Nursing professional practice models: an integrative literature review

Modelos de práctica profesional de enfermería: una revisión integradora de la literatura

Abstract

Background: In recent years, many international health organizations have used nursing professional practice models as a tool to achieve excellence in patient and nursing outcomes.

Objective: To analyze the literature published during the last decade on nursing professional practice models in hospital environment.

Methodology: This is an integrative literature review, according to the PICO methodology (participants, intervention, context and outcomes). Data were collected in December 2015 in CINAHL and MEDLINE databases.

Results: Four main themes were identified from the analysis of the 17 articles included in this study: nursing professional practice models; elements of nursing professional practice models; benefits of nursing professional practice models, and development, implementation and evaluation of nursing professional practice models.

Conclusion: The results show that the development and implementation of nursing professional practice models represent significant challenges that, once achieved, will provide the basis for excellence in nursing practice.

Keywords: nursing; nursing models; professional practice; hospitals

Resumen

Marco contextual: En los últimos años, muchas organizaciones internacionales de salud han valorado los modelos de práctica profesional de enfermería como una herramienta para alcanzar la excelencia en los resultados de los clientes y de los enfermeros.

Objetivo: Analizar la producción científica en relación a los modelos de práctica profesional de enfermería en el contexto hospitalario publicada en la última década.

Metodología: Se trata de una revisión integradora de la literatura de acuerdo con la metodología PICO y cuya recogida de datos se llevó a cabo en diciembre de 2015 en las bases de datos CINAHL e MEDLINE.

Resultados: El análisis de los 17 artículos incluidos en el estudio permitió identificar 4 temáticas relevantes (modelos de práctica profesional de enfermería; elementos de los modelos de práctica profesional de enfermería; beneficios de los modelos de práctica profesional de enfermería y desarrollo, implementación y evaluación de los modelos de práctica profesional de enfermería).

Conclusión: Las pruebas muestran que el desarrollo y la implementación de modelos de práctica profesional de enfermería son retos importantes, que, una vez alcanzados, servirán de base para una práctica de enfermería de excelencia.

Palabras clave: enfermería; modelos de enfermería; práctica profesional; hospitales

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Introduction

According to some authors (Erickson & Ditomassi, 2011), economic and cultural conditions have created in the current health care setting an ideal opportunity for nurses to reflect on their practice and set a new course for the nursing profession, a course that ensures professional sustainability and quality of care. Therefore, always driven by standards of excellence, nurses must now set the new description of what the nursing profession can be. Nursing professional practice models provide a framework for setting this new course and, thus, achieve exemplary outcomes (Erickson & Ditomassi, 2011).

Professional practice models, which are essential for the promotion of excellence in nursing practice (Harwood, Downing, & Ridley, 2013), are particularly known in the United States, where having a model is essential for the Magnet recognition developed by the American Nurses Credentialing Center (ANCC; Berger, Conway, & Beaton, 2012). In fact, the Magnet Recognition Program, originating exactly in the United States, has driven the implementation of nursing professional practice models (Slatyer, Coventry, Twigg, & Davis, 2015). Hospitals that seek Magnet recognition are often faced with the challenge of developing a professional practice model (PPM) in nursing, which is considered a key element in creating an environment that promotes exemplary professional practice (Tinkham, 2013; Berger et al., 2012).

In the 1990s, professional practice models were defined as systems, with structures, processes and values that support nursing care practice. According to Hoffart and Woods (1996), a PPM has some key elements, including autonomy, accountability, professional relationships, a patient care delivery model, shared management and mechanisms of compensation and rewards. The Magnet Recognition Program, mentioned by several authors (Slatyer et al., 2015; Stallings-Welden & Shirey, 2015; Berger et al., 2012), describes a PPM as a schematic representation of the care provided by nurses in order to achieve high-quality outcomes. From this perspective, the PPM reflects how nurses perform, collaborate, communicate, develop professionally, and integrate the nursing mission, vision, values, philosophy and theory in their practice (Berger et al., 2012).

