, many qualified nurses consider leaving the bedside or remove themselves completely from the nursing work force, and changing demographics suggest increased numbers of people requiring care. The desire to leave the nursing profession in international studies varies from 4% to 54%<sup>16</sup> of nurses polled. In Iran, according to one study the average number intending to leave is high,<sup>17</sup> and only around a third of nurses were satisfied with their jobs,<sup>18</sup> job satisfaction being a factor likely to influence decisions around career change.

There is a current shortage of nurses in Iran and a predicted worsening of this shortfall in the future due to the impending retirement of significant numbers of nurses. Patient numbers are also expected to increase due to population growth and an aging population,<sup>19</sup> it is essential therefore to assess the factors influencing the decisions made by nurses in Iran who leave the clinical setting, or even the profession.

Leaving a profession is a multi-step process consisting of components of mental, cognitive and behavioral change.<sup>20</sup> The final decision to leave being made as a result of an individual process<sup>21,22</sup> with multiple underlying causes.<sup>16</sup> The reasons for leaving nursing are complex and are affected by many variables such as personal factors and issues related to work.<sup>12</sup>

Such factors include the imbalance between effort and reward. High job demands and job

stress also affect the tendency to leave the nursing profession.<sup>23</sup>

Staff turnover in nursing contributes to reduced numbers in the overall workforce and adds to the current shortage of nursing<sup>2</sup> leading to an unsustainable reduction in productivity.<sup>20</sup> The nurses who leave the profession, take away their knowledge and experience from the organization, as well as from the nursing work force.<sup>16</sup> Financial assets used for training, orientation and continuing education are consequently wasted. In addition, nurse turnover is costly for organizations: First, because of the direct and indirect costs to fill position and, secondly, because of the reduced knowledge and productivity available.<sup>24</sup> The shortage of nurses in Iran is associated with the hardships and difficulties experienced by those in the profession therefore requires detailed investigation and targeted research to help prevent any consequential difficulties.

Unfortunately the basis of most of these studies to date has been on identifying a uni-dimensional or minimal scope of influencing factors, while the problems appear multi-dimensional.

Studies investigating nurses who are considering leaving the profession have mainly employed quantitative methods of investigation,<sup>16,25,26</sup> and the questionnaires and surveys employed within them have shown that desire to leave nursing is associated with high work demands, burnout and dissatisfaction with the job conditions.<sup>12</sup> There are concerns however that quantitative methodologies may not be sufficiently sensitive to discern the complex decision making around such change, nor able to fully identify the factors contributing to it.<sup>12</sup> Finding the reasons why clinicians exit the profession would support the development of effective strategies to reduce this resource drain, therefore comprehensive studies are required in order to achieve this detailed understanding. It is apparent therefore that studies using deeper methods of investigation are required and the need to utilize qualitative

methods and the production of studies with a deeper understanding becomes apparent.

The interactive and complex nature of nursing is experienced in a uniquely individual way by each practitioner; therefore exploration needs to incorporate understanding of the persons lived experience within their lived environment. Qualitative research is suggested to facilitate this more detailed understanding of how humans perceive the world about them.<sup>25,27</sup> Given that most research published on this subject relates to healthcare systems out-with Iran, each with their own cultural influences, and that no relevant studies have taken place within Iran, so it is recommended that studies be conducted in Iran accommodating any cultural specificity.<sup>28</sup> The aim then of this study was to gain a deeper understanding of the experiences and perceptions of nurses who have an intention to leave the clinical care setting.

## Materials and methods

Nurses who participated in this study were selected from several teaching hospitals affiliated with Tabriz and Uremia Universities of Medical Sciences in Iran. The sample selection process was based on the following criteria: 1) having a baccalaureate degree or higher, 2) having at least one year of work experience in clinical nursing practice, 3) Willingness to participate in the study, and 4) having the ability to express their experiences.

