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Nursing Entrepreneurship and Nurse Migration in Iran: A Narrative Review of Opportunities, Challenges, and Implications for Health System Strengthening

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Abstract

Background and aim: Nurse migration is a major challenge for health systems, particularly in developing countries, leading to staff shortages, increased workload, and reduced quality of care. New approaches are needed to retain nurses and provide long-term opportunities for them. Nursing entrepreneurship is a promising approach that can support nurses, improve job satisfaction, and strengthen health systems.

Material and Methods: This narrative review examined nursing entrepreneurship, its opportunities and challenges, and its role in managing nurse migration and strengthening the health system, with a focus on Iran. A structured search was conducted in PubMed, Scopus, Web of Science, and Google Scholar up to January 2026. Quantitative, qualitative, review, and conceptual studies in English or Persian were included in this review and its findings were synthesized narratively.

Results: Available evidence shows that nursing entrepreneurship helps nurses gain control over their work. It offers ways to build a career and creates chances to earn a steady income. These advantages make nurses happier with their jobs and improve the care they provide. This might make them less likely to leave the country and more likely to stay in the health system. Nurses who start their businesses also help make health services easier to reach and more efficient. They come up with ideas, like clinics run by nurses, home care services and online health education.

Conclusion: Nursing entrepreneurship is a way to deal with nurses moving abroad while making health system stronger. Favorable rules, special training and changes in how organizations work are needed to make nursing entrepreneurship a reality.

Keywords: Entrepreneurship, nursing, migration, health systems.

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Introduction:

Nurse migration is a growing global challenge, particularly in developing and middle-income countries. Nurses' intention to migrate has ranged from 14.3% to 85% across countries, while in Iran, 63.96% reported a strong desire to emigrate [1-2]. Poor financial compensation, difficult working conditions, and limited employment opportunities are major contributing factors, placing additional pressure on health systems [1]. Nursing entrepreneurship may offer alternative career pathways that support nurse retention, although its impact on international nurse migration remains unclear [3-4].

In recent decades, entrepreneurship has gained importance in economic and social development through employment creation, improved quality of life, and social innovation [5]. Its application has expanded to health sciences, where nursing has substantial potential for entrepreneurial innovation in response to evolving healthcare needs [6]. As the largest healthcare professional group, nurses can engage in social, commercial, and intrapreneurial activities, potentially enhancing professional autonomy, satisfaction, and retention [6-7]. Changes in healthcare, technology, and patient needs have further expanded nurses' roles from caregivers to active contributors to healthcare development [8]. Their continuous interaction with patients provides valuable insight into health needs and service gaps, positioning nurses as important contributors to healthcare transformation and entrepreneurial initiatives [4,6,9].

Nursing entrepreneurship is increasingly recognized as a potential response to health system challenges, including resource limitations, demographic changes, and the need for innovative care delivery. By leveraging nurses' knowledge and skills, it can support more sustainable and responsive healthcare systems [4,6,10]. Entrepreneurial nurses may improve healthcare quality, accessibility, and efficiency through specialized clinics, home care, counseling, and technology-based solutions such as virtual education and health applications [11-12]. Professional organizations and policymakers increasingly recognize the need for supportive regulations, entrepreneurship training, and networking opportunities; however, nursing entrepreneurship remains underdeveloped, particularly in developing countries [4,13].

In Iran, nursing entrepreneurship remains at an early stage despite nurses' professional capacities and healthcare needs. Limited entrepreneurship education, weak policies, traditional perspectives, regulatory constraints, and limited awareness of opportunities hinder nurses from fully utilizing their potential [6,10]. Hierarchical organizational cultures, resistance to change, and weak infrastructure further impede its development [14-15]. At the same time, limited resources, growing healthcare demands, population aging, and chronic diseases highlight the need for innovative solutions [10,16]. Nursing entrepreneurship may therefore help address these challenges while improving care quality and access to health services [4,6].