There is currently a consensus that nursing, as both discipline and profession, should contain specific characteristics, which include a wide field of knowledge that can be transmitted through formal education, autonomy in decision making, authority over practice, and responsibility and recognition of the outcomes (Jost & Rich, 2010). Given that these aspects are likely to be integrated into a professional practice model, it makes sense to invest in its development and implementation. According to the literature, professional practice models are needed to inspire and strengthen nurses in practice, helping them to address current challenges (Meehan, 2012).

As advocated by some authors (Berger et al., 2012), although nurses are aware of all the elements/components of nursing practice which should be applied by all nurses, they lack a model to articulate them. In fact, nurses are not able to define and describe a PPM and its application in their daily practice (Berger et al., 2012).

The terminology of nursing professional practice model is likely to be new and potentially difficult for nurses, particularly for those who, in international environments, are unfamiliar with the Magnet theoretical framework (Slatyer et al., 2015). Currently, many healthcare organizations value the contribution of a PPM to nursing practice (Harwood et al., 2013). Although the literature suggests that nursing professional practice models in hospital settings are an essential tool for achieving excellence in nursing and patient outcomes (Stallings-Welden & Shirey, 2015; Harwood et al., 2013), we are unaware of any hospital in Portugal that has defined a nursing PPM, thus making this a little-known issue among Portuguese professionals.

Based on these assumptions, we set the following questions to guide our integrative literature review: What is the scientific production of nurses on nursing professional practice models in hospital settings over the last 10 years? Taking into account this question, our study aimed to analyze nurses’ publications on nursing professional practice models in hospital settings over the last decade.

Methodological procedures of the integrative review

This integrative literature review was conducted to gather and synthesize findings from studies conducted using different methods, with the purpose of contributing to improve the knowledge
on the topic under analysis (Soares et al., 2014). The study has followed the steps recommended by the Joanna Briggs Institute (JBI, 2011): formulation of the question for the preparation of the integrative literature review; specification of the methods of study selection; procedure for data extraction; analysis and assessment of studies included in the integrative literature review; data extraction and presentation of the review/synthesis of the knowledge produced and published. The guiding question of this review was: What is the scientific production of nurses on nursing professional practice models in hospital settings over the last 10 years? This question was formulated based on the PICO strategy (JBI, 2011): participants; intervention; context of the study; and outcomes. Data were collected in December 2015 in the following databases: CINAHL Plus with Full Text, CINAHL Complete and MEDLINE with Full Text, in the EBSCOhost platform. The descriptors used in the search were: Nursing, Professional Practice Model and Hospitals. We established the following inclusion criteria: studies published in the above-mentioned databases, between 2005 and 2015, in full text, in English, Portuguese and Spanish, and whose title and/or abstract referred to the topic of nursing professional practice models. The database search identified 357 articles. At first, we performed a critical and reflexive reading of the titles and abstracts. Later on, after application of the inclusion and exclusion criteria, and the assessment of methodological quality, we obtained a sample of 17 articles. In a second moment, we performed an accurate analysis of the selected articles, extracting the evidence concerning nursing professional practice models. At this stage, for better organization of the analysis, through an exploratory reading of each article, we identified, translated and transcribed the sentences and words that corresponded to elements of interest related to nursing professional practice models. In order to systematize the information from the articles, data extracted from the studies were descriptively compiled in a previously created table, which facilitated the identification and restructuring of the thematic categorizations.

Results and interpretation

Ten (58.8%) of the 17 (100%) included articles were conducted in the United States, three (17.6%) in Canada, two in Australia (11.8%), one in England (5.9%) and one in Ireland (5.9%). All articles were published in English. With regard to the year of publication, we observed a higher incidence in 2011 (four articles), followed by 2015 (three articles), 2013 (three articles), 2014 (two articles), 2012 (two articles) and 2007 (two articles) and, finally, 2010, with one publication. All articles (Table 1) addressed the issue of nursing professional practice models.