A total of 13 nurses participated in the study. From May to February 2014, the participants attended semi-structured interviews where open-ended questions were used to investigate the perspectives and experiences of Iranian nurses who intend to leave clinical nursing. Researchers interviewed each participant individually for 40 to 60 minutes in a place at work (n=8), or outside of work setting (n=5). The interview began with a general question about experiences of Iranian nurses who intend to leave clinical nursing and then moved to more specific, detailed questions as the interview advanced. These questions included; "Are you considering

leaving the nursing profession?", "What reasons cause you to consider leaving nursing?" Interviews were recorded with permission and later transcribed. The raw data were coded verbatim using MAXQDA10 (version 10 R 160410 by udo kuckartz, Berlin, Germany), before analysis.

Among the 13 nurses, there were 11 women and 2 men aged 24 to 47 years; 9 of them had a baccalaureate degree, four had a master's degree. They had 2-15 years of clinical nursing experience in internal medicine, surgery, infectious disease, poison control, intensive adult care and emergency nursing care. Eight participants were married and five were single.

The content analysis method as described by Hsieh & Shannon<sup>29</sup> was applied for its appropriate fit to meet the objectives of this study. Through an inductive process, data were coded and categorized.<sup>30</sup> Data analysis was performed simultaneously with the data collection. The analysis began after the first interview and continued during data collection. Researchers encrypted the copied text, and discussed coding refinement for each emerging theme. Classified codes were categorized, compared and interpreted within the context of general transcripts.

During the study specific methods were used to ensure the rigor and trustworthiness of data collection and analysis. For the reporting of qualitative research findings, methods of worth other than validity and reliability are widely applied,<sup>30</sup> and for this study four supporting processes; conformability, dependability, credibility and transferability were applied. Credibility was confirmed by selecting the appropriate data collection method of interviews. Researchers interviewed participants for their views and experiences in their practice environment. Moreover, member check was used in addition to prolonged involvement of the researcher to increase the credibility of the data. Also, after encoding, the interview transcripts were returned to the participants to ensure the accuracy of the codes and the relevant interpretations.

Dependability was established by detailed and descriptive data analysis and direct references to individual professional experiences. Raw data were translated by a professional translator from Farsi (Persian) in to English and back translated to preserve maximum accuracy of participant expressions within the context. Conformability and consistency of analysis were maintained through research team meetings to discuss and dissect the preliminary findings. Thematic analysis and coding processes were reached through consensus, and to increase the transferability of findings, a description of context, participants' selection and demographic, data collection and analysis process was presented so that the reader is able to determine if the results are transferable to other contexts.<sup>31</sup>

The present study was approved by the Ethics Committee of Tabriz University of Medical Sciences, Iran. Before data collection, researchers obtained written, informed consent to ensure anonymity, privacy and confidentiality and emphasized the voluntary enrollment of participants. Information on the study objectives and goals were detailed to them and contact information for the principal investigator was offered to answer participants' questions.

## Results

Content and thematic analysis revealed four major categories emerging; I) Method of entrance into the nursing profession, II) Defects in dignity, III) Work in non-ideal working environments, and IV) Dissatisfaction with working conditions. Each category had several subcategories.

Participants' reflections for each category and subcategory are further expanded and later compared with other published studies.

### I: Entry routes into nursing

The history of most of the participant's entry to nursing was the same. The majority was without prior interest or understanding of nursing, or their perception of clinical

practice was based on misconceptions. Often this group had been encouraged by their family to gain employment and had subsequently entered nursing. From this group two sub categories were extracted: 1) implicit entry and 2) targeted entry.

#### I.1. Implicit entry into nursing

In this regard a participant considers:

*"When I was a student I was interested in chemistry... then when choosing a field, I chose chemistry and nursing. I was accepted for both, I had chosen nursing completely randomly... I checked, and I did not even know about it..... I did not choose nursing with any affection for it. Even when I enter the field I was thinking about changing it" (P. 2).*

#### I.2. Targeted entry into nursing

Some nurses said that the main reason for their entry into nursing were career reasons or to escape from military service:

*"I was accepted for physics and nursing and psychology... I asked one of my professors should I choose physics or nursing.... She said if you want a good career, a future and to work fine, nursing is good.... then we started nursing college..." (P. 5).*

## II: Defects in dignity

Participants thought that society relegated nurses to a lower social status and did not value nursing as a profession. The experiences divided into two categories: "the lack of professional vision toward the nurses" and "social status of nurses".

