

Nursing practice in home care: an integrative literature review

Atuação do enfermeiro na atenção domiciliar: uma revisão integrativa da literatura
Actuación del enfermero en atención domiciliar: una revisión integrativa de la literatura

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ABSTRACT

Objective: analyze scientific production on nursing practice in home care. **Method:** integrative review employing databases LILACS, BDENF, IBECs, and MEDLINE. Studies in Spanish, English, and Portuguese were included, regardless of publishing date. **Results:** after analyzing 48 articles, it was found that nursing practice in home care is complex, employing a multitude of actions by using three technologies: soft; soft-hard especially; and hard. Challenges related to the home-care training process are reported in the literature. Nurses use knowledge from their experience and scientific recommendations in conjunction with their reflections on the practice. **Conclusion:** home nursing practice is fundamental and widespread. Relational and educational actions stand out as necessary even in technical care, with a predominant need for home-care training.

Descriptors: Nurse's Role; Home Care Services; Home Care Services, Hospital-Based; Home Health Nursing; Nursing.

RESUMO

Objetivo: analisar a produção científica acerca da atuação do enfermeiro na atenção domiciliar em saúde. **Método:** realizou-se uma revisão integrativa da literatura por meio de consulta às bases de dados LILACS, BDENF, IBECs e MEDLINE. Foram incluídos estudos em espanhol, inglês e português, não delimitando data de publicação. **Resultados:** analisados 48 artigos, identificou-se que a atuação do enfermeiro na atenção domiciliar possui complexidade e diversidade de ações com uso de tecnologias leves, leve-duras especialmente, e duras. Destaca-se que desafios relacionados ao processo formativo para a atenção domiciliar estão relatados na literatura. O enfermeiro utiliza conhecimento experiencial e recomendações científicas aliados à reflexão na prática. **Conclusão:** a atuação do enfermeiro no espaço domiciliar é fundamental e ampla. As ações relacionais e educacionais se destacam, sendo necessárias inclusive nos cuidados técnicos, predominando a necessidade de formação para a atenção domiciliar.

Descritores: Papel do Profissional de Enfermagem; Serviços de Assistência Domiciliar; Serviços Hospitalares de Assistência Domiciliar; Enfermagem Domiciliar; Enfermagem.

RESUMEN

Objetivo: analizar la producción científica sobre la actuación del enfermero en atención domiciliar de salud. **Método:** se realizó revisión integrativa de la literatura mediante consulta de las bases de datos LILACS, BDENF, IBECs y MEDLINE. Fueron incluidos estudios en español, inglés y portugués, sin delimitar la fecha de publicación. **Resultados:** analizados 48 artículos, se identificó que la actuación del enfermero en atención domiciliar posee complejidad y diversidad de acciones, con uso de tecnologías blandas, blandas-duras (especialmente) y duras. Se destaca que los desafíos relacionados al proceso formativo para atención domiciliar están narrados en la literatura. El enfermero utiliza conocimiento empírico y recomendaciones científicas, aliados a la reflexión en la práctica. **Conclusión:** la actuación del enfermero en el ámbito domiciliario es amplia y fundamental. Las acciones relacionales y educativas se destacan, siendo necesarias incluso en los cuidados técnicos, manifestándose la necesidad de formación para atención domiciliar.

Descritores: Rol de la Enfermera; Servicios de Atención de Salud a Domicilio; Servicios de Atención a Domicilio Provisto por Hospital; Cuidados de Enfermería en el Hogar; Enfermería.

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INTRODUCTION

Home care (HC) is a type of health care that favors the actualization of new forms of care production and interdisciplinary practice, and it is in expansion in Brazil and worldwide⁽¹⁾. It is an alternative to hospitalization that decreases both the demand for it and length-of-stay. As a consequence, it reduces the costs and complication risks related to the hospital environment⁽²⁾. Moreover, the home has been recognized as a favorable environment for innovative and unique care, with the potential to offer care centered on users' demands and needs⁽¹⁾.

It is necessary to consider that home care is a healthcare intervention that requires qualified professionals, because it is known that this type of care demands the use of specific competencies, mainly linked to interpersonal relationships, in order to work with users, family members, and multi-professional teams. It also demands autonomy, responsibility, and technical and scientific knowledge that are inherent to the field. Thus, it is understood that HC work has a multitude of actions and specific complexities that demand professional experience and the search for home practice qualification⁽³⁾.