Existing literature on nursing entrepreneurship in Iran remains limited and fragmented, with insufficient conceptual frameworks and practical guidance [6,13,17]. This gap has limited understanding of the status, opportunities, and challenges of nursing entrepreneurship in Iran, while structural, educational, and cultural barriers persist. Therefore, a comprehensive review is

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needed to synthesize existing evidence on nursing entrepreneurship in Iran and its potential implications for nurse migration and health system strength.

Methods

This narrative review aimed to synthesize the available evidence on nursing entrepreneurship, including its barriers, facilitators, professional and health-system outcomes, and its potential implications for nurse retention and migration, with particular attention to the Iranian context.

A structured search was conducted in electronic databases, including PubMed, Scopus, and Web of Science, from inception to January 2026. Google Scholar was also searched to identify additional relevant studies and gray literature. Keywords were selected based on Medical Subject Headings (MeSH), a review of the literature, and consultation with experts in nursing and health management. The main keywords included: "Nursing Entrepreneurship," "Nurse Migration," "Nursing," "Health System Strengthening," "Healthcare Innovation," and "Health Development." These keywords were combined using Boolean operators (AND, OR).

The Persian equivalents of these terms were also used in Persian-language databases. In addition, the reference lists of all included studies were manually screened to identify relevant articles.

After the search, all results were transferred to EndNote software and any duplicates were deleted. Then, the titles and abstracts of the articles were looked at separately by two researchers. Articles that were connected to the purpose of the study were chosen for a full-text review.

This narrative review included studies focusing on entrepreneurship in nursing. Eligible studies were original quantitative, qualitative, mixed-methods research, conceptual papers, systematic reviews, and relevant reports from credible international organizations. Only articles published in English or Persian with full-text availability were included in this review. Studies that were not directly related to nursing entrepreneurship were excluded. Non-scientific sources, opinion pieces without methodological rigor, duplicate publications, After removal of duplicates, all retrieved records were screened in terms of title and abstract. Full-text articles meeting the eligibility criteria were then assessed in detail. Finally, studies most relevant to the purpose of this review were included in the final synthesis. Throughout the search, selection, and review of studies, principles of research ethics, academic integrity, and respect for intellectual property rights were observed.

Data were analyzed using a narrative synthesis approach. First, the data of quantitative, qualitative, review, and conceptual studies were extracted and systematically organized. The extracted data were then subjected to qualitative content analysis and grouped into meaningful categories.

The analysis followed three main stages: (1) Data coding, where key concepts from each study were identified; (2) theme development, where codes were clustered into broader categories such as opportunities, challenges, and outcomes; and (3) synthesis

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and interpretation, where relationships between categories were explored to generate an integrated understanding of the phenomena.

Results

The available literature addressing nursing entrepreneurship and nurse migration was reviewed, including quantitative, qualitative, mixed-methods studies, and review articles published up to 2026. The included studies had been conducted in high-income and low- and middle-income countries. The analysis of literature led to the identification of four main thematic categories, including barriers and facilitators of nursing entrepreneurship, outcomes of nursing entrepreneurship development, factors affecting nurse migration, and relationship between nursing entrepreneurship and nurse migration

Overall, the findings suggest that nursing entrepreneurship is influenced by individual, organizational, and policymaking factors, while nurse migration is shaped by economic, professional and social determinants. Several studies also indicated possible links between entrepreneurial opportunities and migration intentions among nurses, although this relationship remains underexplored.

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1.Barriers and Facilitators of Nursing Entrepreneurship

In 6 studies, including 2 systematic review studies, 2 qualitative studies, and 2 quantitative studies [10, 12, 17-20], the barriers and facilitators of entrepreneurship in nursing were classified as shown in table 1. Findings from these studies show that barriers to entrepreneurship in nursing are multidimensional in nature and can be classified into six main domains, including educational, organizational, legal, economic, sociocultural, and individual barriers.

1-1. Educational Barriers

Results showed that nursing education programs do not teach nurses about entrepreneurship. Many nurses do not know about running a business, marketing, planning money and creating services. Nursing education programs mostly teach nurses about taking care of patients. They do not teach nurses about starting their own businesses. Also, there are not teachers or role models in nursing schools who can show nurses how to be entrepreneurs. This means that nurses are not very motivated to start their own business. Nurses need to learn about entrepreneurship but they are not getting this sort of education in nursing school. Nursing education programs need to teach nurses about business skills, like entrepreneurship education so that nurses can learn about entrepreneurship.

