Professional Competence Standards for Nurses: A Systematic Review of Literature and Nursing Organizations Guidelines

ABSTRACT

Aims This study aimed to systematic review of professional competence standards for nurses based on literature and nursing organization guidelines.

Information & Methods The study carried out a systematic review of nursing professional competence standards in 2023 based on articles and national and international nurses' organizations and using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses. The databases including PubMed, MEDLINE, Embase, Scopus, Cochrane, ProQuest, Web of Science, Google Scholar, SID, IranMedex, IranDoc, and Magiran were reviewed. The search strategies were performed using keywords such as "Nurse", "Professional Competence", and "Competence Standard" based on Medical Subject Headings and using the syntax and the operators "AND" and "OR". The inclusion and exclusion criteria were considered in the selection of studies. The handling of the results was carried out using Mendeley software. The results of screening and quality control were carried out on the basis of appropriate checklists. Finally, data extraction and synthesis of results were performed and standards were presented.

Findings In this study, 2078 documents from scientific articles and national Iranian and international nursing organizations were reviewed, and a final total of 50 documents were included. The findings of the study introduced 428 standards as standards of professional competence for nurses. The synthesis of standards led to the identification of five domains of professional competence standards for nurses.

Conclusion The results identified five domains as nursing competencies. Attention to these domains by management can meet the professional needs and improve the quality of healthcare.

Keywords Nurses[1]; Professional Competence[2]; Systematic Review[3]

In Press

Introduction

Nurses make up a large proportion of the health workforce in many countries worldwide and, through the provision of services and basic care, they are a key component of healthcare systems (1). The increasing role of nurses in healthcare has led to an increasing need for them to fulfil a variety of roles (2). This creates a high demand for nurses to work in a variety of healthcare providers, including hospitals, public and private health centres, primary care centres, nursing homes, ambulatory surgery centres, schools, psychiatric centres, the military, industrial centers, healthcare research centers, universities, home care centers, and insurance companies (3). As providers of comprehensive care to patients, nurses are expected to act in accordance with their professional responsibilities when caring for patients (4). In this respect, it should be noted that the improvement of the quality of healthcare is directly linked to the professional competence of nurses (5).

Professional competence has many dimensions and is affected by a variety of factors (6). Professional competence is one of the dimensions of competence and is an important and fundamental concept in the field of nursing (5). The concept of professional competence is a complex, multi-layered and contextual concept (7). To date, different dimensions of competence in the field of nursing have been introduced; in this respect, the following can be mentioned: professional competence, interdisciplinary competence, clinical competence, individual competence, research competence, educational competence and cultural competence (6). Professional competence is considered to be a continuum which may increase or decrease over time and depending on various factors (8). Improving the competences of nurses in various

1. https://www.ncbi.nlm.nih.gov/mesh/68009726
2. https://www.ncbi.nlm.nih.gov/mesh/?term=Professional+Competence
3. https://www.ncbi.nlm.nih.gov/mesh/2028176