Studies reveal that the nurses' focus when administering home care is in both managing services and in direct care⁽⁴⁾. Another important factor is that these professionals perform a crucial role, both in coordinating health plans at homes and in the links they establish with users and family members⁽⁵⁾. Furthermore, this central role is even more evident when it is observed that it brings together families and multi-professional teams because, in general, nurses must train family caregivers, supervise nursing technicians and identify the need for other professionals⁽⁴⁻⁵⁾. Thus, for home-care practice, nurses must present both basic and advanced abilities. Competencies for this practice need to be investigated, disseminated, and systematized⁽⁴⁾.

However, there is strong evidence that Brazilian nursing training does not include the requirements for HC work, because there is a prevalence of curative training, centered on diseases and not on subjects, with a predominance of hospital-focused actions^(3,6). It can be noticed that nursing undergraduate education today has little space for concepts, individualities, and the necessary profile for home care.

Considering this gap in the learning process, in general, it is worth noting that home-care knowledge results, above all, from experience, learned from various daily HC situations. Thus, this process is somewhat unpredictable, because professionals may not have previously experienced this type of care during their undergraduate nursing learning process⁽⁴⁾. In this investigation, the authors believe that the acquisition of competencies resulting from handling unpredictable events is a rich specific feature of nursing practice at home.

With these consideration in mind, we ask: How is nursing practice in home-care services established? This study's

objective was to analyze scientific production on nursing practice in home care.

METHOD

An integrative review of the literature was chosen. This is a research method frequently employed in evidence-based practice. Its aim is to gather and synthesize prior results in order to formulate a comprehensive explanation for a specific phenomenon. Therefore, conclusions are established by critical assessment of various methodological approaches⁽⁷⁾.

This integrative review was conducted following these stages: creation of a guiding question; definition of databases and inclusion and exclusion criteria for studies/samples or searches in the literature; a definition of the information to be extracted from the studies selected; assessment of studies included in the integrative review; interpretation of results; and, lastly, presentation of review/synthesis of knowledge⁽⁷⁾.

Articles were identified through bibliographical searches conducted between January and July, 2015, in the following databases: the Medical Literature Analysis and Retrieval System Online (MEDLINE), searched through PubMed; Base de Dados Específica da Enfermagem (*Specific Nursing Database—BDENF*); the Índice Bibliográfico Espanhol de Ciências da Saúde (Spanish Bibliographical Index of Health Sciences—IBECS); and Literatura Latino-Americana e do Caribe em Ciências da Saúde (Latin American and Caribbean Literature on Health Sciences Information—LILACS), consulted through the Biblioteca Virtual em Saúde (Virtual Library on Health—BVS); and the Cumulative Index to Nursing and Allied Health Literature (CINAHL), accessed through the CAPES portal.

Articles published in English, Spanish, and Portuguese were included, with no limitations as to publishing dates, when presenting abstracts and information on nursing practice in home care.

Search strategy in the PubMed base used the following terms: ("Home Nursing"[Mesh]) OR ("Home Health Nursing"[Mesh]) OR ("Home Care Services"[Mesh]) OR ("Home Care Services, Hospital-Based"[Mesh]) OR ("Homebound Persons"[Mesh]) OR ("Home Nursing"[Title/Abstract]) OR ("Home Health Nursing"[Title/Abstract]) OR ("Home Care Services"[Title/Abstract]) OR ("Homebound Persons"[Title/Abstract]) AND ("Nurse's Role"[Mesh]) OR ("Nurse's Role"[Title/Abstract]). Equivalent strategies were adopted for the other bases.

At initial search, a total of 1,027 publications were found. By reading titles and abstracts, it was possible to exclude duplicates from different databases, studies that did not meet inclusion criteria or the proposed theme. Of those, 63 articles were chosen for full reading. Thirty-five were fully available and 28 had to be searched using the Bibliographic Commutation system. Of these, 22 were selected, and five were rejected

for not presenting serial number, year, or volume. One article with a repeated name was found and discarded. Thus, of the 57 articles read in full, 48 answered the guiding question, so they were the final sample in this review (Figure 1).

In order to validate the selection of publications for analysis, articles in the fourth phase were assessed by two reviewers from the team comprising four researchers. With their expertise in the area, they independently selected articles based on inclusion and exclusion criteria and guided by the research question. Each reviewer recorded their assessment and reason for inclusion or exclusion of articles in an instrument that contained their titles, abstracts, and databases.

The fourth phase's results were compared and disagreements were resolved through consensus between reviewers or with the inclusion of a third reviewer, when necessary. Among the 57 publications assessed in this stage, 48 were selected by both reviewers and included and four were not selected by either reviewer, being automatically excluded. There was a total of five disagreements (8.7%) among reviewers and, after reassessment, these articles were excluded for not addressing HC directly. This process to validate the selection of final samples allowed the inclusion of studies that were consistent, that contributed to reaching the objective and to the exclusion of others that did not meet the requirements.