1-2. Organizational and Structural Barriers

The traditional structure of health system, which mainly defines nurses as organization-dependent employees, is one of these important barriers. Lack of managerial support, limited professional autonomy, and the absence of formal opportunities to develop nursing businesses are among the reported problems. In addition, complex bureaucracy, the absence of a defined position for entrepreneurial nurses, and organizational resistance to innovation limit the development of entrepreneurial activities [17, 19-20].

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1-3. Legal and Policymaking Barriers

Unclear rules about nursing services, limits on getting licenses and no clear laws for nurses starting their own businesses are seen as major problems. In many countries rules about health care focus more on old ways of providing services and do not offer enough help for nurses who want to run their own businesses [10, 17].

1-4. Economic and Financial Barriers

Money is a problem for many people. It is hard to get the money you need to start a business. Economic and financial barriers, such as not having money, are a major issue. Many people face economic and financial barriers like having difficulty getting a loan. Economic and financial barriers also include economic risk. Many nurses do not know how to manage their money, which makes failure the more likely outcome of their business. This is a problem, for nurses who want to start a business and it is considered one of the economic and financial barriers they face.

1-5. Cultural and Social Barriers

The traditional view of nurses' role as employees subordinate to physicians is one of the important cultural barriers. In some societies, entrepreneurship is not considered compatible with the professional identity of nurses. Fear of failure, lack of self-confidence, and absence of social support are also other inhibiting factors [17, 21].

1-6. Individual and Professional Barriers

Not believing in oneself, being afraid of taking chances, not having the necessary skills to manage business and not having experience, are among important personal barriers. A heavy workload and feeling burned out at work also make nurses less willing to get involved in such ideas [9-10,18, 22].

2. Outcomes of Nursing Entrepreneurship Development

Studies show that the development of entrepreneurship in nursing has outcomes at individual, professional, organizational and health system levels. These outcomes include increased professional autonomy, job creation and development of diverse career paths, improved access to quality health services, creativity and innovation in the health system, and economic benefits to the health system and society.

2.1. Increased Professional Autonomy and Job Satisfaction

Entrepreneurship makes it possible to create care-based businesses and participate actively in professional decision-making, which ultimately strengthens professional identity and increases job satisfaction. Greater professional autonomy is also associated with increased job motivation and reduced job burnout [22-24].

2.2. Job Creation and Diversified Career Paths

Entrepreneurship allows nurses to provide services such as home care, specialized nursing clinics, health counseling and community-based services. In addition to creating employment, it reduces dependence on employment and can also be effective in retaining human resources and reducing nurse migration [22-24].

2.3. Improved Access to Quality Health Services

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Entrepreneurial nurses play an important role in responding to health needs, particularly in primary care, chronic disease management, and home care, by providing innovative and community-based services. This can increase vulnerable groups' access to health services and improve the quality of care [25-27].

2.4. Creativity, Innovation, and Health System Efficiency

Since nurses work directly with patients, they can see problems and come up with smart ways to solve them. When nurses start to become entrepreneurs, they can come up with new ideas and ways of delivering care using new technology and innovation, which in turn make health system more efficient [28].

2.5. Economic Benefits to the Health System and Society

Starting business makes services more productive by cutting down hospital costs, creating preventive and community-focused care and helping health economy to grow [29].