dimensions will lead to a variety of achievements, including the professional socialisation and professionalisation of nurses and the provision of high quality services to patients (4) (9) (10).
Different country-specific definitions of competence have been provided, depending on the context of each country (11). This has resulted in the ambiguity and complexity of the concept and the absence of a uniform definition of the concept of competence (13،12). The Merriam-Webster Online Dictionary defines competence as having sufficient knowledge, skills, judgement and ability to carry out a particular task or function (13). Gunawan and Aungsuroch refer to competence as a set of knowledge, attitudes and skills which is manifested through behaviour (14). According to Fukada, competence is a behavioural trait and an acquisition of skills that is the result of experience and learning; it is achieved by the individual on the basis of his attitudes and motivations, and by using his individual interests and experiences (4). DeGrande et al., define professional competence as the ability to make clinical decisions in accordance with clinical circumstances and on the basis of prior experience (15).
Numerous studies show that there are many differences and discrepancies in the implementation of standards and dimensions of nurse competences and the factors that influence them. Halcomb et al., listed clinical performance, professionalism, communication and improving patient health as standards of competence for nurses (16). According to the Valizadeh et al., study, the concept of competence is based on knowledge, attitude, skills, motivation, experience, creativity, responsibility, holistic care, ethical action, clinical judgement, communication with patients, cooperation and teamwork, management and leadership, perseverance and stability, and ability to cope with difficult and complex situations (7). In the DeGrande et al., study, the main dimensions of competence of a nurse were described as situation management, teamwork and decision-making (15). In the study done by Smith, integration of knowledge and practice, critical thinking, motivation, experience, skill, environment, communication, and professionalism were introduced as characteristics of nurse competence (17).
In the existing literature, various factors have been identified as influencing factors in the development of nurses' professional competences and their support for them. The competence of nurses is influenced by a number of factors such as individual characteristics, educational level, work experience, professionalism, the type of environment in which they work, and critical thinking (18). Tabari Khomeiri et al., identified individual characteristics, motivation, theoretical knowledge, opportunities, experience and environment as personal and non-personal factors that influence the development of nurses' professional competences (8). In a study by Gunawan et al., age, marital status, educational level, specialised knowledge, clinical experience, job satisfaction, employment status, job position, income, burnout and continuing education identified as factors influencing clinical competence in nurses (11). Nehrir et al., reported other factors, like knowledge, personal experiences, professional skills, motivation, decision-making power, self-confidence, professional independence, and positive social interactions as factors affecting nurses' competence (6).
Nurses face a number of professional competencies needs during their career (19). If these needs are not addressed and met, many nurses will leave the profession (19) and if these nurses are retained in the health system, the quality of care will deteriorate and public health will be compromised (5). It therefore appears necessary to focus on the standards of professional competence of nurses. Different standards have been implemented in different companies; however, given the context-dependent nature of standards of professional competence, systematic review is needed. This is because no comprehensive study has been found to review these standards on the basis of existing literature, based on scientific articles and national and international nursing organizations, Therefore, in this study we decided to perform a study to determine the competence standards of nurses using the method of systematic review of literature and nursing organizations guidelines. The results of this study are hoped to further develop the professional competencies of nurses, improve the quality of care, increase patient satisfaction and promote the health of individuals in society.

Information & Methods

In Press

In this study, a systematic review of nursing professional competence standards was conducted based on the available scientific literature in Iran and worldwide, with the aim of reviewing the standards of nursing professional competence in 2023.

The first step in a systematic review is to seek to avoid repetition of the review. In this respect, databases including the International Prospective Register of Systematic Reviews (PROSPERO) and the Cochrane Library were consulted to determine the standards of competence for nurses and to confirm that the study was not repeatable (20). The second step in a systematic review is to develop a study protocol that addresses the purpose of the study, minimises errors, specifies the method of review and ensures that the method is consistent between the reviewers. This protocol is necessary prior to the start of the review and has to be agreed by the reviewers.

The study protocol includes aim, search strategy, study inclusion and exclusion criteria, handling search results, screening search results, data extraction, and results synthesis. Guidance such as the Priority Reporting Items for Systemic Reviews and Meta-Analysis (PRISMA) statement is used in the preparation of the study protocol (20,21). Following the development of the protocol, the standards were reviewed on the basis of the PRISMA 2020 statement to identify the standards of competence for nurses.

Search Strategy

In order to ensure that the articles are fully covered, simultaneous searches of the databases PubMed, MEDLINE and Embase are required (22)(23). Researchers looked in external databases such as PubMed, MEDLINE, Embase, Scopus, Cochrane, ProQuest and the Science Web. Google Scholar has also been reviewed to ensure that search is comprehensive. Internal databases such as SID, IranMedex, IranDoc and Magiran were also searched.

One of the most important and time-consuming steps in a systematic review is to find relevant literature. Keywords are first selected to ensure their sensitivity and specificity for determining the search strategy. Sensitivity is determined by researchers who have searched all available literature. Specificity is achieved when the search is managed and resources such as time are taken into account to make the search more specific on the basis of those resources. Because studies like this one require a review beyond the scientific articles to answer the research question, and grey texts, including conference abstracts, guidelines and reports of reputable national and international nursing organizations, may also be considered as searchable sources. However, this takes time and the benefits of reviewing them need to be weighed against the time that has been wasted (20). A national nursing organization is a professional organization or formation which coordinates, exchanges ideas, promotes, stimulates, educates, researches, scientific activities, organizes and provides human resources through policy development, legislation and standardisation. The International Organization of Nurses is a large and global organization of nurses around the world which influences the performance of nurses by setting standards and communicating procedures (24).