Table 1
Summary of the articles included in the integrative review

<table>
<thead>
<tr>
<th>Authors/Year of publication</th>
<th>Type of study</th>
<th>Purpose of the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stallings-Welden and Shirey (2015)</td>
<td>Quantitative</td>
<td>To assess the effectiveness and predictability of a nursing PPM.</td>
</tr>
<tr>
<td>Slatyer, Coventry, Twigg, and Davis (2015)</td>
<td>Literature review</td>
<td>To synthesize the literature on professional practice models in order to identify their main components.</td>
</tr>
<tr>
<td>Basol, Hilleren-Listerud, and Chmielewski (2015)</td>
<td>Qualitative</td>
<td>To describe the development, implementation and evaluation of a PPM.</td>
</tr>
<tr>
<td>Porter, Cortese, Vezina, and Fitzpatrick (2014)</td>
<td>Quantitative</td>
<td>To describe nurses’ perceptions of their own actions, 6 months after the implementation of the PPM.</td>
</tr>
<tr>
<td>Porter, Vezina, McEvoy, and Fitzpatrick (2014)</td>
<td>Quantitative</td>
<td>To describe the development and implementation of a PPM.</td>
</tr>
<tr>
<td>Chamberlain et al. (2013)</td>
<td>Literature review</td>
<td>To analyze the concept of PPM and propose a definition, using the Rodgers’ and Knaff’s method.</td>
</tr>
<tr>
<td>Harwood, Downing, and Ridley (2013)</td>
<td>Qualitative</td>
<td>To describe the revision of the PPM in nephrology, in force since 1999.</td>
</tr>
<tr>
<td>Tinkham (2013)</td>
<td>Literature review</td>
<td>To show the requirements for Magnet recognition.</td>
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</table>
Following the analysis of the selected articles and the scientific evidence found, four themes were identified: nursing professional practice models; elements of nursing professional practice models; benefits of nursing professional practice models; and development, implementation and evaluation of nursing professional practice models.

**Nursing professional practice models**

A nursing professional practice model is a conceptual framework that enables nurses to predict and communicate their practice; it provides the foundation for the provision of safe, high-quality and patient-centered care (Slatyer et al., 2015). Some authors (Murphy, Hinch, Llewellyn, Dillon, & Carlson, 2011; Basol, Hilleren-Listerud, & Chmielewski, 2015) believe that the PPM describes how nurses practice, collaborate, communicate and develop professionally; it defines what is important for nurses and guides the current and future nursing practice. Other researchers (Berger et al., 2012) added that the PPM should reflect and guide nursing professional practice and serve as a tool for assessing the effectiveness of nursing. Nurses use the PPM to help others understand their important and complex role and the difference they make in patients’ lives and organizations' sustainability (Berger et al., 2012). A PPM is a framework that allows nurses to integrate and coordinate the contributions of theory to practice. With a well-designed framework, nurses feel connected to their relationship with the patient, to their own performance, to other nurses, and to the organization (Erickson & Ditomassi, 2011). Following on from this, the PPM, in addition to providing a structure that guides nursing practice, also defines the relationship established between nurses, patients and the organization. Most nursing professional practice models published include a visual model (Stallings-Welden & Shirey, 2015; Berger et al., 2012; Erickson & Ditomassi, 2011; Latta & Davis-Kirsch, 2011). In addition to the visual image, we also observed the possibility of symbolic representation of the model in the analyzed publications. The PPM The Compass evidences how nurses are challenged to navigate through an unknown path. It is generally agreed that compasses provide guidance and navigation support, so The Compass is used to help nurses to define a path that will lead them in the future (Basol et al., 2015).

**Elements of nursing professional practice models**

In a literature review on professional practice models, Slatyer et al. (2015) revealed that the vast majority of models had a theoretical basis and six common components. With regard to the theoretical basis, they found that models were often based on nursing concepts or on a particular theory or theories. Some models also incorporated fundamental values of the hospital or system in which they were integrated into their conceptual basis. According to these authors,
the concepts of shared management, partnership and collaborative leadership were very often mentioned as being the basis of a nursing PPM, highlighting the importance of empowering nurses for equal participation in the organizational decision-making process. In addition to the concepts, some models found by the researchers were based on nursing theories and only a few were based on organizational theories. Regardless of the theoretical foundation, Slatyer et al. (2015) identified six components common to all models: leadership; nurses’ independent and collaborative practice; environment; research/innovation; nurse development and reward; and patient outcomes.