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Table 1: Barriers and Facilitators of Nursing Entrepreneurship

Author / Year	Country	Design	Sample	Main Barriers	Facilitators
Jahani et **al, 2018 [9]**	Iran	Qualitative study; Thirteen entrepreneurial nurses were purposefully selected.	Entrepreneur nurses	Lack of formal entrepreneurship education, traditional attitude toward the nurse's role, lack of awareness	Integrating entrepreneurship into the curriculum, increasing awareness, professional empowerment
Colichi et al 2019[**12**]	NR*	Review study;22 articles were included	22 articles	Lack of business education, lack of managerial knowledge, legal limitations, lack of financial resources	Entrepreneurship education, development of managerial skills, policy support, professional autonomy
Jakobsen et al, 2021 [**20**]	Denmark	Qualitative; A phenomenological-hermeneutical approach guided nine semi-structured interviews, conducted face-to-face (n=6) or by telephone (n=3).	9 participants	Negative attitude toward entrepreneurship, traditional nursing culture, professional identity conflict, stereotypes of the nurse's role, workplace resistance, and fear of leaving the employee role	Presence of coaches and mentors, supportive legal frameworks, professional autonomy
Puspita et al, 2021 [**18**]	NR	Literature Review (databases); Eight articles (four national and four international) meeting the inclusion and exclusion criteria were selected.	NR	-	Use of the internet and social networks, interaction and networking with entrepreneurs, patients, and the community, increased interest and motivation, acceptance of change, and participation in entrepreneurship courses and competitions.
Malakouti et al. **2023** [**13**]	NR	Overview / Review of reviews; Seven reviews (five narrative and two systematic) were included	7 studies (5 review + 2 systematic)	Lack of entrepreneurial knowledge, experience, and skills; risk aversion; traditional organizational culture; laws and insurance problems; insufficient financial and organizational support; and unprofessional attitudes and behaviors of colleagues.	Education and development of entrepreneurial skills, creativity and opportunity recognition, self-efficacy and motivation, managerial and organizational support, financial support and supportive policies, professional autonomy, networking, and use of new technologies.
Ali HI et al, 2023 [**21**]	Egypt	Descriptive-exploratory; A convenience sample of 82 out of 97 nurse managers was included in this descriptive-exploratory study.	82 nurse managers	Weak knowledge and skills, negative attitude and risk aversion, low self-efficacy, managerial and organizational barriers, and limited resources (financial, time, and human).	-
Jamshidi et al, 2024 [**19**]	Iran	Qualitative content analysis; Purposeful sampling using convenience and snowball techniques was conducted until data saturation was reached.	15 participants	Organizational bureaucracy, lack of managerial support, structural limitations	Organizational support, supportive policies, creation of innovation opportunities
Rahmanianaraki et al 2024 (10)	NR	Narrative Review	NR	Cultural barriers, lack of legal support, lack of recognition of the entrepreneurial nurse's role	Supportive policies, enhanced professional status, increased awareness, and social support

* *NR= not report*

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3. Factors Affecting Nurse Migration

In total, 14 studies published between 2007 and 2025 were included in this review. In terms of study design, there were 4 quantitative cross-sectional studies [30-33], 4 qualitative studies [34-36], 3 review studies [37-39], and 3 analytical and policy studies based on secondary data or health workforce analysis [40-42]. In terms of geographical scope, the studies were conducted at the international level [37, 39, 42], in Europe [30, 32, 34,42], Asia and the Middle East [31 and 33], Africa [36], and Iran [7, 35,41].

The main focus of these studies was to identify factors affecting nurse migration, intention to migrate, and factors related to nursing workforce retention. Most qualitative studies focused on nurses lived experiences and their perceptions of working and professional conditions [32-36], whereas cross-sectional studies examined the relationship between working conditions, job satisfaction, and intention to migrate [30-33]. Review and analytical studies also examined global trends in nurse migration, health workforce inequalities, and the role of human resource policies [37-42]. Overall, these studies provided comprehensive evidence regarding the role of economic, professional, organizational, and social factors in nurse migration and retention (Table 2).

3-1. Economic Factors

Studies have found that low wages and differences in pay between where nurses come from and where they go are some of the reasons for nurse migration [37, 39, 40, 42]. Also, when income does not match the cost of living and people have money problems are among factors that make nurses more likely to migrate [31, 41]. On the hand better pay, more money benefits and more financial safety in the places where nurses go are some of the main reasons they choose to move there [31, 37, 40]. When nurses get pay raise, make more money and receive other financial help are among the most important factors that keep nurses in the health system [41- 42].