In the research's fifth phase, publications were analyzed and data interpreted in an organized way and synthesized by creating a synoptic chart containing the following items: identification, authors, year and journals where the publications were published, location (country/city), objectives,

methodological design, main results, and description of nursing practice in HM.

Study quality was assessed based on the levels of evidence (LoE)⁽⁸⁾ classification. Publications were grouped as follows: level I - evidence obtained from results of meta-analysis of controlled clinical trials and with randomization; level II - evidence obtained from experimental design studies; level III - evidence obtained from quasi-experimental researchers; level IV - evidence obtained from descriptive studies or with qualitative approach; level V - evidence obtained from case reports or experience reports; level VI - evidence based on specialist opinions or based on standards or legislation. This classification made it possible to identify the profile of studies on the investigated theme.

Research observed the ethical aspects of research, respecting authors of the ideas, concepts, and definitions presented in the articles included in the review.

RESULTS

It was possible to select 48 articles that met the inclusion criteria to reach the proposed objective⁽⁹⁻⁵⁶⁾. The greatest number of publications came from MEDLINE (79%) and CINAHL (10%). There was a predominance of the English language (87.5%) in 42 publications, followed by four articles in Portuguese, and two in Spanish. The 48 selected articles were published between 1989 and 2014; 19% were dated 2006, 10.4% dated 2014, and 10.4% dated 2002, with a predominance of American (31.2%) and Canadian (23%) studies. The other articles come from the following countries: Brazil (8.3%); Japan (6.3%); Norway (4.2%); the Netherlands (4.2%); Sweden (4.2%); the UK (4.2%); Australia (4.2%); Spain (4.2%); Denmark (2%); Ireland (2%); and Iceland (2%).

Regarding types of studies included, level of evidence IV was present in 86% of the selected sample (18 qualitative studies, 18 literature reviews, and one experience report), level V in 8% (three reflection studies and one experience report), level of evidence I in 4% (two randomized studies), and level VI in 2% (standards guide).

When analyzing studies, it was found that nursing practice in HC is complex and has a variety of actions that enabled the construction of two thematic categories: "nursing actions in home care" and "necessary knowledge for nursing practice in home care."

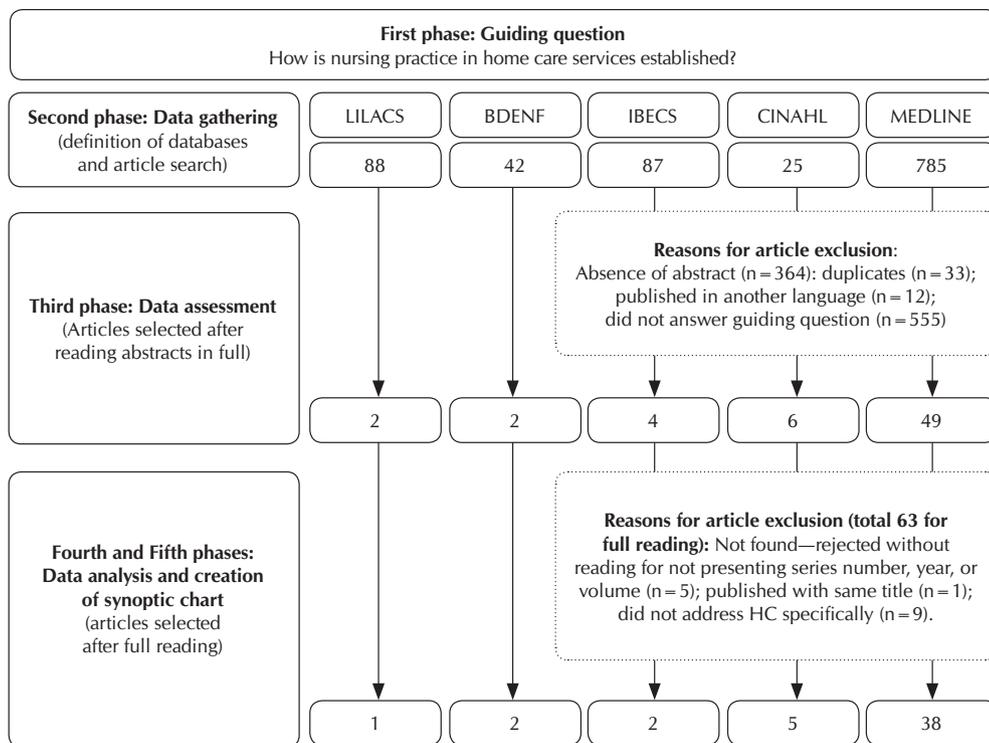


Figure 1 - Flow of study selection process for integrative review

Nursing actions in home care

Analysis of the articles shows that nurses have a central role in HC^(13,25,27,33,40,46). The relevance of their practice is in the fact that they are considered clinical specialists^(11,27,34,56), coordinators of care^(12,15,27,34,40,43), and case managers^(15,40,43), responsible for offering various care practices to patients⁽⁴⁰⁾ and also for performing important leadership roles^(27,40). In this regard, nurses have been portrayed in the literature as crucial professionals in the construction of this type of care⁽¹³⁾.