In the publications analyzed, we found models based on one or more nursing theories. The ideas of Florence Nightingale and Jean Watson cited by Ondrejka and Barnard (2011), of Swanson mentioned by Berger et al. (2012), and Latta and Davis-Kirsch (2011) have been integrated into some of the models found. Some authors (Harwood et al., 2013; Erickson & Ditomassi, 2011; Jost & Rich, 2010; Harwood et al., 2007a; Harwood et al., 2007b) have used Benner’s theoretical framework on the development and implementation of nursing professional practice models. The same applied to the quality model of Donabedian cited by Basol et al. (2015) and Stallings-Welden and Shirey (2015). The development of models consistent with the mission and values of the organization has been a priority (Stallings-Welden & Shirey, 2015). The nursing PPM The Compass (Basol et al., 2015) focuses on caring for the patient and the family, an idea that is strongly incorporated in the organization; the hospital’s mission surrounds the central idea, exposing its six essential elements: collaboration, hospitality, respect, integrity, service and trust. In this model, there are other four components that integrate the values of the organization: quality, safety, value, and service. On the other hand, the integration of the nurses’ legal, social and moral obligations as health professionals into professional practice models (Stallings-Welden & Shirey, 2015) seems to be an interesting component in the provision of quality and safe care.

As a result of the update made to a model implemented in the 1990s, the new nursing PPM in the area of nephrology contains four components (Harwood et al., 2013). The first component - professional practice - consists of care delivery system, communication system, professional development, collaborative practice and leadership; the second component - characteristics of professional practice - refers to the principles and characteristics of professional practice; the third component - process - represents activities used by nurses to provide assistance; and the fourth component - outcome - refers to the results of the use of the model in practice. It should be noted that these outcomes may be related to patients, teams, the organization, and nurses (Harwood et al., 2013).

Another nursing PPM developed and implemented in a hospital in the United States was composed of eight components: philosophy; practice standards; collaborative decision-making; professional development; patient care delivery model; credentialing/peer review; theory-based research and practice (Erickson & Ditomassi, 2011). Ten years after its implementation, the model was revised to include the following components: vision and values, practice standards, innovation/entrepreneurial teamwork, clinical recognition and advancement, research, patient care delivery model, collaborative decision-making, narrative culture, and professional development (Erickson & Ditomassi, 2011). With regard to this revision, narrative culture was introduced as an effective means to share and reflect on clinical practice, allowing professionals to integrate theory into practice and move towards excellence in care; clinical recognition and advancement, based on the Dreyfus Model of Skill Acquisition, reinforces the idea that professionals must master each step before progressing to the next; innovation/entrepreneurial teamwork were added as essential for the creation of a professional practice environment that embraces change (Erickson & Ditomassi, 2011). Despite the differences found between the various models, it is generally agreed that each element of the PPM strengthens the other components, making the whole greater than the sum of its parts (Chamberlain et al., 2013). It should be noted that, regardless of the elements of nursing PPMs, the primary focus is on the patient and the relationship established between the professional and the patient, the key element of success (Stallings-Welden & Shirey, 2015; Basol et al., 2015; Erickson & Ditomassi, 2011). This idea has been corroborated by other authors (Slatyer et al., 2015; Harwood et al., 2007b) who have reported that the core of the PPM is the nurse-patient-family relationship. The harmony resulting from this
relationship contributes to patients’ outcomes and nurses’ rewards. The focus on the patient and the family is the most important aspect of the model, which is usually strategically placed at the center, as if connecting all components (Basol et al., 2015; Berger et al., 2012; Ondrejka & Barnard, 2011). Porter, Vezina, McEvoy, and Fitzpatrick (2014) put forward a PPM focused on the relationship that nurses establish with themselves, their colleagues, patients, and families.