### II. 1. Lack of professional vision toward the nurses

Hence a nurse's work content was not distinct from that of other service work, the role of assistant reinforced the image of nursing being a nonprofessional. One of the participants said: *"Some patients and their families do not take our qualifications too seriously.... they think only the doctor's explanation is acceptable. Because their literacy is higher.... they did not know nursing as a profession" (P. 1).*

### II. 2. Social status of nurses

Lack of supportive feedback from the community, direct confrontation with family and others around the patient of the nurse's

judgment may cause nurses to experience a negative perception towards them and their role. Nursing is not well perceived as a profession within this community.

*"Even the look of community towards nursing is one of the most nonsensical fields ..."* (P.3).

### III: Work in non-ideal working environment

During the interviews, the nurses cited that the "lack of support", "discrimination", "and conflict" and "lack of opportunities for advancement in clinical practice" were reasons for wanting to leave.

#### III. 1. Lack of support

Participants stated that the lack of support from managers and supervisors causes a feeling of emptiness, worthlessness and confusion for nurses.

*"We tell our problems to the head nurse or supervisor but we feel we aren't taken seriously.... For example, when I have problem at home, or I have patient.... they think this is an excuse to really be taken seriously ..."* (P.11).

*"Whatever happens, we have no support. Instead of nursing and head office supporting us, regardless of guilt they just reprimanded us, and there is no support at all"* (P. 9).

#### III. 2. Intolerance of discrimination

Many nurses complained of discrimination in practice. Participants' reported witnessing this:

*"The minimum discrimination that we see is in the writing shift and scoring the work.... over a period of 5 months I could not take a vacation, but I saw in the same month one of the colleagues going for vacation for 3-4 days... he was allowed to go and travel ... I could never have a holiday and relax .... This sort of thing was bothering me ...."* (P: 13).

#### III.3. Conflict with colleagues, managers, doctors

Working conditions and atmosphere is the cause of many communication and peripheral conflicts in the workplace of clinical nursing.<sup>32</sup>

One of the participants said:

*"The head nurse did not like me from the beginning .... And bothered me too much even contacting me 6 times at midnight... we argued.... the head nurse's*

*behavior annoyed me.... the only problem was that why the infusion stand were dirty ... and no reason to reprimand me... and it bothers me so...."* (P. 8).

#### III. 4. Lack of opportunities for advancement

Participants believed that the lack of opportunities for advancement causes to disillusionment for the person to work within the practice setting, and if it is prolonged can develop into a desire to leave, which may eventually occur. One of the participants in this regard stated:

*"how much one can work in the army, he is earned a degree, a job promotion would be seen in any profession, but how many years I worked, while I am the same routine midnight shift and the same usual underling nurse...."* (P. 6).

### IV: Dissatisfaction with working conditions

The conditions in which nurse's work can influence the likelihood of errors and the quality of care afforded to patients. These conditions include "heavy workload", "lack of power" and "unusual working hours".

#### IV. 1. High workload

The low number of nursing staff and high workload are the main causes of nurses' emotional exhaustion and is the burnout strengthens the desire to leave the bedside.

*"Here workload is high and tires me too... and I cannot get to a lot out of my work.... For example, yesterday when I arrived home, I only slept.... because the shifts are so heavy.... each nurse had to work with a high number of patients ...for each of us, there are 12 or 13 patients, and in the infectious ward, patients give antibiotics too and working with so many sick people is hard work ... it is not allowing good care for the sick ...."* (P. 7).

