

# Nurse Entrepreneurship in the Emerging Healthcare Industry: A Systematic Review <sup>1</sup>

Perihan ŞENEL TEKİN <sup>2</sup> - Fevziye BEKAR <sup>3</sup>

Submitted by: 02.01.2023

Accepted by: 07.07.2023

Article Type: Review

## Abstract

*Entrepreneurship is encouraged in every sector in the twenty-first century. In the field of health, nurse entrepreneurship emerges as an important issue in providing health services and improving public health. In this research, the development of entrepreneurial behavior in nursing in the world and a systematic examination of this development within the framework of academic knowledge are aimed. For this purpose, the types of entrepreneurship discussed in the last 10 years of research in the field of entrepreneurship in nursing and the methods, findings and results of these studies were examined. As a result of the search made in databases with high international recognition, 78.761 publications on nurse entrepreneurship were reached in the last ten years, and 30 articles were included in the final review. Classical, social, collective and intrapreneurship were discussed in these studies, which were examined in terms of entrepreneurship typology. As a result of the review, it was seen that the studies in the literature mostly focused on the opportunities and obstacles in front of entrepreneurial nurses. While collective entrepreneurship was included for the first time in the literature, it was found that eco-entrepreneurship and digital entrepreneurship have not yet been the subject of research on nurse entrepreneurship. However, it has been found that more research is needed on the relations between entrepreneurial nurses and non-governmental organizations, the incentives for increasing entrepreneurship and role modeling in entrepreneurship.*

**Keywords:** Entrepreneurship, Nursing, Nurse Entrepreneurship, Systematic Review

**Citation:** Şenel Tekin, P. ve Bekar, F. (2023). Nurse entrepreneurship in the emerging healthcare industry: A systematic review. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 23(3), 603-628.

<sup>1</sup> This study does not require ethics committee permission.

<sup>2</sup> Ankara University, Vocational School of Health, Department of Medical Services and Techniques, [ptekin@ankara.edu.tr](mailto:ptekin@ankara.edu.tr), ORCID: 0000-0002-4513-7049

<sup>3</sup> Gumushane University, Şiran Dursun Keleş Health Services Vocational School, Department of Medical Services and Techniques, [fevziye.gurlas@gumushane.edu.tr](mailto:fevziye.gurlas@gumushane.edu.tr), ORCID: 0000-0003-1692-4294

## Gelişmekte Olan Sağlık Sektöründe Hemşire Girişimciliği: Sistemik Derleme

Perihan ŞENEL TEKİN<sup>4</sup> - Fevziye BEKAR<sup>5</sup>

Başvuru Tarihi: 02.01.2023

Kabul Tarihi: 07.07.2023

Makale Türü: Derleme

### Öz

Yirmi birinci yüzyılda girişimcilik her sektörde teşvik edilmektedir. Sağlık alanında hemşire girişimciliği, sağlık hizmetlerinin sunumunda ve halk sağlığının geliştirilmesinde önemli bir konu olarak karşımıza çıkmaktadır. Bu araştırmada dünyada hemşirelikte girişimci davranışın gelişimi ve bu gelişimin akademik bilgi çerçevesinde sistemik olarak incelenmesi amaçlanmaktadır. Bu amaçla hemşirelikte girişimcilik alanında son on yılda yapılan araştırmalarda ele alınan girişimcilik türleri ve bu çalışmaların yöntemleri, bulguları ve sonuçları incelenmiştir. Uluslararası tanınırlığı yüksek veritabanlarında yapılan tarama sonucunda hemşire girişimciliği ile ilgili son on yılda 78.761 yayına ulaşılmış, 30 makale son incelemeye dâhil edilmiştir. Girişimcilik tipolojisi açısından incelenen bu çalışmalarda klasik, sosyal, kolektif ve iç girişimcilik ele alınmıştır. Yapılan inceleme sonucunda alanyazındaki çalışmaların daha çok girişimci hemşirelerin önündeki fırsat ve engellere odaklandığı görülmüştür. Kolektif girişimcilik alanyazında ilk kez yer alırken, eko-girişimcilik ve dijital girişimciliğin hemşire girişimciliği konusunda henüz araştırma konusu olmadığı tespit edilmiştir. Ancak girişimci hemşireler ile sivil toplum kuruluşları arasındaki ilişkiler, girişimciliği artırmaya yönelik teşvikler ve girişimcilikte rol model olma konusunda daha fazla araştırmaya ihtiyaç olduğu görülmektedir.

**Anahtar Kelimeler:** Girişimcilik, Hemşirelik, Hemşire Girişimciliği, Sistemik İnceleme

<sup>4</sup> Ankara Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, Tıbbi Hizmetler ve Teknikler Bölümü, ptekin@ankara.edu.tr, ORCID: 0000-0002-4513-7049

<sup>5</sup> Gümüşhane Üniversitesi, Şiran Sağlık Hizmetleri Meslek Yüksekokulu, Tıbbi Hizmetler ve Teknikler Bölümü, fevziye.gurlas@gumushane.edu.tr, ORCID: 0000-0003-1692-4294

## Introduction

Entrepreneurship makes a significant contribution to national economies in maintaining prosperity, creating new job opportunities and reducing unemployment (Henry, Hill and Leitch, 2003). Like many professions in the health sector, nursing initiative is encouraged all over the world due to its contributions to individual and community health. Entrepreneurship has the potential to increase the visibility of the profession and create new spaces for nurses (Copelli, Erdmann and Santos, 2017). Being innovative and entrepreneurial in the nursing profession, improving health services and patient safety, is seen as a prerequisite for achieving excellence in the health sector (McSherry, Pearce, Grimwood, and McSherry, 2012). As a matter of fact, the concept of entrepreneurship in nursing is associated with personal and professional characteristics such as autonomy, independence, flexibility, innovation, proactivity, self-confidence and responsibility (Copelli et al., 2017).

Today, entrepreneurship is in a wide range of fields such as practitioner (health assessment, nursing practices, special care, etc.), educator, consultant, therapist, researcher, case manager, manager, operator, partner, employer, secretary, accountant, admissions officer and market consultancy in the nursing profession (Arslan and Konuk Şeker, 2012, p. 144). While health services, patient visits and other health-related services provided by national health systems are defined as direct entrepreneurial activities, activities such as consultancy, infrastructure, labor supply, an invention or production are indirectly included in nursing entrepreneurship (Drennan et al., 2007).

Entrepreneurial nurses can operate on a wide variety of entrepreneurship, including classical entrepreneurship (Andrade, Ben, Sanna, 2015), intrapreneurship (Bagheri and Akbari, 2018), social entrepreneurship (Backes, Toson, Haeffner, Marchiori and Costenaro, 2021), and collective entrepreneurship (Haase and Franco, 2020). According to Carpenter (2012), classical entrepreneurship is startups that are established by starting from scratch with people putting their dreams into action by using their own power, talent, knowledge and skills (Acuner, İlhan-Nas, Şahin, Okan, and Birincioğlu, 2016). Intrapreneurship is an entrepreneurial process that refers to unconventional intentions and behaviors in the organizational process of an institution. Regardless of the size of organizations, innovation refers not only to the creation of new business partnerships, but also to the in-house production and management processes, including the process of adapting to new products, technology, management techniques, and competitive strategies (Antoncic and Hisrich, 2003). Social entrepreneurship is innovative activities with a social purpose in non-profit sectors, as well as social-purpose commercial enterprises (Austin, Stevenson, and Wei-Skillern, 2006). Collective entrepreneurship, on the other hand, was originally called "entrepreneurial teams". In this sense, in collective entrepreneurship, the intelligence, skills and experiences of individuals are integrated with these characteristics of other members of the team. This creates a strong collective capacity for creativity and innovation. In this type of entrepreneurship, individuals try to understand each other's abilities, thoughts and feelings in cooperation (Haskins, Liedtka and Rosenblum, 1998).

Looking at the history of entrepreneurship in the nursing profession, it is seen that it is based on the studies pioneered by Nightingale since the nineteenth century. With the Saint Thomas Hospital nursing school, the scientific foundations of the nursing profession were laid during the Crimean War and the War of Independence. Anne Nery cared for the wounded in the Paraguayan war. Wanda de Aguar Horta, on the other hand, became the leading figure of the entrepreneurial activities of the nursing profession as the first Brazilian theorist (Copelli, Erdmann and Santos, 2019).

While the history of nurse entrepreneurship dates back to the nineteenth century, research on this subject started in the seventies (Arnaert, Mills, Bruno and Ponzoni, 2018). The development of nurse entrepreneurship has been the subject of many studies since those years, and these studies have been compiled with literature reviews (Arnaert et al., 2018; Copelli et al., 2019; Neergård, 2021; Puspita, Castury, Suparto, Hermayanti and

Rahayuningsih, 2021). Arnaert et al. (2018) examined the lack of nurse entrepreneurship in educational curricula between 1977 and 2015. Copelli et al. (2019) scanned the national and international literature and revealed typologies in nurse entrepreneurship.

Puspita et al. (2021) reviewed the last five years of nursing entrepreneurship literature at national and international levels and then examined 8 articles on nurses and nursing students. Neergård (2021), searching only one database (Scopus), scanned 647 documents and ultimately analyzed 37 articles to analyze empirical descriptions of entrepreneurial nurses' employment status, contexts, knowledge, activities, barriers, and motivations. Neergård (2021) identified two entrepreneurial nursing roles in her review. According to this research, it is stated that entrepreneurial nurses can act as nurse entrepreneurs or entrepreneurial nurses. It has been stated that these roles are rooted in the field of nursing empirically and entrepreneurship theoretically (Neergård, 2021).