Nursing practice in HC is influenced both by patient profile and by the logic peculiar to homes. In HC, nurses offer care to a diverse profile, with a predominance of patients under palliative care^(12-13,22,27,33,50,52,55) and the elderly^(16,28-29,35) being noticed in this review, although analyzed articles have also reported care actions for children^(11,19,25) and young individuals⁽²⁸⁾ with complex needs, as well as mentally challenged persons^(14,27).

Review of the articles revealed that nurses conduct various actions in HC, such as: interpersonal support; health education for patients, family members; and caregivers; performance of technical procedures; and clinical and administrative supervision, as demonstrated in Chart 1.

Interaction among nurses and patients, family members, and/or caregivers is a fundamental aspect of the home context, being mentioned in 31 publications, as shown in Chart 1. Articles indicate that nurses must be able to construct effective relationships with patients. Negotiation and nurse-patient interaction stand out as care mediated by dialog^(16,26). The way roles and relationships are built, negotiated, and experienced

shows the relevance of the relationship between nurses and patients when defining their experiences and perceptions of the quality of care in general⁽¹⁶⁾.

A large part of nursing care in HC is dedicated to active listening to patients, in an effort to comfort them⁽¹⁸⁾. In one of the studies, nurses were named as the professionals most sensitive to patient demands, which turns the acts of being polite and offering dialog into care strategies, in tandem with conscience and responsibility⁽²⁰⁾.

Interpersonal interaction has a special place in home palliative care^(22,52), a context in which nurses focus continuous efforts on preparing families for the patients' evolution and for their responsibilities, facilitating care and offering emotional support⁽²²⁾.

In the relationship with caregivers, nurses act as facilitators, encouraging them to express their worries and experiences with patient care while searching for physical, emotional, and mental comfort for patients and caregivers⁽⁴⁸⁾. Moreover, in interpersonal relationships, nurses present themselves as open to others⁽¹⁰⁾ and are considered capable of caring with love, compassion, and confidence, acting as "counselors" because they listen and welcome families with their worries and fears⁽¹¹⁾.

Results of this review indicate that nurses are essential in home care, both for their specific knowledge of therapeutic projects and for being at the forefront when teaching patients and families necessary precautions, for example, when handling equipment safely and efficiently⁽¹¹⁾. Thus, nurses in HC conduct clinical and educational activities⁽²⁵⁾, being viewed as "technical experts."

Chart 1 – Characteristics of Activities Conducted by Nurses in Home Care, Belo Horizonte, State of Minas Gerais, Brazil, 2016

<p>Interactive actions</p>	<p>Relationship of help/Interaction^(14,17-20,24-25,29-30,35,42,44,46,48-49,54) Emotional, mental, or psychological support^(37,40,42,46,51,55) Communication^(12,18,21,51,56) Relationship of trust^(10,22,26,42,56) Negotiation^(16,21,26,52) Respect^(11,41,56) Dialog^(20,26) and listening⁽¹⁸⁾</p>
<p>Educational actions</p>	<p>Guidelines for families, caregivers, and/or patients^(13,19,25,27,29,32,36-40,44-46, 48,51,53) Development of teaching strategies⁽⁴⁸⁾ Learning about social resources⁽⁵¹⁾ Training of patients, family, and neighbor network and other sectors for risk prevention in emergencies⁽³⁸⁾ Guidelines for other nurses⁽⁴⁰⁾</p>
<p>Care actions</p>	<p>Medication management or infusion^(12,27-28,30,44-45,53-54) Acute care at home^(15,17, 23,27,31,46,54) Clinical handling of wounds^(9,28,46,51) Pain management^(29,44,46) Precautions in parenteral nutrition, peritoneal dialysis, and oxygen therapy⁽⁵⁴⁾ Home visits^(14,37,41,50) Risk assessment and prevention of complications^(19,45) Technical procedures: physical assessment^(37,46-47); personal hygiene^(27-28,51); enemas^(27,51); verification of vital signs⁽⁵¹⁾; bed care⁽²⁷⁾; walking exercises⁽⁵¹⁾; assistance for activities of daily living⁽²⁷⁾; mouth treatment⁽²⁷⁾; attention in emergency cases⁽²⁷⁾</p>
<p>Administrative actions</p>	<p>Clinical and administrative supervision⁽⁴³⁾ Planning and organization of Home Visits^(12,37,41) Care coordination^(12,15,27,34,40,43) Case management^(15,33,40,43)</p>

Various studies show that health education administered by nurses can improve knowledge for patients, caregivers, and family members in different situations of home care. This is an important aspect, and was mentioned in 21 articles, according to Chart 1.