3-2. Professional Factors

The findings also showed that limited opportunities for professional advancement, specialized education, and career promotion are important factors in nurse migration [31, 34,40]. In addition, low professional status, lack of professional autonomy, and limited participation in clinical decision-making reduce job satisfaction and increase the tendency to migrate in nurses [32, 7, 35]. In contrast, creating professional development opportunities, continuing education, and advanced career pathways play an important role in increasing job satisfaction and nurse retention [32, 7, 39].

3-3. Organizational and Work Environment Factors

Studies have shown that high workload, nursing shortages, an inappropriate nurse-to-patient ratio, and long shifts are among the most important factors in nurse migration [30,36]. In addition, job burnout, high work stress, and an unfavorable work environment significantly increase the intention to migrate among nurses [30,33]. Furthermore, ineffective management, insufficient organizational support, and inappropriate human resource policies have been reported as other factors affecting nurse migration [32, 36, 41]. In contrast, improving working conditions, creating a supportive work

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environment, and effective organizational leadership can play an important role in nurse retention [32, 36].

3-4. Social Factors and Quality of Life

Some studies have shown that low quality of working life, work-life imbalance, and work-related psychological pressures are important factors in nurse migration [33, 34, 37]. In addition, the search for a better quality of life, greater social security, and a more suitable career are other factors in nurse migration [31, 40]. In contrast, improving quality of life, providing social support, and creating work-life balance can significantly increase nurse retention [32-33].

4.Relationship Between Nursing Entrepreneurship and Nurse Migration

Although limited studies have directly addressed the relationship between entrepreneurship and nurse migration, studies show that the availability of entrepreneurial opportunities can act as a protective factor against nurse migration. By creating independent job opportunities, increasing income, enhancing professional autonomy, and improving job satisfaction, entrepreneurship can reduce nurses' desire to leave the country [43].

In contrast, in environments where entrepreneurial opportunities are limited and sufficient organizational and legal support does not exist, nurses are more likely to seek job opportunities abroad [44]. Some studies showed that the absence of alternative career paths, including entrepreneurial activities, and lack of professional independence are among factors that affect nurse migration [43, 45].

Table 2: Reasons for Nurse Migration (Migration Factors, Retention Factors)

Author / Year	Country / Region	Study Type	Migration Factors (Push/Pull)	Retention Factors (Retention)
Lorenzo et al, 2007 [39]	International	Review	Wage differences, unfavorable working conditions	Improved working conditions and benefits
Brush, 2008 [38]	United States / International	Review	Limited professional opportunities	Professional development, advanced career pathways
Kingma, 2008[37]	International	Review / Analytical	Wage disparities, better economic opportunities, unfavorable working conditions	Improved salaries, appropriate working conditions, enhanced professional status
Yeates, 2010[40]	International	Analytical	Economic factors, better job opportunities, quality of life	Better professional opportunities, economic security
Goštautaitė et al, 2018 [32]	Europe	Cross-sectional	Job dissatisfaction, weak organizational support	Supportive leadership, job satisfaction
Hu et al, 2022 [33]	Asia	Cross-sectional	Job stress, burnout, work-life imbalance	Improved occupational well-being, organizational support
Pessa et al, 2023[34]	Europe	Qualitative / Mixed	Lack of career advancement, job dissatisfaction, poor work-life balance	Professional development, improved work-life balance
Laari et al, 2024 [36]	Africa	Cross-sectional	Resource shortages, high work pressure	Supportive work environment, workforce retention policies
Botezat et al, 2024 [42]	Europe	Analytical	Low wages, better economic opportunities abroad	Salary increases, retention policies

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Afshari et al, 2025[**41**]	Iran	Analytical	Financial dissatisfaction, inappropriate management	Financial incentives, organizational support
AbdElhay et al, 2025 [**31**]	Middle East	Cross-sectional	Low income, low quality of life	Job security, improved quality of life
Mohtashami et al, 2025 [**2**]	Iran	Qualitative	Low professional status, lack of professional autonomy	Enhanced professional status, occupational autonomy
Nezhad et al, 2025 [**35**]	Iran	Qualitative	Professional dissatisfaction, limited career growth	Professional support, promotion opportunities
Aleksić et al, 2025 [**30**]	Europe	Cross-sectional	Workforce shortage, high workload, job burnout	Reduced workload, improved working conditions