Although there is an understanding of the past century, importance and opportunities of nurse entrepreneurship on a global scale, knowledge is still limited both in the literature and in practice (Copelli et al., 2019). Nursing entrepreneurship is a field of research that is open to development by making use of international experiences. Considering the changes in the business world, the pandemic, the development of technology and the transition to home working methods in the last ten years, it has been noticed that nurses focus on entrepreneurial intention and attitude and nurse students' perception of entrepreneurship rather than entrepreneurial behavior. In this study, it is aimed to complete the deficiencies of previous systematic review studies. For this purpose, our study will both combine current data and scientific knowledge in the literature, and contribute to the development of the entrepreneurship literature by drawing attention to the neglected elements. In order to achieve these goals, it is aimed to reveal current studies in the changing business world order and to include the entrepreneurial experiences of nurses who continue their activities in the sector by scanning larger international databases.

Within the scope of the research, answers are sought to the questions of which types of entrepreneurship have been focused on in the last ten years on nurses working in the international public and private sectors, what methods have been used in these researches, and what findings have been obtained. With this compilation research, a systematic scope review was conducted to examine the method, scope, and bibliometric analysis of the researches on nursing entrepreneurship, the country origins of the researches and the types of entrepreneurship.

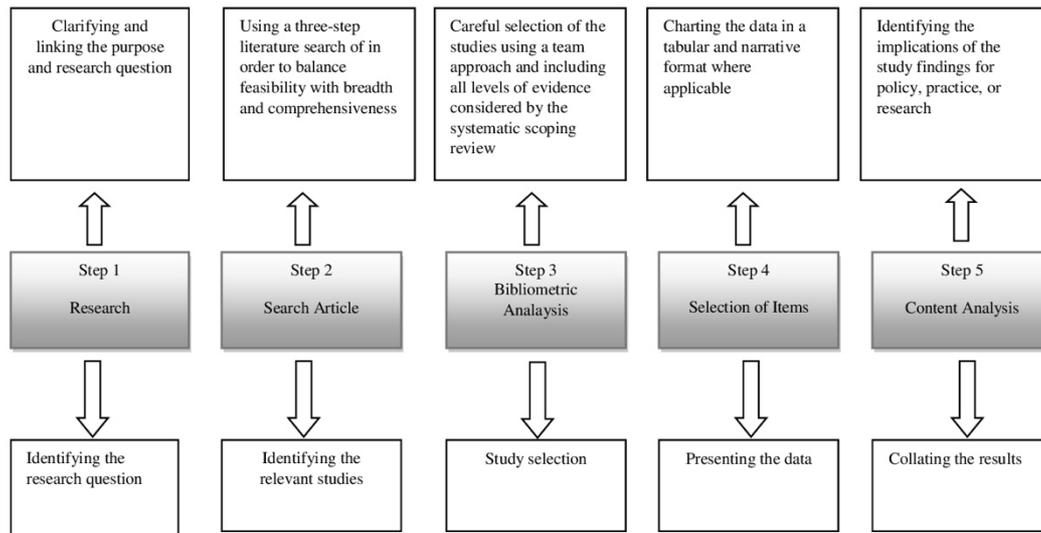
## **Method**

### **Type of Research**

The method of this research is systematic scope review. Systematic scope review was developed by the Joanna Briggs Institute and was first used by Arksey and O'Malley in 2005 (Peters et al., 2015). This method was preferred because of the synthesis of the findings obtained for the research, the mapping of the frequently used literature, and the contribution to the presentation of the conceptual framework in a clear and critical way (Peters, et al. 2015).

### **Research Process**

The systematic scope analysis of Arksey and O'Malley (2005) and Levac, Colquhoun and O'Brien (2010) has a research process that is carried out in six different steps. This process is summarized in five basic steps in Khalil et al. (2016)'s research. These are (1) determining the research question, (2) conducting a literature search in three steps, namely the scope and breadth of the research and balancing them, (3) carefully selecting the researches in team work, (4) organizing the data in tabular and narrative form, (5) the study. combining the findings with practice and documents. In Figure 1, detailed information about this process is presented visually.



Note: Created by authors based on research by Khalil et al., 2016 and Ratten, 2019

Figure 1. The Systematic Scope Compilation Process

### Research Question

Within the scope of this study, the research question was determined as the first step of the research process, which includes five steps of the systematic scope review. The questions of the research are determined as “which types of entrepreneurship have been focused on in the researches on nurses working in the international public and private sectors in the last ten years? Which methods were used in these studies and what findings were obtained?”

### Data Collection

In the systematic scope review process, as the second step to collect the data of the study, it was determined on which databases the information would be collected. In this context, research was conducted on seven of the most well-known databases, namely Web of Science, Scopus, EBSCO (covering 26 databases including CINAHL), PubMed, Google Scholar, Emerald and ScienceDirect. In the first step, the databases were shared equally by two researchers and scanned. The databases were searched by typing the words entrepreneur\* and nurse\* in various combinations such as “entrepreneurship” and “nursing” / “entrepreneurship” and “nurse” / “entrepreneurship” and “nurses” / “entrepreneurial” and “nursing” / “entrepreneurial” and “nurse” “entrepreneurial” and “nurses”. After the preliminary search, new keywords such as “social entrepreneur\* and “intrapreneurship” were determined on the basis of various entrepreneurship types and the research made in the databases was repeated. These searches were conducted on the basis of the last 10 years of research articles published until 11.09.2022. The last ten years have been included in the filtering options to keep the research data up to date. Within the scope of the research, the abstract, title and keywords were examined separately by each researcher. Then, the articles reached by the two researchers were combined. The data obtained from all databases were examined in all aspects by two researchers as full-text articles. The publications that were agreed upon in line with the final criteria were included in the research.

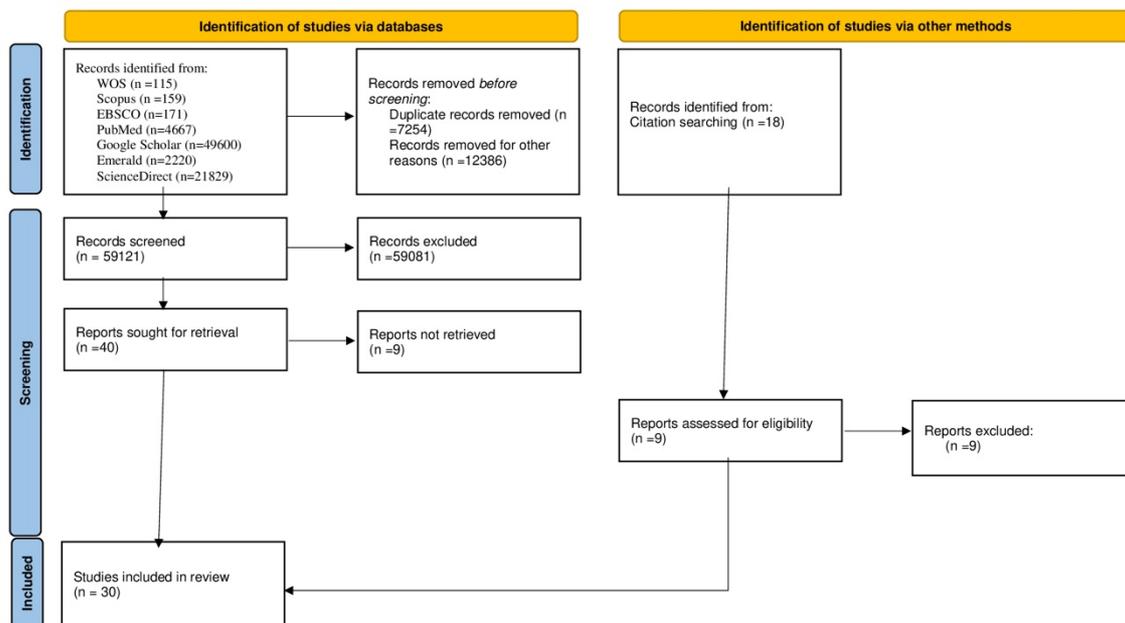
### Selecting Data

As the third step in the context of systematic scope review, the selected articles were studied meticulously by working as a team. A protocol has been made for the selection of published studies on the subject of entrepreneurial nurses. Here, the publications were included (access to the full text, the language of the

publication was in English, being a research article published between 2013-2022, and nurses with entrepreneurial behavior as a sample) and exclusion criteria (nurse students, entrepreneurial intention and compilations, books, book chapter, letter to the editor) was decided.

Search results are organized per PRISMA guidelines in Figure 2 (Page et al., 2021). A total of 78.761 publications were identified in the first examinations made in line with the research. However, most of these publications were not directly related to nurse entrepreneurship behavior. When the publication inclusion and exclusion criteria were applied for the purpose of the subject, a total of 21 studies were accessed. These articles accessed are 3 (14.3%) Web of Science, 3 (14.3%) Scopus, 2 (9.5%) EBSCO, 9 (42.9%) PubMed, 2 (9.5 %) Google Scholar, 1 (4.8 %) Emerald, 1 (4.8%) ScienceDirect. The distribution of publications is shown in Figure 2 in detail.

The point to be noted here was that the articles were in more than one database. For example, the Wall (2014) article was scanned in both Web of Science and PubMed. When such duplications are detected, this publication has been evaluated within the scope of the database from which it was first obtained. Finally, both the bibliographies of the articles searched and Arnaert et al. (2018), Copelli et al. (2019), Neergård (2021), and Puspita et al. (2021), the articles included in the systematic reviews were re-examined and the publications that were not found in our search were added in accordance with the purpose of the research. In this way, 9 more articles were accessed with the snowball sampling method. With the last additions, 30 articles were finally reached. These articles accessed are 12 (40.0 %) Web of Science, 3 (10.0 %) Scopus, 2 (6.7%) EBSCO, 9 (30.0 %) PubMed, 2 (6.7 %) Google Scholar, 1 (3.3 %) Emerald, 1 (3.3 %) ScienceDirect.