#### IV. 2. Lack of work force

The few number of nursing staff and high workload are the main causes of nurses' emotional exhaustion and leading to job burnout to leave clinical practice. In this regard a nurse mentions:

*"The law is too much and work force numbers are low and we cannot do everything... so we are fed up at the bedside trying to go away from the bedside ...."*

*Totally I don't like to continue at the bedside...."* (P.4).

#### IV. 3. Unconventional work hours

The large number of shifts, double shifts and night shifts is one the most common complaints by nurses, causing to leave clinical nursing. One of participants indicated:

*"Our shifts are heavy, so our lives are troubled... for example I am on shift this morning and evening but tomorrow I am off .... Also I am shift the day after tomorrow, morning and afternoon.... It is too hard for me..."* (P. 10).

## Discussion

The results of this qualitative study showed that the decision to leave nursing is a complex, continuous, multifaceted and long-term process. Therefore, this process cannot be assessed with a simple questionnaire. This is one of the reasons that the primary uses of quantitative research studies do not provide a clear picture of the reasons nurses leave nursing.

The findings show that the entry route of majority of participants in nursing is the same. For any of the nurses participating in the study by Flinkman and colleagues also, nursing was not their childhood dream, they stated that nursing is not their "first choice," in other words, instead of targeted choice, they have accidentally entered the field.<sup>1</sup> In Iran, the academic entrance tests (non-specialized tests, theory and talent) are the only measure of volunteers' entrance in all academic pursuits. Volunteers with higher rates enter the field of medicine and dentistry, while those with relatively lower ratings enter nursing and other disciplines. No other attributes are checked. Studies have shown that health care professions need psychological and personality characteristics as well as suitable knowledge and attitudes. In nursing volunteers, usually without any prior knowledge enter a particular field of study and then the profession.<sup>33</sup> Therefore, most nursing students do not have a high level of motivation to stay in the profession having entered

clinical practice. Therefore, problems of motivation will be increased when they encounter the poor working conditions prevalent within nursing; high workload, low pay and limited clinical independence. So in practice they do not expect to experience the resultant level of psychological stress and ultimately they leave. Some nurses endure this, remaining in the profession, but can become indifferent and unmotivated, and the working environment becomes boring for them.<sup>34</sup>

The findings of this study showed that defects in the dignity of nurses in Iran has a negative impact on nurses and can leads to intentions to leave the bedside. Directing explicit attention to nurse dignity may benefit the attainment of both nurse and organizational goals.<sup>35</sup> Hoeve et al., stated that the nature of nursing has not always been clear and nurses continue to suffer about the public stereotyped of nursing. The public stereotypes could to create an exhausting and uneasy environment in health care system.<sup>36</sup> Although there is a considerable amount of research into the stereotypical images of nurses,<sup>37,38</sup> only a handful of studies have linked the low status of nursing with a will leave the profession.<sup>39,40</sup> Qualitative and quantitative studies are therefore required on the impact of low social status of nursing and its influence on intent to leave the clinical care. Nurses participating in this study noted the lack of professional respect shown towards nurses. As an example visiting hours in hospitals are in the afternoon, nurses working the afternoon shift are in direct contact with the views of the family and others connected with the patients and feel judged by them often receiving negative feedback arising from a negative image of their profession.<sup>17</sup> In a study in Iran 70.3% of nurses were unhappy with the professions social status within the community and 80.7% of them were not happy for their children to choose nursing as a career due to difficulties the profession faced, such as low pay and irregular working hours.<sup>41</sup> The organization and environment supporting nursing was not viewed as ideal by the

participants because of the "lack of management support", "intolerance of discrimination", "conflict" and "limited opportunities for advancement in clinical practice." Due to the difficult conditions faced by nurses they need supportive employers. If nurses are not supported by nursing management and hospital authorities, and do not have sufficient resources to provide quality care, do not participate in planning patient care, do not have job promotion opportunities, are not be able to prove their competence in the workplace and so on, are not able to provide proper care they will gradually become neglectful and indifferent to their work, and consequently leave the bedside.<sup>42</sup> In addition, working conditions and atmosphere are the cause of many communication conflicts in the clinical nursing workplace.<sup>32</sup> Thus, any effective management strategies aimed at resolving such conflict should consider ways to address the underlying causes of conflict and the unique difficulties faced by nurses within this environment.