Discussion

Evidence shows that professional and economic factors are among the most important determinants of nurse migration. Multiple studies have shown that the absence of career advancement opportunities, inadequate income, and low job satisfaction are associated with an increased tendency to migrate [10, 12, 13, 17]. In contrast, creating new professional pathways, including nursing entrepreneurship, can increase professional autonomy, job satisfaction and economic opportunities [18–20]. Entrepreneurship allows nurses to provide independent services, increase their income, and play a more active role in the health system, and these factors are associated with increased nurse retention [19, 21]. In addition, studies have shown that improving professional conditions and creating innovative job opportunities can act as an effective strategy for reducing the departure of nursing workforce and their international migration [12, 17, 22, 23]. Therefore, as a policy proposal for developing countries that are dealing with greater migration of nursing workforce, the development of entrepreneurship in nursing can act as a potential strategy for strengthening nursing workforce retention and reducing migration.

There are no studies on how nursing entrepreneurship and nurse migration are connected. We do not know much about how policies that support nurses, teaching nurses about entrepreneurship and measures that organizations can take would help to reduce the number of nurses who migrate abroad. We need studies that use numbers and look at associated factors over a long period of time to see how nursing entrepreneurship affects nurses' decisions to move to another country. Nursing entrepreneurship is an area to study in relation to nurse migration.

Conclusion

Nursing entrepreneurship can provide new professional and economic opportunities for nurses, increase professional autonomy and job satisfaction, and potentially contribute to nursing workforce retention and reduced nurse migration, particularly in developing countries. However, the current evidence does not establish a direct causal relationship between nursing entrepreneurship and nurses' migration decisions. Therefore, entrepreneurship should be considered as a potential component of broader nurse retention strategies rather than a standalone solution to migration. Strengthening entrepreneurship education, creating supportive organizational and policy environments, facilitating access to

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mentorship, financing, and professional resources, and developing appropriate regulatory frameworks may help expand entrepreneurial opportunities for nurses. Further longitudinal and quantitative research is needed to examine the relationship between nursing entrepreneurship, retention, and migration and to identify the organizational and policy conditions under which entrepreneurship may contribute to reducing nurse migration.

This review has some limitations. The available literature directly examining the relationship between nursing entrepreneurship and nurse migration was limited, and substantial heterogeneity in study designs, populations, and outcome measures restricted direct comparison across studies. In addition, much of the available evidence focused on entrepreneurship, job satisfaction, professional autonomy, or retention separately rather than examining migration as a specific outcome. Therefore, the potential contribution of nursing entrepreneurship to reducing nurse migration should be interpreted cautiously. Future longitudinal and comparative studies are needed to provide stronger evidence regarding this relationship and to evaluate the effectiveness of entrepreneurship-focused interventions and policies in different healthcare contexts.

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References:

1. Konlan KD, Lee TW, Damiran D. The factors that are associated with nurse immigration in lower- and middle-income countries: an integrative review. Nurs Open. 2023;10(12):7454-7466.
2. Mohtashami AR, Keshavarzi A, Bayati M. Tendency to migrate among Iranian nurses. BMC Nurs. 2025;24(1):1089.
3. Neergård GB. Entrepreneurial nurses in the literature: a systematic literature review. J Nurs Manag. 2021;29(5):905-915.
4. Senel Tekin P, Bekar F. Nurse entrepreneurship in the emerging healthcare industry: a systematic review. Anadolu Univ Sos Bilim Derg. 2023;23(3):603-628.
5. Shahab Samani M, Akbari Ghamsari A, Yazdaninasab M. A comparative-quantitative study of the impact of macro and structural factors on entrepreneurship. J Soc Dev Welf Plan. 2025;15(61):313-349. [Persian]
6. Hosseinzadeh F, Imani R, Chekeni AM, Anvari H, Roozbahani G, Heidari-Soureshjani R. Entrepreneurship in nursing: a literature review. J Med Educ Dev. 2023;18(1):359-78. [Persian]
7. Tajari M, Ashktorab T. Reasons Behind Immigration of Iranian Nurses: A Qualitative Study. Knowledge of Nursing 2023; 1 (1) :40-51
8. Boore J, Porter S. Education for entrepreneurship in nursing. Nurse Educ Today. 2011;31(2):184-191.
9. Jahani S, Abedi H, Khoshknab MF, Elahi N. The experience of Iranian entrepreneurial nurses on the identification of entrepreneurial opportunities: a qualitative study. J Family Med Prim Care. 2018;7(1):230-236.
10. Rahmanianaraki H, Sadeghi Meresht F, Hojjati H, Manouchehr B. Challenges of entrepreneurship in nursing: a narrative review. J Nurs Adv Clin Sci. 2024;1(4):219-225.
11. Andrade AC, Dal Ben LW, Sanna MC. Entrepreneurship in nursing: overview of companies in the State of São Paulo. Rev Bras Enferm. 2015;68(1):40-44.
12. Colichi RMB, Silva e Lima SG, Bonini AB, Lima SAM. Entrepreneurship and nursing: integrative review. Rev Bras Enferm. 2019;72(Suppl 1):321-330.
13. Malakoti N, Zabihi V, Ajilian Abbasi M, Akhlaghi A, Alipour-Anbarani M, Shariati K. An overview of entrepreneurship in nursing: challenges, opportunities, and barriers. Med Educ Bull. 2023;4(3):803-811.
14. Salarianzadeh MH, Sadr F, Vaez Mahdavi MR, Maher A. Factors affecting organizational entrepreneurship in governmental health organizations of Iran. Health Inf Manage. 2012;8(8):1199-1212. [Persian]
15. Jamali N, Emami SMH, Vatankhah S, Maleki MR. What are the challenges and barriers for the entrepreneurship ecosystem in the Iranian health system? Qualitative research. J Educ Health Promot. 2025; 14:201.
16. Inanloo S, Mehdizadeh Ashrafi A, Jahangirfard M. An organizational entrepreneurship model based on organizational learning: a systematic review study from Iran Health Insurance Organization. Soc Determinants Health. 2023;9(1):1-13. [Persian]
17. Jahani S, Abedi H, Elahi N, Fallahi-Khoshknab M. Iranian entrepreneur nurses' perceived barriers to entrepreneurship: a qualitative study. Iran J Nurs Midwifery Res. 2016;21(1):45-53.
18. Puspita AW, Castury D, Suparto TA, Hermayanti Y, Rahayuningsih D. Nursing entrepreneurship development: literature review. Indones J Community Dev. 2021;1(1):8-18.
19. Jamshidi Z, Aieen M, Jafari-Oori M. University innovation and start-ups: barriers and facilitators experienced by nursing faculties: a content analysis study. Nurs Open. 2024;11(5):e2190.
20. Jakobsen L, Qvistgaard LW, Trettin B, Rothmann MJ. Entrepreneurship and nurse entrepreneurs lead the way to the development of nurses' role and professional identity in clinical practice: a qualitative study. J Adv Nurs. 2021;77(10):4142-4155.
21. Ali HI, Abd Allah SM, Al-Hosany WAE. Nurse manager's barriers to entrepreneurship in nursing. Malays J Nurs. 2023;15(1):32-37.
22. Spence Laschinger HK, Wong CA, Grau AL, Read EA, Pineau Stam L. The influence of leadership practices and empowerment on Canadian nurse manager outcomes. J Nurs Manag. 2012;20(7):877-888.
23. Saleh MM, Ata AA, Abd-Elhamid ZN, Eltahan AA .Building nursing leaders: the influence of

[Downloaded from knjournal.ir on 2026-11-14]