It is very important to define key words based on the Medical Subject Headings (MeSH) and synonyms provided in the Embase database. Keyword selection through these databases provides a comprehensive and powerful method of finding relevant sources. It was also proposed to use free text terms, related words or phrases in articles to make the key words more comprehensive. Typically, a full search term consists of two or three components, which may include an independent variable, a dependent variable, a study type, and a study sample; which are associated with "AND" operator, and separated from the "OR" operator (25)(20). In this study, the keywords were selected from the Medical Subject Headings (MeSH), synonyms in various databases and the related free terms by two researchers. Studies on the competence of nurses were also examined in order to identify key words relevant to this issue.

Another approach is to use the search strategy Population or Problem, Intervention or Exposure, Comparison, Outcome, Study Design (PICOS) and Sample, Phenomenon of Interest, Design, Evaluation, Research Type (SPIDER) (26). In order to ensure the quality of the systematic review, it is preferable to carry out the search using at least two components of PICOS or SPIDER. Searching in title, abstract, and keyword in foreign databases was done. Moreover, the search was also carried out in Persian databases using a translation of the abovementioned keywords in Persian and the same search strategy. The components of both search strategies, together with the key words, are shown in Table 1. Syntaxes have been developed and used to search both Iranian and foreign

In Press

databases comprehensively and accurately, based on search strategies specific to each database (Table 2).

Study Inclusion Criteria

The following were considered as inclusion criteria for the study:

• Quantitative, qualitative, and mixed-method articles that have at least one of the professional competence standards for nurses in the title, keyword, or abstract of the article.

• Scientific articles must have been published in peer-reviewed journals.

• Articles from Iranian and foreign conferences that have at least one of the professional competence standards for nurses in the title, keyword, or abstract of the article.

• Guidelines and reports from reputable Iranian and international nursing organizations that have at least one of the professional competence standards for nurses.

• Scientific articles, conference papers, guidelines, and reports must be relevant to the research question.

• Since the oldest article mentioning the competence standards for nurses was Davey's article in 1995 (27), studies from 1995 onwards were included in the study.

Study Exclusion Criteria

The exclusion of a study was considered to be the lack of access to the full article due to journal access constraints which could not be resolved.

Handling Search Results

At this stage, the search results have been aggregated to a comprehensive list of articles, guidelines and reports on the research question. For better management of results, references have been stored in the Mendeley Reference Management Software (version 1.19.8, 2008-2020, Mendeley Ltd) to facilitate the identification and deletion of duplicates of articles, guidelines and reports (20).

Screening Search Results

After managing search results and removing duplicate sources, the search results have been screened. This phase aimed at identifying resources related to the research question and meeting the inclusion criteria for studies. Accordingly, in order to identify possible relevant sources, the titles and abstracts of the sources were first reviewed by two researchers and, in case of disagreement, a third researcher was consulted. The screening took place in two stages. Firstly, sources were screened and briefly reviewed in order to identify potential relevant sources. The full text of the possible relevant sources was downloaded and printed; this was before the full study of the sources had been completed and the selection of the sources that met the inclusion criteria had been decided. Following the screening, sources were selected to help establish the standards of professional competence of nurses (20).

Quality Control

The quality of quantitative articles was assessed by the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist, qualitative articles by the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist, and mixed-method articles by the Mixed Methods Approach Tool (MMT) (28)(29)(30).

At this stage, a list of characteristics of sources and the number of imported and exported resources has been prepared to facilitate future revisions (20). In this respect, a flow chart has been developed on the basis of the PRISMA 2020 statement to show the number of imported and exported resources (28).

Data Extraction

After screening search results, a data extraction process is carried out. This provides a structured and consistent procedure and leads to the identification of the information that is relevant for the purpose of the study. The researcher achieved this by creating a table for extracting data. In designing this form, the researcher should consider what analysis he or she intends to carry out and what kind of data he or she intends to retrieve and retrieve. The type of extracted data depends on the research question and the type of availabled data. For example, the extraction table may include

In Press

information such as the title of the study, the year of publication, the location, the methods and the results of the study (20).
In this study, the data extraction table for the articles should contain the title of the study, the purpose, the authors, the year of publication, the location of the study, the data collection methods and tools, the study sample and the results relating to the proficience standards for nurses. Also, given the type of availabled data on Iranian and international nursing organizations, the proposed form included information such as the name of the organization, the year of publication and the results concerning the standards of nursing competence.