Professional agents and the lack of appropriate attention by authorities to feedback from nurses', nurses' lack of support from managers and their supervisors when required, economic factors, including insufficient salary, assuming a non-academic position for nurses and the lack of meeting the nurses' individual needs are the most prevalent reasons of the nurses' leaving the bedside.<sup>43</sup> On the other hand, creating an attractive working environment, recognition of employees, attention to the suggestions of the nurses, creating opportunities for communication and ultimately attention to psychological needs of nurses can increase job satisfaction, commitment and a sense of responsibility among nurses, and ultimately improve the quality of care.<sup>44</sup>

In this study it was found that nurses were dissatisfied about working conditions due to heavy workload, staffing deficiencies and unconventional work schedules. In another study, heavy workload, lack of facilities and

support services, staff shortages and non-compliance with standards around nurse patient ratios are the factors associated with generating an intent to leave clinical nursing.<sup>17</sup>

Nurses believe that the optimal care of patients is not supported as essential within healthcare environments.<sup>45</sup> The goals of managers are often seen as utilizing the minimum number of nurses to provide quick and effective care. It is therefore clear that friction is likely between such managers and nurses who value the interpersonal interaction associated with good quality clinical care.<sup>46</sup>

The findings from the nurses participating in the study who were working in teaching hospitals of Medical Sciences cannot be extended to nurses who work in different health care settings. Since certain features of private hospitals differ from government hospitals, further studies should be done to explain the experiences of nurses who work in private hospitals and in other care settings. In addition, human experience is dynamic and the nurses' work and work environment are variable with educational, political, economic and social expectations of health care. So it would be beneficial for a longitudinal study to examine the impact of various changes on nurses' perceptions of their work environment and work in the future.

## Conclusion

The desire for nurses to leave the bedside is an important and challenge issue. The findings of this study showed that "entry processes into the nursing profession", "low social status", "working in the non-ideal work environment" and "dissatisfaction with working conditions" are the underlying causes of the desire to leave bedside nursing within Iran, and these factors will reduce the likelihood of nurses staying within the profession. To counter this there is a need for improvement of the working conditions in nursing and a need to build a culture of recognition for the sacred profession of nursing in Iranian society. Society's attitudes to the nursing profession should be considered

by nursing organizations as a culture shift in this area could change public attitudes towards the profession, enhancing the job motivation of the nurses and the attractiveness of the profession to potential applicants. This would require a review of the entrance route to nursing.

## Acknowledgments

This study is as a part of PhD thesis in nursing education (approved projects no: 5/4/3861) and funded by the Tabriz University of Medical Sciences. Authors appreciate all the participants in the study.

## Ethical issues

None to be declared.

## Conflict of interest

The authors declare no conflict of interest in this study.