**Benefits of nursing professional practice models**

The dissemination of a nursing PPM can be the catalyst needed to change nursing practices (Stallings-Welden & Shirey, 2015). In a study aimed to assess the effectiveness and predictability of a nursing PPM regarding its impact on nursing and patient outcomes, positive results were found concerning nurses’ perceptions of the quality of care, interactions, decision-making, autonomy, and job satisfaction. With regard to patients, there was a decrease in pressure ulcers and an improvement in satisfaction, namely in their perceptions of the care and information received (Stallings-Welden & Shirey, 2015). In the same study, after the implementation of a nursing PPM, nurses’ professional development also improved (Stallings-Welden & Shirey, 2015), an aspect which had been previously addressed by other authors (Erickson & Ditomassi, 2011). In a study with the purpose of examining the effect of a nursing PPM in nephrology (Harwood et al., 2007b), nurses reported greater familiarity with their patients and better knowledge of the overall care plan. Nurses’ more active involvement allowed them to be accountable for their professional obligations and go beyond the minimum standards. Nurses believed that patient outcomes were improved due to consistency and continuity of care, as well as nurses taking the initiative to identify problems as early as possible and taking the necessary measures to solve them, consulting team members, presenting the problem during handover, and ensuring that the issue was properly addressed (Harwood et al., 2013). Nurses’ autonomy and initiative skills also improved. Harmony increased nurses’ confidence in their ability to manage problems, as well as to optimize their patients’ health and well-being, which translates into higher job satisfaction (Harwood et al., 2007b). In another study (Harwood et al., 2007a), using two instruments (Nursing Worklife Index-Practice Environment Scale and Conditions of Work Effectiveness II Questionnaire), a significant improvement was observed in the following areas after the implementation of a PPM: care based on a nursing (as opposed to medical) model; a preceptorship program; working with clinically competent nurses; patient assignments that foster continuity of care; collaborative organizational relationships; and consultation. In the two previously mentioned studies, we observed that nursing professional practice models have helped define and articulate nurses’ role and promote the quality of nursing care (Harwood et al., 2007b). Given the positive impact of the nursing PPM in nephrology, and taking into account the changes that occurred in human, technological and environmental resources, this model was revised in 2013, with the conviction that it could provide a theoretical basis for nursing practice, a care delivery method that promotes accountability, continuity of care, nurse job satisfaction and a system that promotes quality improvement for patient care, aspects which have been demonstrated (Harwood et al., 2013).

Several studies (Stallings-Welden & Shirey, 2015; Erickson & Ditomassi, 2011; Harwood et al., 2007a, 2007b) have found that the professional practice models enhance autonomy, job satisfaction, responsibility, control in practice, positive and collaborative relationships between professionals and nurses’ professional development. According to Meedan (2012), the PPM may also contribute to bridge the gap between nursing practice and theory. To this end, it is important that the PPM is a structure that enables professionals to continue with the integration and continuous enrichment of theory as an essential element of the practice (Erickson & Ditomassi, 2011). Given that nurses come from different backgrounds and have different academic paths, the contribution of the PPM for the standardization of nursing practices was also reported in the literature (Ondrejka & Barnard, 2011).