Note: Adapted from Page et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*. 372, n71.

Figure 2. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) Diagram. Flow Diagram of the Retrieval and Screening Process

### Finding

The 30 researches included in the systematic review covering the years 2013-2022 were published in 2018 with the most 7 (23.3%) articles. This was followed by 4 (13.3%) articles in 2019 and 2021, 3 (10%) each in 2013 and 2020, 2 (6.7%) each in 2014-2017, and 1 (3.3%) in 2022 (See. Figure 3).

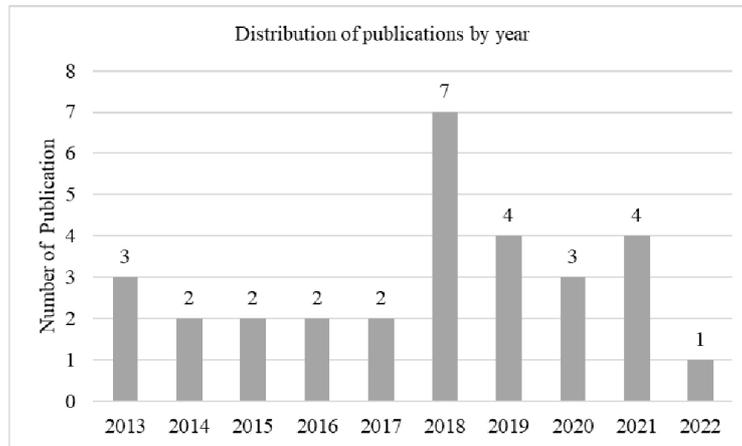


Figure 3. Distribution of Publications by Years

When the distribution of the articles according to the scientific journals in which they were published is examined, *Revista Brasileira de Enfermagem* ranks first with 3 publications (10%), and "Journal of the American Association of Nurse Practitioners", "Qualitative Health Research", "The Journal for Nurse Practitioners" are coming. Only 1 article was published in the other 21 journals. Table 1 provides information on the distribution of publications according to journals.

Table 1

Distribution of Journals in Which Researches Conducted in the Field of Entrepreneurial Nursing are Published

| <b>Journals</b>                                             | <b>N</b>  | <b>%</b>   |
|-------------------------------------------------------------|-----------|------------|
| Revista Brasileira de Enfermagem                            | 3         | 10.0       |
| Acta Medica Iranica                                         | 1         | 3.3        |
| Acta Paulista de Enfermagem                                 | 1         | 3.3        |
| Administrative Sciences                                     | 1         | 3.3        |
| BMC Health Services Research                                | 1         | 3.3        |
| Cyprus Journal of Medical Sciences                          | 1         | 3.3        |
| Gender, Work & Organization                                 | 1         | 3.3        |
| Innovation: The European Journal of Social Science Research | 1         | 3.3        |
| International Journal of Africa Nursing Sciences            | 1         | 3.3        |
| Iranian Journal of Nursing and Midwifery Research           | 1         | 3.3        |
| Journal of Advanced Nursing                                 | 1         | 3.3        |
| Journal of Family Medicine and Primary Care                 | 1         | 3.3        |
| Journal of Health Organization and Management               | 1         | 3.3        |
| Journal of Nursing Scholarship                              | 1         | 3.3        |
| Journal of Primary Health Care                              | 1         | 3.3        |
| Journal of The American Association of Nurse Practitioners  | 2         | 6.7        |
| Nursing-Research and Reviews                                | 1         | 3.3        |
| Nursing Administration Quarterly                            | 1         | 3.3        |
| Nursing Leadership                                          | 1         | 3.3        |
| PLOS ONE                                                    | 1         | 3.3        |
| Qualitative Health Research                                 | 2         | 6.7        |
| Revista de Pesquisa, Cuidado é Fundamental Online           | 1         | 3.3        |
| Revista Eletronica Enfermagem                               | 1         | 3.3        |
| The International Journal of Health Planning and Management | 1         | 3.3        |
| The Journal for Nurse Practitioners                         | 2         | 6.7        |
| <b>Total</b>                                                | <b>30</b> | <b>100</b> |

When it is examined which type of enterprise is discussed in nurse entrepreneurship in studies, it is seen that 16 (53.3%) studies were mostly about classical entrepreneurship, 6 (20%) social entrepreneurship, 2 (6.7%) intrapreneurship, 1 (3.3%) research combined intrapreneurship and classical entrepreneurship, and 1 (3.3%) research was about collective entrepreneurship. In the content analysis of the studies, it was found that the entrepreneurship type of the 4 studies was not specified (See Table 2).

Table 2

Distribution by Types of Entrepreneurship in Researches

| <b>Types of Entrepreneurship</b>             | <b>N</b>  | <b>%</b>   |
|----------------------------------------------|-----------|------------|
| Classical Entrepreneurship                   | 16        | 53.3       |
| Intrapreneurship                             | 2         | 6.7        |
| Classical Entrepreneurship+ Intrapreneurship | 1         | 3.3        |
| Social Entrepreneurship                      | 6         | 20.0       |
| Collective Entrepreneurship                  | 1         | 3.3        |
| Unspecified                                  | 4         | 13.3       |
| <b>Total</b>                                 | <b>30</b> | <b>100</b> |

Considering the distributions according to the method used in the studies, it was seen that 19 (63.3%) studies used qualitative, 8 (26.7%) quantitative methods, and 3 (10%) mixed methods were used (See Figure 4).

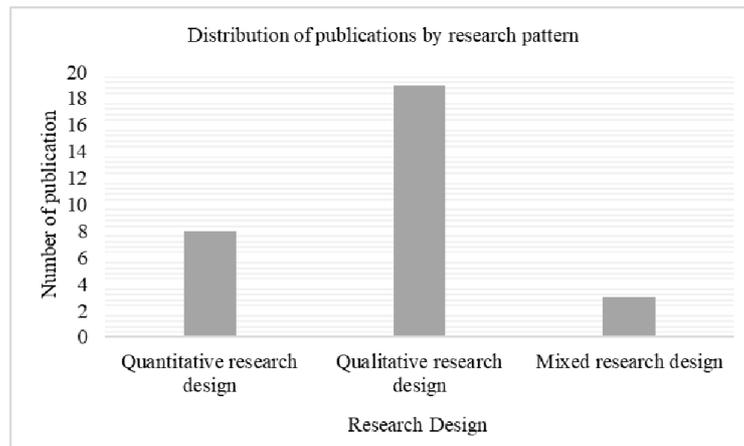


Figure 4. Distribution of Studies According to Research Methods

When evaluated within the scope of the country where the research was conducted, it was found that 6 (20.0%) studies in Brazil, 6 (20.0%) in the USA, 4 (13.3%) in Canada, 4 (13.3%) in Iran, 2 (6.7%) in Portugal, 2 (6.7%) in Italy, 1 (3.3%) in Australia, 1 (3.3%) in New Zealand, 1 (3.3%) in Nigeria, 1 (3.3%) in Denmark, 1 (3.3%) in South Korea and 1 (3.3%) in Turkish Republic of Northern Cyprus (See Table 3).

A scale was used in only 8 of the articles. In one study, a scale development study was conducted to measure entrepreneurship management in nursing (Backes et al., 2021). Among the scales used in research, Renko, El Tarabishy, Carsrud and Brännback (2015) “Entrepreneurial Leadership Scale” (Bagheri and Akbari, 2018), Santos, Marques and Ferreira (2020) “Individual Entrepreneurial Orientation Scale” (Ferraz, Marques, Santos, Cunha, and Vaz, 2021), Gawke, Gorgievski and Bakker’s (2019) “Intrapreneurship Scale” (Ferraz et al., 2021), Soriano’s (2003) “Attitudes Towards Collective Entrepreneurship Scale” (Haase and Franco, 2020) and İşcan and Kaygı’s (2011) “Entrepreneurship Scale” (Nurluöz and Esmailzadeh, 2019) were used. In Backes et al. (2021), a tool consisting of 17 items and 3 dimensions was developed to measure the management of entrepreneurship in nursing. In the first dimension of the scale, perceptions of entrepreneurship management (5 items), in the second dimension, the performance of entrepreneurship management, personal and professional qualifications (8 items), and in the third dimension, information about new technologies and maintenance tools of enterprises (6 items) are measured.

Table 3  
Comprehensive Analysis Data of Studies Included in the Systematic Scoping Review