## References

1. Flinkman M, Isopahkala-Bouret U, Salanterä S. Young registered nurses' intention to leave the profession and professional turnover in early career: a qualitative case study. *Int Sch Res Notices* 2013; 2013 (2013): 1-12. doi: [10.1155/2013/916061](https://doi.org/10.1155/2013/916061)
2. Buchan J, Aiken L. Solving nursing shortages: a common priority. *Journal of Clinical Nursing* 2008; 17 (24): 3262-8. doi: [10.1111/j.1365-2702.2008.02636.x](https://doi.org/10.1111/j.1365-2702.2008.02636.x).
3. Juraschek SP, Zhang X, Ranganathan V, Lin VW. United States registered nurse workforce report card and shortage forecast. *AM J MED QUAL* 2012; 27 (3): 241-9. doi: [10.1177/1062860611416634](https://doi.org/10.1177/1062860611416634).
4. Kang SW, Kim YM. Effects of job stress and coping behaviour on job satisfaction in Korean male nurses. *Journal of Nursing Education and Practice* 2014; 4 (11): 66-73. doi: [10.5430/jnep.v4n11p66](https://doi.org/10.5430/jnep.v4n11p66)
5. MacKusick CI, Minick P. Why are nurses leaving? Findings from an initial qualitative study on nursing attrition. *Medsurg Nurs* 2010; 19 (6): 335-40.
6. World Health Organization. Working together for health: the World Health Report 2006. Geneva: World Health Organization. 2006. Available form: <http://www.who.int/world-health-day/previous/2006/en/>
7. Takase M, Yamashita N, Oba K. Nurses' leaving intentions: antecedents and mediating factors. *Journal of Advanced Nursing* 2008; 62 (3): 295-306. doi: [10.1111/j.1365-2648.2007.04554.x](https://doi.org/10.1111/j.1365-2648.2007.04554.x)
8. Zarea K, Negarandeh R, Dehghan-Nayeri N, Rezaei-Adaryani M. Nursing staff shortages and job satisfaction in Iran: Issues and challenges. *Nursing & Health Sciences* 2009; 11 (3): 326-31. doi: [10.1111/j.1442-2018.2009.00466.x](https://doi.org/10.1111/j.1442-2018.2009.00466.x).
9. Needleman J, Buerhaus P, Pankratz VS, Leibson CL, Stevens SR, Harris M. Nurse staffing and inpatient hospital mortality. *N Engl J Med* 2011; 364 (11): 1037-45. doi: [10.1056/NEJMsa1001025](https://doi.org/10.1056/NEJMsa1001025).
10. Zhu Xw, You Lm, Zheng J, Liu K, Fang Jb, Hou Sx, et al. Nurse staffing levels make a difference on patient outcomes: a multisite study in Chinese hospitals. *J Nurs Scholarship* 2012; 44 (3): 266-73. doi: [10.1111/j.1547-5069.2012.01454.x](https://doi.org/10.1111/j.1547-5069.2012.01454.x).
11. Rafferty AM, Clarke SP, Coles J, Ball J, James P, McKee M, et al. Outcomes of variation in hospital nurse staffing in English hospitals: cross-sectional analysis of survey data and discharge records. *Int J Nurs Stud* 2007; 44 (2): 175-82. doi: [10.1016/j.ijnurstu.2006.08.003](https://doi.org/10.1016/j.ijnurstu.2006.08.003).
12. Flinkman M, Laine M, Leino-Kilpi H, Hasselhorn H-M, Salanterä S. Explaining young registered Finnish nurses' intention to leave the profession: a questionnaire survey. *Int J Nurs Stud* 2008; 45 (5): 727-39. doi: [10.1016/j.ijnurstu.2006.12.006](https://doi.org/10.1016/j.ijnurstu.2006.12.006)
13. Clarke SP, Aiken LH. Failure to rescue: needless deaths are prime examples of the need for more nurses at the bedside.