[DOI: 10.66224/knjournal.2.2.180]

entrepreneurial leadership program on nurse interns' innovation and clinical performance. BMC Nurs. 2025;24:501.
24. Wilson A, Whitaker N, Whitford D. Rising to the challenge of health care reform with entrepreneurial and intrapreneurial nursing initiatives. Online J Issues Nurs. 2012;17(2):5.
25. Beaudet O, Pesut D, Lemberger O. The ANA Innovation Engine: activating innovation through education and communities of practice. Online J Issues Nurs. 2023;28(2).
26. Hojjati H, Nejatollahi M. Entrepreneurship in the nursing profession. J Nurs Adv Clin Sci. 2024;1(3):125-132.
27. Guterres Correia A. The role of entrepreneurship in transforming healthcare: a comprehensive review. Int J Innov Sci Res Technol. 2025;10(9):71-78.
28. Orr Z, Zalcman BG, Pinchas-Mizrachi R, Romem A. Fostering healthcare innovation: a mixed-methods study of an impact entrepreneurship course for nurse practitioner students. Nurs Rep. 2025;15(11):397.
29. Thepna A. Individual factors and business success among nurse entrepreneurs in nursing and midwifery clinics [dissertation]. Seattle (WA): University of Washington; 2024.
30. Aleksić I, Bučalina-Matić A, Tankosić M. Job satisfaction and economic migration in nursing: a survey review. Int Rev. 2025;(3-4):147-158.
31. AbdELhay ES, Taha SM, El-Sayed MM, Helaly SH, AbdELhay IS. Nurses retention: the impact of transformational leadership, career growth, work well-being, and work-life balance. BMC Nurs. 2025;24(1):148.
32. Goštautaitė B, Bučiūnienė I, Milašauskienė Ž, Bareikis K, Bertašiūtė E, Mikelionienė G. Migration intentions of Lithuanian physicians, nurses, residents and medical students. Health Policy. 2018;122(10):1126-1131.
33. Hu H, Wang C, Lan Y, Wu X. Nurses' turnover intention, hope and career identity: the mediating role of job satisfaction. BMC Nurs. 2022;21(1):43.
34. Pessa MA, Ismail LMN, Mahmoud FZ, AbouZead MM. Entrepreneurial competence and readiness among medical surgical nursing students: effect of an educational program. Migrat Lett. 2023;20(S1):698-707.
35. Nezhad MS, Abdi A, Vaisi-Raygani AA. Explaining the causes and factors related to nurse migration from the perspective of nursing students in Iran: a content analysis study. BMC Nurs. 2025;24(1):1204.
36. Laari CK, Sapak J, Wumbei D, Salifu I. Migration intentions among nursing students in a low-middle-income country. BMC Nurs. 2024;23(1):492.
37. Kingma M. Nurse migration and the global health care economy. Policy Polit Nurs Pract. 2008;9(4):328-333.
38. Brush BL. Global nurse migration today. J Nurs Scholarsh. 2008;40(1):20-25.
39. Lorenzo FM, Galvez-Tan J, Icamina K, Javier L. Nurse migration from a source country perspective: Philippine country case study. Health Serv Res. 2007;42(3 Pt 2):1406-1418.
40. Yeates N. The globalization of nurse migration: policy issues and responses. Int Labour Rev. 2010;149(4):423-440.
41. Afshari A, Masoumi SZ, Borzou SR, Safdari A, Khazaei A. Prioritizing drivers of nursing migration: a summative content analysis of influential factors. BMC Nurs. 2025;24(1):632
42. Botezat A, Incaltarau C, Nijkamp P. Nurse migration: long-run determinants and dynamics of flows in response to health and economic shocks. World Dev. 2024;174:106445
43. Ubochi NE, Osuji JC, Ubochi VN, Ogbonnaya NP, Anarado A, Iheanacho PN, et al. The drive process model of entrepreneurship: a grounded theory of nurses' perception of entrepreneurship in nursing. Int J Afr Nurs Sci. 2021;15:100377.
44. El-Jardali F, Dimassi H, Dumit N, Jamal D, Mouro G. A national cross-sectional study on nurses' intent to leave and job satisfaction in Lebanon: implications for policy and practice. BMC Nurs. 2009;8:3.
45. Galbany-Estragués P, Nelson S. Migration of Spanish nurses 2009-2014: underemployment and surplus production of Spanish nurses and mobility among Spanish registered nurses: a case study. Int J Nurs Stud. 2016;63:112-123.

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