| Researchers/<br>year/country                     | Purpose of the research                                                                                                                                               | Type of<br>entrepreneurship | Method                                     | Sample                                    | Scale | Findings                                                                                                                                                                                                                                                          |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------|-------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gibson <sup>46</sup><br>(2013)<br>Australia      | It is investigated how the entrepreneurial roles of nurses in Australia are affected by the discourse of the administrators.                                          | Intrapreneurship            | Qualitative research                       | 26 nurses                                 | -     | There is an entrepreneurial feature in the job descriptions of nurses in hospitals managed on the basis of efficiency. However, it was found that nurses providing health care services showed less entrepreneurial characteristics compared to executive nurses. |
| Wall <sup>32</sup><br>(2013a)<br>Canada          | Exploring the professional experience processes of Canadian self-employed nurses is to rethink nursing knowledge, ethics and professionalism.                         | Classical entrepreneurship  | Qualitative research                       | 20 nurses                                 | -     | It has been found that nurses have a new professional identity that will contribute to social welfare despite the obstacles they face.                                                                                                                            |
| Wall <sup>33</sup><br>(2013b)<br>Canada          | Investigation of the experiences of self-employed nurses who see themselves as leaders in advancing the nursing profession and their contribution to health services. | Classical entrepreneurship  | Qualitative research                       | 20 nurses                                 | -     | The responses of self-employed nurses to health system change, their expanded role as nurses, the consequences of this unconventional approach in nursing work, and the possibilities for change stemming from nursing entrepreneurship were found.               |
| Sharp & Monsivais <sup>47</sup><br>(2014)<br>USA | It is to describe the difficulties experienced by nurses in the role transition in rural areas in the USA and to make practical inferences.                           | Social entrepreneurship     | Qualitative research                       | 24 nurses                                 | -     | It has been found that specialist nurses in rural areas have problems with role transitions in social enterprise activities, and although they are successful as a nurse, they lack knowledge and skills in the management of their clinics.                      |
| Wall <sup>39</sup> (2014)<br>Canada              | It is to investigate how self-employed nurses perceive the contemporary health field and its characteristics.                                                         | Classical entrepreneurship  | Qualitative research ethnographic analysis | 20 nurses                                 | -     | Nurses reflected the deficiencies in the health system. It has been found that they have taken entrepreneurial risks that will enable them to do nursing according to their professional values.                                                                  |
| Andrade et al <sup>6</sup><br>(2015)<br>Brazil   | Identifying the scope of nursing companies managed by enterprising nurses registered in the São Paulo Commercial Register in Brazil.                                  | Classical entrepreneurship  | Qualitative research                       | Trading company with 196 nursing ventures | -     | The type, year, economic activity area, capital value, shareholding ratio, and distribution of the companies established by entrepreneurial nurses were found.                                                                                                    |
| Wall <sup>34</sup> (2015)<br>Canada              | An examination of the experience of self-employed nurses to better understand self-                                                                                   | Classical entrepreneurship  | Qualitative research                       | 20 nurses                                 | -     | It has been found that nurse entrepreneurship experiences are similar to other women                                                                                                                                                                              |

|                                               |                                                                                                                                                             |                            |                       |                 |                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                               | employment in professional care work.                                                                                                                       |                            |                       |                 |                                                                                                                       | entrepreneurs in some issues such as insecurity and uncertainty.                                                                                                                                                                                                                                                                                 |
| Dehghanzadeh et al <sup>45</sup> (2016) Iran  | Evaluation of the psychological characteristics of nurses towards entrepreneurship in Iran.                                                                 | -                          | Qualitative research  | 59 nurses       | Need for achievement - Steers and Braunstein (1976); locus of control Rotter (1966); Jackson's personality inventory. | There is a positive and significant relationship between psychological characteristics and entrepreneurial orientations; While there is a significant relationship between entrepreneurial orientation and risk-taking, uncertainty, tolerance and innovation; no significant relationship was found between locus of control.                   |
| Jahani et al <sup>48</sup> (2016) Iran        | The aim of this study is to determine the barriers perceived by Iranian entrepreneur nurses towards entrepreneurship.                                       | Classical entrepreneurship | Qualitative research  | 13 nurses       | -                                                                                                                     | It has been found that nurses face various problems and obstacles to enter and continue in entrepreneurial nursing. As a result of the data analysis, five main themes were extracted: Traditional nursing structure, legal limitations, traditional attitudes of state administrators, unprofessional behavior of colleagues, and immoral work. |
| Cadmus et al <sup>52</sup> (2017) USA         | Determining the entrepreneurship and entrepreneurial skills of Advanced Practice Nurses (APN) working in primary health care services in the United States. | Classical entrepreneurship | Quantitative research | 372 APN         | -                                                                                                                     | In 12 of the 14 identified categories, it was found that APNs were at the beginner level and needed to be developed in business skills and management.                                                                                                                                                                                           |
| Vannucci & Weinstein <sup>35</sup> (2017) USA | To understand the experiences of entrepreneurial nurses, their work motivation processes and the challenges of entrepreneurship.                            | Classical entrepreneurship | Quantitative research | 44 nurses       | Mindful Self-Care Scale (Short), Cook-Cottone and Guyker (2017)                                                       | Nurse entrepreneurs have high self-care skills. There is a relationship between self-care and age. Psychological factors (meaning, purpose, etc.) were found to be more critical motivation factors than structural strengthening factors (financial gain, organization, etc.) in the decision of entrepreneurial nurses to start a business.    |
| Bagheri & Akbari <sup>7</sup> (2018) Iran     | Testing the effect of entrepreneurial leadership behaviors of nurses in Iran on innovative work behavior.                                                   | Intrapreneurship           | Quantitative research | 273 nurses      | Renko et al. (2015) Entrepreneurial Leadership Scale                                                                  | Entrepreneurial leadership behaviors of nurses affect innovative work behaviors.                                                                                                                                                                                                                                                                 |
| Colichi & Lima <sup>51</sup> (2018) Brazil    | Comparison of nursing interventions with other healthcare professional initiatives in Brazil.                                                               | Classical entrepreneurship | Quantitative research | 12068 companies | -                                                                                                                     | It was found that 6% of 12,068 interventions carried out by healthcare professionals in Brazil until                                                                                                                                                                                                                                             |

|                                                      |                                                                                                                                                                |                            |                       |                                        |                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                      |                                                                                                                                                                |                            |                       |                                        |                                                                                                                 | 2017 were nurse interventions.                                                                                                                                                                                                                                                                                                                  |
| Ippoliti et al <sup>49</sup><br>(2018a)<br>Italy     | It has been researched how to sustain a social entrepreneurship project for public health.                                                                     | Social entrepreneurship    | Quantitative research | 1657 case studies                      | -                                                                                                               | As an innovative care model, it has been concluded that the social enterprise project is financially sustainable.                                                                                                                                                                                                                               |
| Ippoliti et al <sup>50</sup><br>(2018b)<br>Italy     | It is aimed to compare the social entrepreneurship project developed as an innovative care model in Italy with different approaches.                           | Social entrepreneurship    | Quantitative research | Data collected from 524 municipalities | -                                                                                                               | Their project, which was developed as an innovative behavioral model for the prevention of hip fractures in mountainous areas in Italy, was found to be effective.                                                                                                                                                                              |
| Jahani et al <sup>40</sup><br>(2018)<br>Iran         | It is an exploration of how Iranian nurses can identify entrepreneurial opportunities.                                                                         | Classical entrepreneurship | Qualitative research  | 13 nurses                              | -                                                                                                               | Identifying entrepreneurial nursing opportunities for nurses in various sectors such as care, education, counseling, rehabilitation, health tourism, social assistance and public services are the findings of the study.                                                                                                                       |
| Kirkman et al <sup>53</sup> (2018)<br>New Zealand    | It is an examination of how to define innovative behavioral activities of nurses in primary care services in New Zealand as social entrepreneurs.              | Social entrepreneurship    | Qualitative research  | 7 nurses                               | -                                                                                                               | Two different themes were determined. (1) To create a social entrepreneurship model compatible with nursing care and (2) to create social capital.                                                                                                                                                                                              |
| Lyden et al <sup>44</sup><br>(2018)<br>USA           | The aim of this study is to investigate the job satisfaction and empowerment of self-employed nurses in fifty states of the USA and the factors affecting it.  | Classical entrepreneurship | Mixed method          | 142 survey data<br>13 interview        | Misener NP job satisfaction survey (MNPJSS) and the conditions of work effectiveness questionnaire II (CWEQ-II) | The job satisfaction of nurses is at a good level; on the other hand, empowerment was found to be high in the dimensions of opportunity, official power and knowledge, and low in the dimensions of administrative support and resources.                                                                                                       |
| Nurluöz & Esmailzadeh <sup>29</sup> (2019)<br>Cyprus | The aim of this study is to examine the entrepreneurial characteristics, views, hope and hopelessness feelings of nurses in Cyprus.                            | Classical entrepreneurship | Quantitative research | 140 nurses                             | Entrepreneurship scale- İşcan and Kaygı (2011); Beck hopelessness scale Turkish version, Seber (1993)           | Nurses with high hope levels have higher self-confidence and risk-taking levels, and their need for achievement is higher.                                                                                                                                                                                                                      |
| Richter et al <sup>42</sup><br>(2019)<br>Brazil      | It is to identify the difficulties in the development of entrepreneurial behaviors from the perspective of nurses in strategic leadership positions in Brazil. | -                          | Qualitative research  | 22 nurses                              |                                                                                                                 | It has been found that there are significant challenges for the entrepreneurial behaviors of nurses in strategic leadership positions. These can be exemplified as situations of inactivity, learning to be an entrepreneur, entrepreneurial culture, and the development of entrepreneurial actions in health and nursing services management. |