- Am J Nurs 2003; 103 (1): 42-7. doi: [10.1097/00000446-200301000-00020](https://doi.org/10.1097/00000446-200301000-00020)
14. Rivers PA, Tsai KL, Munchus G. The financial impacts of the nursing shortage. *J Health Care Finance* 2005; 31(3): 52-64.
  15. Needleman J, Buerhaus P, Mattke S, Stewart M, Zelevinsky K. Nurse-staffing levels and the quality of care in hospitals. *N Engl J Med* 2002; 346 (22): 1715-22. doi: [10.1056/NEJMsa012247](https://doi.org/10.1056/NEJMsa012247)
  16. Flinkman M, Leino-Kilpi H, Salanterä S. Nurses' intention to leave the profession: integrative review. *Journal of Advanced Nursing* 2010; 66 (7): 1422-34. doi: [10.1111/j.1365-2648.2010.05322.x](https://doi.org/10.1111/j.1365-2648.2010.05322.x)
  17. Hariri G, Yaghmaei F, Shakeri N. Assessment of some factors related to leave in nurses and their demographic character in educational hospitals of Shahid Beheshti University of Medical Sciences. *Journal of Health Promotion Management* 2012;1 (3): 17-27. (Persian)
  18. Ahmadi SAA, Mobaraki H, AskariNejad M. Assessment of the factors influencing the nurses' intention to leave their job. *Scientific Journal of Kurdistan University of Medical Sciences* 2012; 17 (1): 99-108. (Persian)
  19. chamani cheraghtapeh r, Mahmoodi Ah, Baba mahmoodi A. Assessing the effective factors on retention nurses as knowledge workers in hospitals. *Quarterly Journal of Nersing Management* 2012; 1 (3): 19-27. (Persian)
  20. Takase M. A concept analysis of turnover intention: Implications for nursing management. *Collegian* 2010; 17 (1): 3-12.
  21. Carless SA, Arnup JL. A longitudinal study of the determinants and outcomes of career change. *J Vocat Behav* 2011; 78 (1): 80-91. doi: [10.1016/j.jvb.2010.09.002](https://doi.org/10.1016/j.jvb.2010.09.002).
  22. Laine M, van der Heijden BI, Wickström G, Hasselhorn H-M, Tackenberg P. Job insecurity and intent to leave the nursing profession in Europe. *The International Journal of Human Resource Management* 2009; 20 (2): 420-38. doi: [10.1080/09585190802673486](https://doi.org/10.1080/09585190802673486).
  23. Lavoie-Tremblay M, O'brien-Pallas L, Gelinac C, Desforges N, Marchionni C. Addressing the turnover issue among new nurses from a generational viewpoint. *Journal of Nursing Management* 2008; 16 (6): 724-33. doi: [10.1111/j.1365-2934.2007.00828.x](https://doi.org/10.1111/j.1365-2934.2007.00828.x)
  24. Li Y, Jones CB. A literature review of nursing turnover costs. *J NURS Manage* 2013; 21 (3): 405-18. doi: [10.1111/j.1365-2834.2012.01411.x](https://doi.org/10.1111/j.1365-2834.2012.01411.x).
  25. Hayes LJ, O'Brien-Pallas L, Duffield C, Shamian J, Buchan J, Hughes F, et al. Nurse turnover: a literature review—an update. *INT J Nurs Stud* 2012; 49 (7): 887-905. doi: [10.1016/j.ijnurstu.2011.10.001](https://doi.org/10.1016/j.ijnurstu.2011.10.001)
  26. Chan ZC, Tam WS, Lung MK, Wong WY, Chau CW. A systematic literature review of nurse shortage and the intention to leave. *J NURS Manage* 2013; 21 (4): 605-13. doi: [10.1111/j.1365-2834.2012.01437.x](https://doi.org/10.1111/j.1365-2834.2012.01437.x).
  27. Holtom BC, Mitchell TR, Lee TW, Eberly MB. Turnover and retention research: a glance at the past, a closer review of the present, and a venture into the future. *Academy of Management Annals* 2008; 2 (1): 231-74. doi: [10.1080/19416520802211552](https://doi.org/10.1080/19416520802211552)
  28. Hassani M, JodatKordlar L. The Study of relationship between perception of organizational justice with turnover intention, job satisfaction and organizational citizenship behavior of medical staff of Urmia Imam Reza Hospital. *Journal of Urmia Nursing & Midwifery Faculty* 2012; 10 (3). (Persian)
  29. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res* 2005; 15 (9): 1277-88.

30. Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs* 2008; 62 (1): 107-15.
31. Yilmaz K. Comparison of quantitative and qualitative research traditions: epistemological, theoretical, and methodological differences. *European Journal of Education* 2013; 48 (2): 311-25.
32. Busari Payami M, Ebrahimi H, Ahmadi F, Abedi H. Types and Major Causes of Conflicts Experienced by Nurses: A Qualitative Analysis. *Journal of Zanjan University of Medical Sciences and Health Services* 2009; 16 (65): 61-76. (Persian)
33. Hajbaghery MA, Moradi T, Mohseni R. Effects of a Multimodal Preparation Package on Vital Signs of Patients Waiting for Coronary Angiography. *Nursing and Midwifery Studies* 2014; 3 (1). doi: [10.17795/nmsjournal17518](https://doi.org/10.17795/nmsjournal17518).
34. Fini IA. Nursing Challenges in Iran. *Nursing and Midwifery Studies* 2014; 3 (2): 1-2. doi: [10.17795/nmsjournal19906](https://doi.org/10.17795/nmsjournal19906).
35. Lawless J, Moss C. Exploring the value of dignity in the work-life of nurses. *Contempt Nurse* 2007; 24 (2): 225-36. doi: [10.5172/conu.2007.24.2.225](https://doi.org/10.5172/conu.2007.24.2.225)
36. ten Hoeve Y, Jansen G, Roodbol P. The nursing profession: public image, self-concept and professional identity. A discussion paper. *J Adv Nurs* 2014; 70 (2): 295-309. doi: [10.1111/jan.12177](https://doi.org/10.1111/jan.12177)
37. Darbyshire P, Gordon S. Exploring popular images and representations of nurses and nursing: New York: Springer Publishing Company; 2005.
38. Bridges J. Literature review on the images of the nurse and nursing in the media. *Journal of Advanced Nursing* 1990; 15 (7): 850-4. doi:[10.1111/j.1365-2648.1990.tb01917.x](https://doi.org/10.1111/j.1365-2648.1990.tb01917.x)
39. Takase M, Maude P, Manias E. Impact of the perceived public image of nursing on nurses' work behaviour. *Journal of Advanced Nursing* 2006; 53 (3): 333-43. doi: [10.1111/j.1365-2648.2006.03729.x](https://doi.org/10.1111/j.1365-2648.2006.03729.x)
40. Fochsen G, Sjögren K, Josephson M, Lagerström M. Factors contributing to the decision to leave nursing care: a study among Swedish nursing personnel. *Journal of Nursing Management* 2005; 13 (4): 338-44. doi:[10.1111/j.1365-2934.2005.00546.x](https://doi.org/10.1111/j.1365-2934.2005.00546.x)
41. Mirzabeigi Gh, Salemi S, Sanjari M, Shirazi F, Heidari S, Maleki S. Job Satisfaction among Iranian Nurses. *Hayat* 2009; 15 (1): 49-59. (Persian)
42. Arab M, Rahimi A, Vali L, Ravangard R, Akbari Sari A. Study of the relationship between nurses' work environment indices and their burnout aspects in TUMS teaching hospitals. *Iran Occupational Health* 2012; 9 (3): 39-51. (Persian)
43. Houshmand Behabadi A, Sayf H, Nikbakht nasrabadi A. Survey of nurse burnout in a 10 years period. *Teb va Tazkieh* 2005; 55 : 10-20. (Persian)
44. Sodeify R, Vanaki Z, Mohammadi E. Nurses' experiences of perceived support and their contributing factors: A qualitative content analysis. *Iran J Nursing Midwifery Res* 2013; 18 (3): 191-7.
45. Loi R, Hang-Yue N, Foley S. Linking employees' justice perceptions to organizational commitment and intention to leave: The mediating role of perceived organizational support. *J Occup Organ Psychol* 2006; 79 (1): 101-20. doi: [10.1348/096317905X39657](https://doi.org/10.1348/096317905X39657)
46. Hajbaghery MA, Salsali M. A model for empowerment of nursing in Iran. *BMC Health Serv Res.* 2005; 5 (1): 24. doi:[10.1186/1472-6963-5-24](https://doi.org/10.1186/1472-6963-5-24)