Results Synthesis
At this stage, the findings of the studies are pooled after data extraction (20). In this respect, a table of data extraction has been completed for each resource. Then, table set it up in Microsoft Word Professional Plus 2016 (16.0.17126.20132). Each of the extracted resources, which had been entered in the aggregated forms, was then entered in one form for scientific articles and one form for nursing organizations. After categorisation of the information extracted, the standards of competence for nurses were determined.

Findings
For the review of the professional competence standards for nurses, 2078 documents were initially received from scientific articles and from Iranian and international nursing organizations. After removing duplicate documents using Mendeley software, there were 1,619 documents left. The researchers selected 52 documents relevant to the study objectives by examining the remaining documents and abstracts. Due to the lack of a full text for two articles, the systematic review of the standards of competence of nurses finally covered 50 eligible documents, including 16 articles, 2 national nursing organizations and 32 international nursing organizations. The process of selecting a study according to the PRISMA 2020 flow chart is illustrated in Figure 1 (31).
The findings of the selected studies were synthesised after screening and controling of the quality of the documentation. The thematic synthesis approach was used for the data synthesis. From the examination of 50 documents included, a total of 428 standards of competence for nurses were identified. Of these, 136 professional competence standards for nurses were extracted from 16 scientific articles (Table 3), 15 standards from two national nursing organizations (Table 4), and 277 standards from 32 international nursing organizations (Table 5). Following the synthesis of the findings of the systematic review, comparable standards have been compared and consolidated. These standards were then grouped and introduced in domains. The synthesis of studies led to the identification of five domains of professional competence standards for nurses. These domains included clinical competence, educational and research competence, ethical competence, communication and interpersonal competence, and management and leadership competence. The identified standards in each domain are presented in Table 6. The following describes each domain of competence:
1. Clinical competence
Clinical competence is often proposed as one of the most basic and fundamental professional competencies for nurses. The ability of nurses to perform various technical skills has always been considered as one of the elements for the development of competent nurses and the use of nursing knowledge in nursing has been an important factor in enhancing their clinical competence. The findings showed that nurses should use the acquiring clinical skills and attention to clinical guidelines to provide services. Moreover, the acquiring skills in working with hospital information system (HIS) is considered a pre-requisite for the acquisition of clinical competence by nurses. Standards such as focus on decision-making, clinical reasoning, critical thinking, and problem solving have been introduced as key elements of clinical competence.

2. Educational and research competence
In addition to strengthening the clinical competencies of nurses, the central elements of this competence area were the enhancing patient care knowledge and the using theoretical knowledge, evidence based and nursing process in the clinical setting. By regularly reviewing theoretical knowledge and applying knowledge, evidence based and nursing process, nurses can help to consolidate knowledge and prevent its forgetting. The completion of this competence included consideration of teaching and learning in universities, including the employing experienced

In Press

professors, the employing efficient teaching methods and the increasing the quantity and quality of clinical training. In addition to providing care, nurses have an important role to play in providing education based on the patient demands and the patient's companion. The results showed that familiarity with scientific research and participation in research activities are essential for the acquisition of research competences by nurses.

3. Ethical competence

The study results show that, in addition to the need for nurses to have clinical knowledge and skills, it is also important to pay attention to ethical values when caring for patients. Attention to the patient as a centre of care will also help to achieve competence. In this respect, adherence to ethical aspects, regarding fairness and justice for care, conscientiousness in care and promoting professional responsibility are considered as key factors in the ethical competence of nurses. Moreover, honoring the patient by nurses, self-regulation and attention to the legal components of the profession are effective in achieving this.

4. Communication and interpersonal competence

Improving professional communication is a very important issue in the competence of nurses and covers different dimensions, including the relationship between nurses and their colleagues, doctors, patients and patient families. This study identified communication and interpersonal relationships within the care team as one of the key factors in gaining competence and providing quality care. In this respect, improving professional communication and enhancing teamwork are essential for ensuring this competence. Nurses will be able to develop their teamwork skills by gaining professional communication skills. In addition to acquiring communication and teamwork skills, it is essential that an organization encourages teamwork and spreads its culture. In this respect, members of the health team must be fully aware of their job description and must act accordingly.