|                                                   |                                                                                                                                                                                   |                             |                      |                                                                                        |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Silva et al <sup>36</sup><br>(2019)<br>Brazil     | It is an understanding of the process of building the autonomy of private nurses in Brazil.                                                                                       | Classical entrepreneurship  | Qualitative research | 4 nurses                                                                               | -                                                                                                                                                                                                                                                                                     | It has been found that self-employed nurses are systematically excluded and stigmatized by other practitioners and society.                                                                                                                                                                         |
| Waite <sup>37</sup><br>(2019)<br>USA              | It is to determine what the experiences of specialist nurses who have independent workplaces are.                                                                                 | Classical entrepreneurship  | Qualitative research | 17 nurses                                                                              | -                                                                                                                                                                                                                                                                                     | It has been found that more opportunity areas should be created in the field of entrepreneurship, where nurses experience job dissatisfaction due to career flattening.                                                                                                                             |
| Haase & Franco <sup>9</sup><br>(2020)<br>Portugal | Investigation of the connection between leadership styles and entrepreneurial behaviors in Portugal.                                                                              | Collective entrepreneurship | Qualitative research | 165 nurses                                                                             | The Multi-Factor leadership questionnaire (MLQ), Bass and Avolio (2004); organizational commitment, comeche and Loras (2010); collaboration, Kantis et al., Komori (2002); interpersonal communication, Lloria (1998); attitudes towards collective entrepreneurship, Ribeiro (2003). | Transformational leadership indirectly encourages the collective entrepreneurship process through nurses' organizational commitment and interpersonal communication.                                                                                                                                |
| Lim et al<br>(2020)<br>South Koea                 | It is to understand the nursing focus and importance of entrepreneurship by analyzing the content of YouTube videos.                                                              | -                           | Mixed method         | 32 Expert Opinions (Delphi Technique)                                                  | -                                                                                                                                                                                                                                                                                     | It has been found that the entrepreneurial qualities of nurses should be developed towards competitive business skills.                                                                                                                                                                             |
| Trombeta et al <sup>30</sup><br>(2020)<br>Brazil  | To understand the experiences of entrepreneurial nurses in the elderly care center in Brazil and to develop a theory for social entrepreneurship in the light of this experience. | Social entrepreneurship     | Qualitative research | Data collected from two different groups of nurses, active entrepreneurs and quitters. | -                                                                                                                                                                                                                                                                                     | It has been concluded that elderly care services in Brazil are a market area for social entrepreneurship and that entrepreneurs need experience, knowledge, skills and resources for this process.                                                                                                  |
| Backes et al <sup>8</sup><br>(2021)<br>Brazil     | Development of a measurement tool for entrepreneurship management in nursing.                                                                                                     | Social entrepreneurship     | Qualitative research | 11 experts                                                                             | The scale developed by the authors consists of 3 dimensions and 17 items                                                                                                                                                                                                              | Perceptions of entrepreneurship management (5 items) in the first dimension of the scale, performance/personal and professional qualifications related to entrepreneurship management in the second dimension (8 items), and information on the maintenance tools of new technologies/businesses in |

|                                                  |                                                                                                                                                                                                                    |                                                 |                       |            |                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                       |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                  |                                                                                                                                                                                                                    |                                                 |                       |            |                                                                                                                                                                                                    | the last dimension (6 items) are measured.                                                                                                                                                                                                                            |
| Ferraz et al <sup>25</sup><br>(2021)<br>Portugal | In Portugal, it is evaluated how nurses' cognitive styles support individual entrepreneurship and intrapreneurship and how cognitive styles guide innovative behavior.                                             | Intrapreneurship and classical entrepreneurship | Quantitative research | 667 nurses | Cognitive Styles Index, Allinson and Hayes 1996; Individual Entrepreneurial Orientation Scale, Santos et al. 2020; Intrapreneurship Scale, Gawke et al. 2019; Innovation Scale, Weng et al., 2012. | It was found that nurses' cognitive styles encourage individual entrepreneurial orientation and intrapreneurship, which in turn affects innovativeness.                                                                                                               |
| Jakobsen et al <sup>38</sup> (2021)<br>Denmark   | Investigation of nurses' experiences and perspectives on transition to entrepreneurship in clinical and cultural nursing environment and the effect of entrepreneurship on nursing role and professional identity. | Classical entrepreneurship                      | Qualitative research  | 9 nurses   | -                                                                                                                                                                                                  | While nurses are engaged in entrepreneurial activities, they experience identity confusion and are affected by the prejudices of others.                                                                                                                              |
| Ubochi et al <sup>31</sup><br>(2021)<br>Nigeria  | Explaining the entrepreneurship perception of nurses in Nigeria, developing a theoretical model for the meaning and practices of entrepreneurship.                                                                 | -                                               | Qualitative research  | 20 nurses  | -                                                                                                                                                                                                  | Increasing innovation in nursing is seen as nursing entrepreneurship. Innovative elements driven by the need for professionalism, philanthropy, social satisfaction, business understanding and economic transformation are perceived as entrepreneurship in nursing. |
| Layton et al <sup>41</sup><br>(2022)<br>USA      | It is the determination of the knowledge, training and skill needs of specialist nurses in the USA regarding entrepreneurship.                                                                                     | Classical entrepreneurship                      | Mixed method          | 102 nurses | -                                                                                                                                                                                                  | It has been determined that nurses need training on billing, coding, regulatory and application management.                                                                                                                                                           |

## Discussion

In this study, the literature on entrepreneurship was examined from the perspective of nursing, and the developments in nursing entrepreneurship over the last ten years were reviewed. The aim was to determine the current gaps for future research. For this purpose, 30 studies on nurse entrepreneurship were examined and content analysis was made in the examination made with the systematic scope analysis method and the results were presented in a comprehensive way. With a comprehensive review, both empirical results and theoretical contributions have been revealed from studies dealing with nurse entrepreneurship (Trombeta, Ramos and Bocchi, 2020; Ubochi et al., 2021).

As a result of the examination, it was determined that the definition of nurse within the framework of entrepreneurship in nursing was expressed with two different concepts as “entrepreneurial nurses” and “nurse entrepreneurs”. As mentioned earlier by Neergård (2021), the empirical origin of entrepreneurship research in nursing comes from the field of nursing, while its theoretical origin comes from the field of entrepreneurship. Thus, it would not be wrong to define entrepreneurship in nursing as a common set of both disciplines. In this framework, two different roles of nursing have been defined from the perspective of entrepreneurship (Neergård, 2021). One of them is the entrepreneurial nurse role, which transforms opportunities into commercial gains by assuming all kinds of risks that represent classical entrepreneurship. The second refers to the role of nursing, which represents intrapreneurship.

According to the second result obtained as a result of this research, nursing entrepreneurship in the researches that are the subject of the examination is discussed with the collective entrepreneurship dimension as a new typology, as well as classical, social and intrapreneurship, similar to previous researches. Among these types of entrepreneurship, classical entrepreneurship activities have been the subject of the most research in the field of nursing. Examining scientific research conducted up to 2016, Copelli et al. (2017) divided entrepreneurship in nursing into three typologies in the study. These are social, commercial and intrapreneurship. In the light of these results, it is seen that the concept of collective entrepreneurship has been encountered as a new type of entrepreneurship in the practice and literature process up to the present. Collective entrepreneurship is defined as combining the capacities of individuals to collaborate, innovate and create within organizations (Haase and Franco, 2020).

Third, it was seen that descriptive information such as the scope, year, type, capital and partnership structure of nursing entrepreneurship were only mentioned in the study of Andrade et al. (2015). In this study carried out in Brazil, 196 nursing initiatives established by nurses were discussed.

Fourth, eight of the reviewed studies focused specifically on the entrepreneurial experiences of nurses (Jakobsen, Wachter Qvistgaard, Trettin, and Juel Rothmann, 2021; Silva et al., 2019; Trombeta et al., 2020; Vannucci and Weinstein, 2017; Waite, 2019; Wall, 2013a; Wall, 2013b; Wall, 2015). It has been found that nurses face some obstacles within the scope of their entrepreneurial experience (Jakobsen et al, 2021; Wall, 2013a). These obstacles are exclusion, stigma by society and other practitioners (Silva et al., 2019), the need for knowledge, skills and resources (Trombeta et al., 2020), job dissatisfaction due to career flattening, and the need to create more opportunity areas in the field of entrepreneurship (Waite, 2019). At the same time, in a study focusing on the experiences of female nurses (Wall, 2015), it is seen that the experiences are similar to the difficulties and obstacles experienced by female entrepreneurs in other sectors. However, despite all the obstacles, it is seen that the nursing profession tries to determine new professional roles (Wall, 2013a; Wall, 2014) and to build its autonomy in the contemporary healthcare environment (Silva et al., 2019). In other words, role ambiguity is among the other obstacles.

Barriers to nursing entrepreneurship are similar across countries. For example, the traditional nursing structure of Iranian nurses, legal limitations, traditional attitudes of state administrators, unprofessional behaviors and immoral attitudes of colleagues have been defined as obstacles (Jahani, Abedi, Elahi and Fallahi-

Khoshknab, 2016). Another obstacle to the entrepreneurship of nurses is the lack of entrepreneurial knowledge and skills. For example, Layton, Blakely, Patel, and Miltner, (2022), in a study conducted with 102 nurses in the USA, reported that nurses lack knowledge about billing, coding, legal regulations and practices. Richter, Santos, Kaiser, Capellari and Ferreira (2019) point out that nurses in strategic leadership positions face many obstacles such as entrepreneurial knowledge, entrepreneurial culture and lack of opportunity.

Lim, Kim, Kim, and Lee (2020), on the other hand, state that the entrepreneurial qualities of nurses should be developed within the scope of competitive business skills. According to Lyden, Sekula, Higgins, and Zoucha (2018), when the obstacles and difficulties in front of nurses are removed and entrepreneurship knowledge and skills increase, successful and sustainable jobs can be created.

Fifth, the concept of entrepreneurship in nursing was associated with personal and professional characteristics such as autonomy, independence, flexibility, innovativeness, proactivity, self-confidence and responsibility (Copelli et al., 2017) and was associated with feelings of hope and hopelessness (Nurluöz and Esmaeilzadeh, 2019). It is reported that psychological factors have an effective motivation feature in the decision to start a business in nurse entrepreneurship (Vannucci and Weinstein, 2017). Dehghanzadeh, Kholasehzadeh, Birjandi, Antikchi, Sobhan, and Neamatzadeh (2016) also found that the psychological characteristics of nurses are related to entrepreneurial orientation, especially the relationship between tolerance, risk-taking, innovation and uncertainty, and entrepreneurial orientation. Ferraz et al. (2021) emphasized that cognitive styles support nurses' classical and intrapreneurship. According to the results, nurses' cognitive styles encourage individual entrepreneurial orientation and intrapreneurship, which in turn affects innovative behavior (Ferraz et al., 2021). According to Nurluöz and Esmaeilzadeh (2019), nurses with high hope are more self-confident, more willing to take risks and have a higher desire to succeed.