**Development, implementation and evaluation of nursing professional practice models**

The evidence of better outcomes for nurses and for those who receive care has significantly boosted the widespread application of nursing professional practice models (Slatyer et al., 2015; Porter, Cortese,
Vezina, & Fitzpatrick, 2014). A literature review on professional practice models found that the first models were developed and implemented in isolated units, later in hospitals and, only afterwards, in the entire system (Slatyer et al., 2015). According to the ANCC, nursing leaders should involve clinical nurses in the development, implementation and evaluation of nursing professional practice models (Stallings-Welden & Shirey, 2015), which was also observed in the studies analyzed. In 2012, a working group composed of direct care nurses, clinical nurse specialists, educators, managers and directors was set up with the purpose of designing a nursing PPM to be implemented in organizations integrated in the same health group (Berger et al., 2012). In addition, another working group composed of nurses, head nurses, educators, case managers and advanced practice nurses was set up in 2015 to design the nursing PPM The Compass (Basol et al., 2015). The implementation of a model provides the basis for a quality nursing practice and is applicable to all nurses who seek excellence in nursing care (Slatyer et al., 2015). From this perspective, all nurses need to be familiar with the PPM and describe how they apply it in their daily practice, either direct care nurses, nurses with complementary functions, teachers, managers or directors (Berger et al., 2012). The integration of the nursing professional practice model is a complex organizational change (Basol et al., 2015; Murphy et al., 2011). Therefore, when implementing a PPM, it is important to take into account how organizational change will affect nurses and how that change can be achieved (Berger et al., 2012). According to the literature found, the PPM must be formally presented to nurses through interactive training sessions (Basol et al., 2015). The video account of a patient’s history contributed significantly to the success of the implementation of a PPM. The video mentioned by the authors (Basol et al., 2015) in their study demonstrated, through the example of a given patient, how the PPM defines what is important for nurses and how it guides the current and future nursing practice. The distribution of flyers about the model and the inclusion of its content in printed and electronic newsletters are strategies that ensured visibility and facilitated the integration of the PPM (Basol et al., 2015). It is generally agreed among several authors (Basol et al., 2015; Berger et al., 2012; Ondrejka & Barnard, 2011) that training should be compulsory, thus ensuring that all nurses are familiar with the model. With the use of electronic resources, we found references to online training programs, e-learning interactive courses, blogs, as well as videos with nurses’ accounts. The content included information on the PPM and its importance for nursing (Berger et al., 2012). The presentation of real cases by the nurses in group sessions, and the adoption of cognitive and affective teaching methods were also described by Ondrejka & Barnard, 2011. Other strategies found include the elaboration of posters and mouse pads describing the PPM, which were subsequently placed in all computers used by the nurses. The posters and the mouse pads were also used as visual memory aids for nurses (Berger et al, 2012). Regardless of the strategy used, the development of a common and clear language in the presentation of the PPM components is essential for its implementation (Basol et al., 2015). In fact, as with any change, the implementation of a new model can be a challenge, and a proper communication is the key to success (Tinkham, 2013). During the implementation of professional practice models, nurse managers should be made aware of the importance of collaborating in the creation of a positive environment for nursing practice. In education, it is the teachers’ responsibility to adopt strategies that ensure the integration of the PPM in educational programs (Berger et al., 2012).

Since the evaluation of the impact of nursing PPMs is a challenging task (Harwood et al., 2007a), researchers use two methodologies to better understand the results: quantitative and qualitative (Harwood et al., 2007a, 2007b). The evaluation of the PPM before and after its implementation allows comparing data related to patient and nursing outcomes. Some authors (Erickson & Ditomassi, 2011) have discussed the evaluation of professional practice models based on other methodologies: internal and external. Internally, health care organizations have identified, for example, the professionals’ perceptions and, externally, they seek Magnet recognition to validate the model.

**Conclusion**

At a time when quality is a main concern, health care organizations and professionals have been facing many challenges. In particular, the quality of
the nurses’ professional performance in hospital settings is an area that requires specific research, in order to identify differentiated strategies that can contribute to a professional practice of excellence. This review made it clear that one of those strategies may be nursing professional practice models, as structures that provide nurses guidance in their practice. All analyzed articles confirmed the idea that the development and subsequent implementation of nursing professional practice models benefit both patients and nurses. With regard to patients, benefits include the promotion of health and well-being, prevention of complications, and increased patient satisfaction. With regard to nurses, benefits include improved communication, autonomy, teamwork and shared management, as well as the strengthening of the commitment to the organization and the profession, which culminates in these professionals’ increased satisfaction. The fact that the existing literature confirms that a professional practice model fosters environments that promote a quality nursing professional practice makes its development and implementation even more urgent. The lack of studies conducted in Portugal justifies the investment in this area, both theoretically and in clinical practice.

References