5. Management and leadership competence

The findings of this study show that the introduced competences are not sufficient in themselves and that the focus on management and leadership competences is important. Factors such as improve the orientation period for nurses, review the staff training program, review the methods of providing feedback to nurses, providing hospital facilities and equipment, and specialization are some of the factors that health managers and leaders can focus on to ensure that nurses are properly provided and trained.

Discussion

This study was carried out to establish the professional competence standards for nurses. These findings were obtained by a systematic review of literature and nursing organizations guidelines. Based on the findings of the review of professional competence standards for nurses, five domains of competence have been introduced, comprising the 25 standards identified. For nurses, four, seven, seven, two and five standards of professional competence were identified in the five domains of competence, namely clinical, educational and research, ethical, communication and interpersonal and management and leadership.

The clinical competence was one of the identified domains in the systematic review. Four standards identified in the clinical competence domain included acquiring clinical skills, attention to clinical guidelines, acquiring skills in working with HIS, and focus on decision-making, clinical reasoning, critical thinking, and problem solving.

Nurses can provide high quality and safe care to patients by relying on their clinical knowledge (32). Our study showed that the attention to clinical skills and guidelines is recognised as one of the professional competencies of nurses. Several studies included in the review confirmed the results of this study, such as the study by Thi Ha and Nuntaboot, which included nursing skills and practice as new competencies required for nurses as compared to the national nursing competence standards in Vietnam (33).

Halcomb et al., identified professional practice and nursing care as the professional standards of practice for nurses in Australia (34). In other studies and nursing organizations, clinical practice and skills were reported as one of the competencies of nurses (16)(35). In this study, the acquisition of skills for working with HIS was identified as a further clinical competence standard, in line with

In Press

the results of the study which identified information technology knowledge and skills as a competence standard (34)(16).

This is important for accessing patient clinical records, providing diagnostic and therapeutic services, and monitoring the treatment of patients. Computer literacy of nurses is a pre-condition for gaining competence and providing quality and cost-effective care (36). In this study, other clinical competence standards included reinforcement of decision-making, clinical reasoning, critical thinking, and problem solving. Some studies have shown that clinical decision-making is one of the competences for clinical performance in the nursing care (37). Clinical reasoning (38) and critical thinking (38)(39) are also important for the training of nurses and for the competence of nurses. According to a study by Halcomb et al., problem solving is also recognised as one of the nursing competence standards in primary care (16). This finding is in line with international guidelines such as the Nursing and Midwifery Board of Australia, which emphasises critical thinking and analysis of nursing performance as one of the nursing competence standards (40).

One of the domains most frequently covered in our systematic review was the domain of educational and research competence. This domain consisted of seven identified standards: enhancing patient care knowledge, using theoretical knowledge, evidence based and nursing process in the clinical setting, employing experienced professors, employing efficient teaching methods, increasing the quantity and quality of clinical training, providing education based on the patient demands and the patient's companion, and familiarity with scientific research and participation in research activities.

Some of the studies included in the systematic review indicated that the improvement of the competences of nurses required knowledge acquisition (38)(33). After knowledge has been acquired, the use of theoretical knowledge, scientific evidence and nursing process in clinical practice may increase educational and research competence. Several studies have shown that use of evidence-based practice in practice is effective in improving the nursing competence and confirm the results of our study (37)(41)(42)(43). This finding is in line with the emphasis of the American Nurses Association on the importance of evidence-based practice in nursing (44). In accordance with the results of this study, the nursing process was established as an important standard of competence for nurses by Lee et al., (41). University professors play an important role in the qualification of nurses by completing the training of nurses. Professors are responsible for teaching nursing students and preparing them for future careers in the healthcare. To acquire the knowledge and skills needed to provide quality care, it is essential that teaching institutions, and especially professors, recognise the importance of their work in training professionals and develop the attitudes and skills necessary to be successful.

Clinical educators must possess characteristics such as communication with students, professional skills, evaluation skills, teaching abilities and personal factors for teaching. It is therefore essential that professors evaluate their teaching and improve their teaching practice by identifying those aspects of teaching which are incomplete (45). Baker et al., identified the curriculum, learning experience, faculty, instructors, mentors and educational resources as the standards for the competence of nurses (38). In support of these findings, teaching and learning have been shown to be effective in the development of competence (46)(16). Need-based education for patients and their families was another standard introduced in the Thi Dung et al., study as a standard of nurse competence (47) and it is consistent with the results of this study. In addition to educational competence, research competence are also a requirement for nurses' professional competence. In this respect, the studies reviewed indicate that scientific search and research are among the standards of competence of nurses (48)(46) and this is confirmed by the results of this study.