Sixth, the role of leadership in nurse entrepreneurship, as well as in the general entrepreneurship literature, has been explored. In studies associating entrepreneurship with leadership, it has been observed that entrepreneurial leaders affect innovative behaviors in employees (Bagheri and Akbari, 2018). In a study conducted in Australia, it was reported that the discourse of administrators in health institutions was effective on nurses' perceptions of entrepreneurship, and this effect emerged in different ways according to the roles of nurses (Gibson, 2013). While this effect is not perceived positively by nurses who are directly involved in patient care, nurses who work in administrative services show a positive perception of entrepreneurship and running businesses according to the principles of productivity (Gibson, 2013). Haasse and Franco (2020), in their study in Portugal, reported that transformational type leadership is effective on the type of collective entrepreneurship of nurse entrepreneurship. According to the results of this study, transformational leadership indirectly affects the collective entrepreneurship process through organizational commitment and interpersonal communication (Haasse and Franco, 2020). Wall (2013b) reports that leadership leads the way in redefining the professional roles of entrepreneurial nurses. At this point, another remarkable finding in the nurse entrepreneurship researches conducted in the last 10 years is that the definition of the nursing profession and the role ambiguity are still at the forefront (Gibson, 2013; Jacobsen et al., 2021; Jahani et al., 2016; Sharp and Monsivais, 2014; Silva et al., 2019;).

Seventh, nurses can be entrepreneurs in many areas such as care services, education, counseling, rehabilitation, health tourism, and social assistance (Jahani, Abedi, Khoshknab, and Elahi, 2018). The example of a social enterprise project, which is presented as an innovative care model developed to support people living in the mountainous region of Italy to have a healthy aging process, provides evidence that nurse initiatives are sustainable (Ippoliti et al., 2018a; Ippoliti, Falavigna, Montani, and Rizzi, 2018b). Trombeta et al. (2020) state that there are social entrepreneurship opportunities that nurses can realize, especially in the field of elderly care services. However, it is noteworthy that the studies examined include examples from 12 different countries and that nurse entrepreneurship is still very limited within the framework of these examples. Colichi and Lima

(2018) reported that only 6% of the 12,068 healthcare professional interventions that took place in Brazil until 2017 were nurse interventions in the study in which they compared nurse initiatives and other healthcare professionals' initiatives in Brazil.

Although there are differences in nurse entrepreneurship practices according to countries, it is seen that it takes place as a new title in the entrepreneurship literature. Of course, one of the reasons why this field is niche is that nurse entrepreneurship faces a number of obstacles. Hence, research has mostly focused on these barriers.

### **Limitations of the Research and Future Studies**

Although we believe that we have achieved the research objectives, this systematic review has some limitations, as in all research. First of all, this systematic review was limited to searching seven different internationally recognized databases. Therefore, since some national and international published journals were not included, studies published in these journals were not included. At the same time, only English language and full-text publications were examined. For this reason, some studies in other languages and for which the full text is not available may have been overlooked. The research also excluded articles on entrepreneurial intention and student nurses. In future systematic reviews, gray literature not included in this study can be scanned, entrepreneurial intention and entrepreneurship research in student nurses can be used as inclusion criteria.

However, as a result of our review, it is seen that research on nursing entrepreneurship is limited in number and quality, both in terms of content and method, as in previous systematic reviews. In the future, it is recommended to conduct research that will fill the theoretical and empirical gaps in nurse entrepreneurship revealed by this article. In addition, no research has been found on the impact of non-governmental organizations and professional organizations on nurse entrepreneurship, and researches addressing this dimension may be conducted in the future. At the same time, we think that different typologies such as digital entrepreneurship and eco-entrepreneurship should be investigated within the scope of nurse entrepreneurship.

### **Implications for Health Policy and Management**

Nurses can be used more in the development and maintenance of health on a national and global scale. We believe that nurses should be supported by professional organizations and health authorities to create opportunities in this field. In this context, the nurses of the future should be equipped with entrepreneurship knowledge, skills and culture through entrepreneurship education. The capacities of nurses can be developed while they are still students, especially with an entrepreneurship education that will be included in vocational education.

In addition, professional organizations should create a climate that will support the autonomy of the profession and colleague solidarity without ignoring the traditional roles of nurses. Health authorities should shape the legal and administrative infrastructure of benefiting more from nurses as trained health manpower in protecting and improving public health and pave the way for more nurses to become entrepreneurs. It seems that the most economical and healthiest way to produce the health services that humanity needs on a global scale is to develop the potential of this profession, which has hundreds of years of experience.

## Conclusion

As a result of the systematic review, it was observed that nurse entrepreneurship did not receive sufficient attention both in practice and in research. However, although limited in number, our review of the findings of these studies provided some clues about the necessity of reconsidering the entrepreneurial roles of nurses. Especially the recent COVID-19 pandemic has once again reminded the role and importance of the nursing profession all over the world. Nevertheless, studies show that the potential of nurses in the health sector is not recognized enough. However, nursing as a profession is one of the most rooted areas of the health sector. Still, it needs re-evaluation in terms of new job description and employment opportunities suitable for its changing roles. With this perspective, nurses should not only be considered as manpower in the health sector but should also be able to take part in the new and competitive health industry with various entrepreneurship dimensions.

## References

- Acuner, T., İlhan-Nas, T., Şahin, K., Okan, T. and Birincioglu, N. (2016). *İşletme [Business]*. İstanbul: Beta Yayınları.
- Andrade, A.D.C., Ben, L.W.D and Sanna, M.C. (2015). Entrepreneurship in nursing: Overview of companies in the State of São Paulo. *Revista Brasileira de Enfermagem*, 68, 40-44. doi.org/10.1590/0034-7167.2015680106i
- Antonicic, B. and Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of Small Business and Enterprise Development*, 10(1), 7-24. doi.org/10.1108/14626000310461187
- Arksey, H. and O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19-32. doi.org/10.1080/1364557032000119616
- Arnaert, A., Mills, J., Bruno, F.S. and Ponzoni, N. (2018). The educational gaps of nurses in entrepreneurial roles: An integrative review. *Journal of Professional Nursing*, 34(6), 494-501. doi.org/10.1016/j.profnurs.2018.03.004
- Arslan, H. and Konuk Ş. D. (2012). A new and important concept in nursing: Entrepreneurship. *Florence Nightingale Journal of Nursing*, 20(2), 140-145. Erişim Adresi: <https://www.fnjn.org/en/a-new-and-important-concept-in-nursing-entrepreneurship-16803>
- Austin, J., Stevenson, H. and Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship Theory and Practice*, 30(1), 1-22. doi.org/10.1111/j.1540-6520.2006.00107.x

- Backes, D. S., Toson, M. J., Haeffner, L. S. B., Marchiori, M. T. C. and Costenaro, R. G. S. (2021). Entrepreneurial management technology for nursing professionals. *Revista Brasileira de Enfermagem*, 74(6), 1-7. doi.org/10.1590/0034-7167-2019-0527
- Bagheri, A. and Akbari, M. (2018). 'The impact of entrepreneurial leadership on nurses' innovation behavior. *Journal of Nursing Scholarship*, 50(1), 28-35. doi.org/10.1111/jnu.12354
- Cadmus, E., Johansen, M., Zimmer, P. and Knowlton, D. (2017). Entrepreneurship: Assessing the readiness of the New Jersey APN workforce. *Nursing Administration Quarterly*, 41(1), 48-55. doi.org/10.1590/0034-7167-2019-0527
- Colichi, R.M.B and Lima, S.A.M. (2018). Entrepreneurship in nursing compared to other health professions. *Rev Eletr Enferm*, 20, 1-11 doi: 10.5216/ree.v20.49358
- Copelli, F.H.D.S., Erdmann, A.L. and Santos, J.L.G.D. (2019). Entrepreneurship in nursing: An integrative literature review. *Revista Brasileira de Enfermagem*, 72, 289-298. doi.org/ 10.1590/0034-7167-2017-0523
- Copelli, F.H.D.S., Erdmann, A.L., Santos, J.L.G.D., Lanzoni, G.M.D.M. and Andrade, S.R.D. (2017). Entrepreneurship in the public university management of nursing: Obstacles and strategies. *Rev Rene, Fortaleza*, 18(5), 577-583. doi: 10.15253/2175-6783.2017000500003
- Dehghanzadeh, M.R., Kholasehzadeh, G., Birjandi, M., Antikchi, E., Sobhan, M.R and Neamatzadeh, H. (2016). Entrepreneurship psychological characteristics of nurses. *Acta Medica Iranica*, 54(9), 595-599. Erişim Adresi: <https://acta.tums.ac.ir/index.php/acta/article/view/5162/4837>
- Drennan, V., Davis, K., Goodman, C., Humphrey, C., Locke, R., Mark, A., et al. (2007). Entrepreneurial nurses and midwives in the United Kingdom: An integrative review. *Journal of Advanced Nursing*, 60(5), 459-469. doi.org/10.1111/j.1365-2648.2007.04458.x
- Ferraz, P., Marques, C.S., Santos, G., Cunha, A. M. and Vaz, S. (2021). The influence of cognitive styles as promoters of entrepreneurial orientation and intrapreneurship as drivers of innovation: The case of nurses in health services in Portugal in times of COVID-19. *Administrative Sciences*, 11(4), 1-15. doi.org/10.3390/admsci11040107
- Gawke, J.C., Gorgievski, M. J. and Bakker, A. B. (2019). Measuring intrapreneurship at the individual level: Development and validation of the employee intrapreneurship scale (EIS). *European Management Journal*, 37(6), 806-817. doi.org/10.1016/j.emj.2019.03.001

- Gibson, T. (2013). The entrepreneurial rationalities of governing and the construction of the enterprising nurse. *Qualitative Health Research*, 23(1), 93-104. doi.org/10.1177/1049732312467233
- Haase, H. and Franco, M. (2020). Leadership and collective entrepreneurship: Evidence from the health care sector. *Innovation: The European Journal of Social Science Research*, 33(3), 368-385. doi.org/10.1080/13511610.2020.1756231
- Haskins, M.E., Liedtka, J. and Rosenblum, J. (1998). Beyond teams: Toward an ethic collaboration. *Organizational Dynamics*, 26(4), 34-50. doi.org/10.1016/S0090-2616(98)90004-3
- Henry, C. Hill, F. and Leitch, C. (2003). Developing a coherent enterprise support policy: A new challenge for governments. *Environment and Planning C: Government and Policy*, 21(1), 3-19. doi.org/10.1068/c0220
- Ippoliti, R., Allievi, I., Falavigna, G., Giuliano, P., Montani, F. and Obbia, P, et al. (2018a). The sustainability of a community nurses programme aimed at supporting active ageing in mountain areas. *The International Journal of Health Planning and Management*, 33(4), 1100-1111. doi.org/10.1002/hpm.2591
- Ippoliti, R., Falavigna, G., Montani, F. and Rizzi, S. (2018b). The private healthcare market and the sustainability of an innovative community nurses programme based on social entrepreneurship-CoNSENSo Project. *BMC Health Services Research*, 18(1), 1-8. doi.org/10.1186/s12913-018-3513-z
- İşcan, Ö. F. and Kaygın, E. (2011). Üniversite öğrencilerinin girişimcilik eğilimlerini belirlemeye yönelik bir araştırma [A research to determine the entrepreneurship tendencies of university students]. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 15(2), 443-462. Erişim Adresi: <https://dergipark.org.tr/en/pub/ataunisobil/issue/2828/38346>
- Jahani, S., Abedi, H., Elahi, N. and Fallahi-Khoshknab, M. (2016). Iranian entrepreneur nurses' perceived barriers to entrepreneurship: A qualitative study. *Iranian Journal of Nursing and Midwifery Research*, 21(1), 45-53. doi: 10.4103/1735-9066.174749
- Jahani, S., Abedi, H., Khoshknab, M. F. and Elahi, N. (2018). The experience of Iranian entrepreneurial nurses on the identification of entrepreneurial opportunities: A qualitative study. *Journal of Family Medicine and Primary Care*, 7(1), 230-236. doi: 10.4103/jfmpc.jfmpc\_233\_17

- Jakobsen, L., Wachter Qvistgaard, L., Trettin, B. and Juel Rothmann, M. (2021). Entrepreneurship and nurse entrepreneurs lead the way to the development of nurses' role and professional identity in clinical practice: A qualitative study. *Journal of Advanced Nursing*, 77(10), 4142-4155. doi.org/10.1111/jan.14950
- Khalil, H., Peters, M., Godfrey, C., M. McInerney, P., Soares, C. B. and Parker, D. (2016). "An evidence-based approach to scoping reviews", *Worldviews on Evidence-Based Nursing*, 13(2), 118-123. doi.org/10.1111/wvn.12144
- Kirkman, A., Wilkinson, J. and Scahill, S. (2018). Thinking about health care differently: Nurse practitioners in primary health care as social entrepreneurs. *Journal of Primary Health Care*, 10(4), 331-337. https://doi.org/10.1071/HC18053
- Layton, S.S., Blakely, K.K., Patel, B. and Miltner, R.S. (2022). 'Assessing southeastern advanced practice registered nurses' business and operational skill sets. *The Journal for Nurse Practitioners*, 18(6), 636-639. doi.org/10.1016/j.nurpra.2022.02.019
- Levac, D., Colquhoun, H. and O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5, -1-9. doi.org/10.1186/1748-5908-5-69
- Lim, J.Y., Kim, S., Kim, J. and Lee, S. (2020). Identifying trends in nursing start-ups using text mining of YouTube content. *PLOS One*, 15(2), 1-14. doi.org/10.1371/journal.pone.0226329
- Lyden, C., Sekula, L.K., Higgins, B. and Zoucha, R. (2018). Job satisfaction and empowerment of self-employed nurse practitioners: A mixed methods study. *Journal of the American Association of Nurse Practitioners*, 30(2), 78-91. doi: 10.1097/JXX.0000000000000007
- McSherry, R., Pearce, P., Grimwood, K. and McSherry, W. (2012). The pivotal role of nurse managers, leaders and educators in enabling excellence in nursing care. *Journal of Nursing Management*, 20(1), 7-19. doi.org/10.1111/j.1365-2834.2011.01349.x
- Neergård, G.B. (2021). Entrepreneurial nurses in the literature: A systematic literature review. *Journal of Nursing Management*, 29(5), 905-915. doi.org/10.1111/jonm.13210
- Nurluöz, Ö. and Esmaeilzadeh, S. (2019). Assessment of the entrepreneurial characteristics and hopelessness status of nurses working in the one training and research hospital. *Cyprus Journal of Medical Sciences*, 4(3), 208-215. doi: 10.5152/cjms.2019.832

- Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Syst Rev*, 10, 1-11. doi.org/10.1186/s13643-021-01626-4
- Peters, M.D., Godfrey, C.M., Khalil, H., McInerney, P., Parker, D. and Soares, C.B. (2015). Guidance for conducting systematic scoping reviews. *JBIEvidence Implementation*, 13(3), 141-146. doi: 10.1097/XEB.0000000000000050
- Puspita, A.P.W., Castury, D., Suparto, T.A., Hermayanti, Y. and Rahayuningsih, D. (2021). Nursing entrepreneurship development: Literature review. *Indonesian Journal of Community Development*, 1(1), 8-18. Erişim Adresi: <https://ejournal.upi.edu/index.php/IJCD/article/view/33157>
- Ratten, V. (2019). Older entrepreneurship: A literature review and research agenda, *Journal of Enterprising Communities: People and Places in the Global Economy*, 13(1/2), 178-195. doi.org/10.1108/JEC-08-2018-0054
- Renko, M., El Tarabishy, A., Carsrud, A.L. and Brännback, M. (2015). Understanding and measuring entrepreneurial leadership style. *Journal of Small Business Management*, 53(1), 54-74. doi.org/10.1111/jsbm.12086
- Richter, S. A., Santos, E. P. D., Kaiser, D. E., Capellari, C. and Ferreira, G.E. (2019). Being an entrepreneur in nursing: Challenges to nurses in a strategic leadership position. *Acta Paulista de Enfermagem*, 32, 46-52. doi.org/10.1590/1982-0194201900007
- Santos, G., Marques, C.S. and Ferreira, J.J. (2020). Passion and perseverance as two new dimensions of an individual entrepreneurial orientation scale. *Journal of Business Research*, 112, 190-199. doi.org/10.1016/j.jbusres.2020.03.016
- Sharp, D.B. and Monsivais, D. (2014), "Decreasing barriers for nurse practitioner social entrepreneurship", *Journal of the American Association of Nurse Practitioners*, 26(10), 562-566. doi: 10.1002/2327-6924.12126
- Silva, E.K.B., Da Silva Junior, J.N.O., Neto, N.M.G., Da Costa, L.S., Rodrigues, K.F. and Alexandre, A.C.S. (2019). The art and science of caring: Appreciation, established and outsiders in the autonomy of the nursing liberal. *Revista de Pesquisa, Cuidado é Fundamental Online*, 11(2), 370-376. <https://doi.org/10.9789/2175-5361.2019.v11i2.370-376>

- Soriano, D.R. (2003). The impact of consulting service on Spanish firms. *Journal of Small Business Management*, 41(4), 409-416. doi.org/10.1111/1540-627X.147091
- Trombeta, F.M., Ramos, N.P. and Bocchi, S. C. M. (2020). Experience of nurse entrepreneurs in long term institutions for elderly people. *Revista Brasileira de Enfermagem*, 73(3), 1-8. doi.org/10.1590/0034-7167-2019-0619
- Ubochi, N.E., Osuji, J.C., Ubochi, V.N., Ogonnaya, N.P., Anarado, A. and Iheanacho, P.N. (2021). 'The drive process model of entrepreneurship: A grounded theory of nurses' perception of entrepreneurship in nursing. *International Journal of Africa Nursing Sciences*, 15, 1-10. doi.org/10.1016/j.ijans.2021.100377
- Vannucci, M.J. and Weinstein, S.M. (2017). The nurse entrepreneur: Empowerment needs, challenges, and self-care practices. *Nursing: Research and Reviews*, 7, 57-66. Erişim Adresi: <https://pdfs.semanticscholar.org/8172/ce8711b0ad90f79b5b127110c3c75d00b24a.pdf>
- Waite, A. (2019). Highlighting the lived experience of nurse practitioners in independent practice. *The Journal for Nurse Practitioners*, 15(10), 787-791. doi.org/10.1016/j.nurpra.2019.07.020
- Wall, S. (2013a). Nursing entrepreneurship: Motivators, strategies and possibilities for professional advancement and health system change. *Nursing Leadership*, 26(2), 29-40. doi.org/10.7939/R3VF1G
- Wall, S. (2013b). 'We inform the experience of health' Perspectives on professionalism in nursing self-employment. *Qualitative Health Research*, 23(7), 976-988. doi.org/10.1177/1049732313490077
- Wall, S. (2014). Self-employed nurses as change agents in healthcare: Strategies, consequences, and possibilities. *Journal of Health Organization and Management*, 28(4), 511-531. doi.org/10.1108/JHOM-03-2013-0049
- Wall, S. (2015). Dimensions of precariousness in an emerging sector of self-employment: A study of self-employed nurses. *Gender, Work and Organization*, 22(3), 221-236. doi.org/10.1111/gwao.12071

## Genişletilmiş Özet

### Amaç

Hemşire girişimciliği birey ve toplum sağlığına katkıları nedeniyle tüm dünyada teşvik edilmektedir. Yenilikçi ve girişimci olmak, sağlık hizmetlerini ve hasta güvenliğini geliştirmek, sağlık sektöründe mükemmelliğe ulaşmanın ön koşulu olarak görülmektedir. Nitekim hemşirelikte girişimcilik kavramı özerklik, bağımsızlık, esneklik, yenilikçilik, proaktiflik, özgüven ve sorumluluk gibi kişisel ve mesleki özelliklerle ilişkilendirilmektedir. Küresel ölçekte hemşire girişimciliğinin önemi ve fırsatları konusunda geçen yüzyıldan bugüne bir anlayış olmasına rağmen, hem alan yazında hem de uygulamada bilgi hala sınırlıdır. Son on yılda iş dünyasındaki değişimler, pandemi, teknolojinin gelişmesi ve evden çalışma yöntemlerine geçiş dikkate alındığında hemşirelik girişimciliği, uluslararası deneyimlerden yararlanılarak gelişmeye açık bir araştırma alanıdır. Bu çalışmada daha önceki sistematik inceleme araştırmalarının eksikliklerinin tamamlanması ve alan yazındaki güncel veriler ile bilimsel bilgilerin birleştirilmesi amaçlanmaktadır. Araştırma hemşire girişimciliğine ilişkin uluslararası alan yazında son on yılda hangi girişimcilik türleri üzerinde durulduğu, bu araştırmalarda hangi yöntemlerin kullanıldığı ve hangi bulguların elde edildiği sorularına cevap aranmaktadır.