Ethical competence is considered to be an important domain of professional competence for nurses. In the ethical competence domain, seven intruded standards included adherence to ethical aspects, regarding fairness and justice for care, conscientiousness in care, promoting professional responsibility, honoring the patient by nurses, self regulation, and attention to the legal components of the profession.

In support of the results of this study and based on the studies reviewed, it is necessary for nurses to acquire professional competencies through ethical and legal competence (33) and ethical practice (41)(49). The College of Nurses of Ontario also considers ethics to be a standard of competence (50). Bickford introduces one of the competence standards for nurses as a fair practice in the field of nursing (48). In another study, the promotion of equity by nurses was based on standards derived from a systematic review of a number of international organizations (43). Ethical conscientious

In Press

accountability was another standard that Republic of the Philippines Professional Regulation Commission held as important (51) and our study's results reinforce that. Another frequently cited standard is responsibility. The International Labour Organization and the Professional Regulatory Board of Nursing are among the nursing organizations which consider this standard to be essential (52)(53) and support the results of this study. In this study, it was found that honoring the patient by nurses is effective in ensuring the ethical competence of nurses. In line with the results of our study, patient advocacy has been identified as a standard competence for nurses (48). The Nursing and Midwifery Council also considers that patient prioritisation through demands identification, respectful behavior and respect for patients' rights is an effective way of developing competent nurses (54). Self-regulation of nurses was another factor in promoting professional competence. This result is also confirmed by some studies included in the review (55)(56)(57).

Improving professional communication and enhancing teamwork were two standards of the domain of communication and interpersonal competence.

Study by Parnik et al., It has shown that there is a positive and significant relationship between professional communication and professional engagement and interest in job, leading to quality care and patient safety (58). Improving professional communication is in line with the guidelines for nurses, which consider this standard to be an integral part of the competences of nurses (59)(60). Regarding the enhancing teamwork, studies highlight the importance of attention to teamwork as one of the important standards for improving the competences of nurses (49)(34). Strengthening communication and teamwork skills should therefore be considered as a priority in the training of nurses.

Finally, in the domain of management and leadership competence, five standards were identified, including improve the orientation period for nurses, review the staff training program, review the methods of providing feedback to nurses, providing hospital facilities and equipment, and specialization.

Improving in-service training is another standard identified in this study as a prerequisite for improving professional aptitude. In support of the findings of this study, Sato and Ishimaru considered that in-service training is necessary to improve nurses' competencies (61). Training of educational needs should be adapted to the nurses competence. The educational needs of nurses can be assessed by an analysis of educational needs (62). Indiana University Southeast also considers that training of nurses is a factor in improving the competence of nurses (63), which is in line with our results. In this study, the other standard was a review the methods of providing feedback to nurses. Feedback is a crucial part of nursing. If nurses does not receive feedback about their performance, they may assume he does not have to improve in any of the areas. Therefore, nursing specialists should take feedback into account in their learning process and monitor how they receive it. Feedback is effective if it is provided in a supportive environment and on a regular basis. Nursing managers should ensure that they provide feedback in a timely manner and on a specific performance of an individual. This type of feedback is considered to be very valuable and useful for individuals and to enable them to assess their own skills and to increase motivation, self-confidence, self-esteem and skills (64).

Providing hospital facilities and equipment is considered to be a standard of nursing competence. Maphumulo and Bhengu are also introduce facilities and physical infrastructure, in accordance with this study (65). The results of one study show that physical environment, including the design and performance of hospital buildings, has a significant influence on nurses' recruitment and retention. Available facilities may have a significant impact on the performance of nurses and on the quality of care provided to patients (66).

Conclusion

The synthesis of the Iranian and global standards of nursing competences, based on articles and guidelines of nursing organizations, introduced five domains of competence included clinical competence, educational and research competence, ethical competence, communication and interpersonal competence, and management and leadership competence. The findings of this study are presented as a reliable source of information for nurses and the nursing management system on the standards of competence of nurses. Attention was paid to some of the standards of professional competence of nurses. In this way, by considering these domains, managers can effectively meet the needs for nurses' professional competencies, training of competent nurses and improving the quality of healthcare.

In Press