### Tasarım ve Yöntem

Bu araştırmanın yöntemi sistematik kapsam incelemesidir. Çalışmada sistematik kapsam incelemesinin beş adımını içeren bir yol izlenmiştir. İlk adım, araştırmanın sorularının belirlenmesidir. Araştırma son on yılda uluslararası kamu ve özel sektörde çalışan hemşireler üzerine yapılan araştırmalarda hangi girişimcilik türleri üzerinde durulduğu; bu çalışmalarda hangi araştırma yöntemlerinin kullanıldığı, ve hangi bulguların elde edildiği, şeklinde belirlenmiştir. Sistematik gözden geçirme sürecinde, ikinci adım olarak bilgilerin hangi veritabanlarında toplanacağı belirlenmiştir. Bu kapsamda Web of Science, Scopus, EBSCO (CINAHL dahil 26 veri tabanını kapsayan), PubMed, Google Scholar, Emerald ve ScienceDirect olmak üzere yedi veritabanı araştırma kapsamında incelenmiştir. İlk adımda veri tabanları iki araştırmacı tarafından eşit olarak paylaştırılmış ve taranmıştır. Veritabanları "girişimci\*" ve "hemşire\*", "girişimcilik" ve "hemşirelik", "girişimcilik" ve "hemşire", "girişimcilik" ve "hemşireler", "girişimci" ve "hemşirelik", "girişimci" ve "hemşire" "girişimci" ve "hemşireler" gibi çeşitli kombinasyonlarda yazılmasıyla aranmıştır. Ön aramanın ardından çeşitli girişimcilik türleri bazında "sosyal girişimci\*" ve "iç girişimcilik" gibi yeni anahtar kelimeler belirlenmiş ve veritabanlarında yapılan araştırmalar tekrarlanmıştır. Bu aramalar son on yıllık araştırma makaleleri dikkate alınarak yapılmıştır. Araştırma verilerini güncel tutmak için son on yıl filtreleme seçeneklerine dahil edilmiştir. Araştırma kapsamında özet, başlık ve anahtar kelimeler her araştırmacı tarafından ayrı ayrı incelenmiştir. Daha sonra iki araştırmacının ulaştığı makaleler birleştirilmiştir. Tüm veri tabanlarından elde edilen veriler, iki araştırmacı tarafından tam metin makaleler olarak tüm yönleriyle incelenmiştir. Nihai kriterler doğrultusunda üzerinde anlaşmaya varılan yayınlar araştırmaya dahil edilmiştir. Sistematik inceleme kapsamında üçüncü adım olarak seçilen makaleler ekip çalışması yapılarak titizlikle incelenmiştir. Girişimci hemşireler konusunda yayınlanmış çalışmaların seçimi için protokol yapılmıştır. Burada yayınlar tam metne erişim, yayın dili İngilizce, 2013-2022 yılları arasında yayınlanan bir araştırma makalesi ve girişimci davranışı olan hemşireler örnekleme olarak dahil edilmiştir. Dışlama kriterleri olarak belirlenen hemşire öğrenciler ve girişimcilik niyeti yayınları, derlemeler, kitaplar, kitap bölümü ve editöre mektuplar araştırma dışında bırakılmıştır. İlk incelemelerde toplam 78.761 yayın tespit edilmiştir. Ancak bu yayınların çoğu doğrudan hemşire girişimcilik davranışı ile ilgili değildi. Konunun amacına yönelik yayın dahil etme ve hariç tutma

kriterleri uygulandığında toplam 21 çalışmaya ulaşılmıştır. Son olarak, taranan makalelerin bibliyografyaları ve diğer sistematik derlemelerde yer alan makaleler yeniden incelenmiş ve aramızda bulunmayan yayınlar amaca uygun olarak eklenmiştir. Bu aşamadan sonra araştırmaya toplam 30 araştırma dahil edilmiştir.

### **Bulgular**

2013-2022 yıllarını kapsayan sistematik derlemede yer alan 30 araştırma en çok 7 (%23,3) makale ile 2018 yılında yayınlanmıştır. Makalelerin yayınlandıkları dergilere göre dağılımında ilk sırada 3 yayın (%10) ile “Revista Brasileira de Enfermagem” yer alırken, “Journal of the American Association of Nurse Practitioners”, “Qualitative Health Research”, “The Journal for Nurse Practitioners” izlemektedir. Araştırmalarda hemşire girişimciliğinin 16 (%53,3) çalışma ile daha çok klasik girişimcilik ve 6 (%20) araştırma ile sosyal girişimciliği konu edindiği görülmektedir. Çalışmalarda kullanılan araştırma yöntemine göre dağılımlara bakıldığında 19 (%63,3) çalışmada nitel, 8 (%26,7) nicel yöntem ve 3 (%10) karma yöntem kullanıldığı görülmüştür. Araştırmanın yapıldığı ülke kapsamında değerlendirildiğinde Brezilya’da 6 (%20,0), ABD’de 6 (%20,0), Kanada ve Türkiye’de 4’er (%13,3) çalışmanın olduğu saptanmıştır. Makalelerin sadece 8’inde bir ölçek kullanılmıştır.

### **Sınırlılıklar**

Araştırma hedeflerine ulaştığımızda inansak da, bu sistematik derlemenin tüm araştırmalarda olduğu gibi bazı sınırlılıkları vardır. Her şeyden önce, bu sistematik inceleme, uluslararası kabul görmüş yedi farklı veri tabanını araştırmakla sınırlıydı. Bu nedenle bazı ulusal ve uluslararası yayınlanmış dergiler yer almadığı için bu dergilerde yayınlanan çalışmalara yer verilmemiştir. Aynı zamanda sadece İngilizce ve tam metin yayınlar incelenmiştir. Bu nedenle diğer dillerdeki ve tam metnine ulaşılamayan bazı çalışmalar gözden kaçmış olabilir. Araştırma aynı zamanda girişimcilik niyeti ve öğrenci hemşireler hakkındaki makaleleri de hariç tuttu. Gelecekteki sistematik incelemelerde, bu çalışmada yer almayan gri literatür taranabilir, öğrenci hemşirelerde girişimcilik niyeti ve girişimcilik araştırması dahil edilme kriteri olarak kullanılabilir.

### **Öneriler (Teorik, Uygulama ve Sosyal)**

Özellikle son dönemde yaşanan COVID-19 pandemisi tüm dünyada hemşirelik mesleğinin rolünü ve önemini bir kez daha hatırlatmıştır. Bununla birlikte, araştırmalar sağlık sektöründe hemşirelerin potansiyelinin yeterince tanınmadığını göstermektedir. Ulusal ve küresel ölçekte sağlığın geliştirilmesi ve sürdürülmesinde hemşirelerden daha fazla yararlanılabilir. Hemşirelerin bu alanda fırsatlar yaratması için meslek kuruluşları ve sağlık otoriteleri tarafından desteklenmesi gerektiğine inanıyoruz. Bu bağlamda geleceğin hemşireleri girişimcilik eğitimi yoluyla girişimcilik bilgi, beceri ve kültürü ile donatılmalıdır. Özellikle mesleki eğitimde yer alacak bir girişimcilik eğitimi ile hemşirelerin kapasiteleri henüz öğrenciyken geliştirilebilir. Sağlık otoriteleri, halk sağlığının korunması ve geliştirilmesinde yetişmiş sağlık insan gücü olarak hemşirelerden daha fazla yararlanmanın yasal ve idari altyapısını şekillendirmeli ve daha fazla hemşirenin girişimci olmasının önünü açmalıdır. İnsanlığın ihtiyaç duyduğu sağlık hizmetlerini küresel ölçekte üretmenin en ekonomik ve sağlıklı yolu, yüzlerce yıllık tecrübeye sahip bu mesleğin potansiyelini geliştirmek gibi görünmektedir.

### **Özgün Değer**

Sistemik inceleme sonucunda hemşire girişimciliğinin hem uygulamada hem de araştırmalarda yeterince ilgi görmediği görülmüştür. Ancak, sınırlı sayıda olmakla birlikte, bu çalışmaların bulgularını gözden geçirmemiz, hemşirelerin girişimci rollerinin yeniden ele alınması gerekliliği hakkında önemli ipuçları sağlamıştır.

**Araştırmacı Katkısı:** Perihan ŞENEL TEKİN (%50), Fevziye BEKAR (%50).