In this context, it must be emphasized that these professionals must offer information in a timely and adequate manner, while considering the different skills, ages, cultures, languages, and preferences of patients, family members, and caregivers. This task demands high quality communication and knowledge translation⁽⁵⁶⁾, as well as creative strategies for a creative and efficient teaching process⁽⁴⁸⁾.

Some studies point to the role of nurses in the experience of patients and their families⁽¹²⁾. Furthermore, care education for patients and caregivers is a strategy for the maintenance of care⁽³⁴⁾. However, it must be emphasized that although teaching materials for nurses are plentiful, not all of them feel comfortable teaching in the home environment⁽⁴⁸⁾.

Results indicate that while some HC nurses basically perform patient visits and predefined care, or perform care in association with clinical supervision, others, described as administrative nurses, primarily conduct clinical and administrative supervision⁽⁴³⁾.

Home visits were mentioned as important aspects of this professionals practice^(14,37,41,50), requiring planning⁽³⁷⁾ and organization⁽⁴¹⁾, for example, when making decisions on the ideal moment for the next visit to patients and families, a process that is difficult for both novice and veteran nurses⁽⁵⁰⁾. Care planning in the home context is defined as a complex practice with various goals, including the relationship and assessment of demands and capacities of patient and family, workload, and resources for home care⁽¹³⁾.

As managers of care, home nurses assess patient demands in all aspects of health (physical, mental, social) and build care plans. Thus, they provide or organize services for prevention of increasing vulnerability or for avoiding increases in health problems⁽²⁷⁾.

Nurses are considered sources of expertise in clinical and technical actions⁽¹¹⁾. In the process of medication management, they must follow the preparation, verification, and administration of medication; update knowledge on medication; monitor treatment efficacy; and notify of adverse reactions⁽⁵³⁾. Special attention should be given to careful monitoring, which, if conducted in HC, has the potential to decrease the impact of adverse effects of medication⁽⁴³⁾. Moreover, the importance of standardizing practices for drug administration in home care is emphasized⁽⁴⁵⁾. Regarding wound handling, this action is a challenge in home care, and HC nurses have more knowledge than nurses from other care sectors^(9,28).

When it comes to pain management in home care, chronic pain is a widespread, complex problem, viewed as difficult to treat adequately and permeated by many challenges⁽²⁹⁾. Nursing interventions that help patients take control of their pain are considered useful. Among these actions, therapeutic shock⁽²⁹⁾, epidural analgesia handling⁽⁴⁴⁾ (United States), employment of non-invasive pain management techniques⁽⁴⁴⁾, and control and assessment⁽⁴⁶⁾ enable significant decreases in pain and anxiety for patients.

Nurses are considered responsible for acute care demands⁽²⁸⁾, such as post-surgery home care for myocardial revascularization⁽⁴⁶⁾. Another action that stands out in analyzed articles refers to the assessment and management of clinical risks at home as an action for decreasing problems⁽¹⁹⁾. Development and use of governing structures and clinical risk management are part of care for children with complex needs and their families⁽¹⁹⁾, of intercurrent cases in home care⁽³⁸⁾, and of the assessment of suspicion of biological agents⁽³⁹⁾.

Necessary knowledge for nursing practice in home care

Articles analyzed in this review demonstrate that nurses have to be prepared to practice under the unpredictable conditions^(13,15,30,41) that are inherent to home care. The HC space requires highly qualified nurses, with various abilities and commitment⁽³³⁾, who possess a wide range of clinical and care competencies and a high degree of autonomy to conduct their work, performing continuous monitoring of their patients, in chronic or acute conditions, in the family and community spheres, and who employ a balance of curative and preventive actions⁽³³⁾. In addition, their role in the practice of home care is based on the recognition of their competence regarding their skills, abilities, aptitudes, and experiences⁽¹⁸⁾.

However, concerning challenges inherent to the complexity of nursing practice in home care, it was possible to verify that insufficient training or little experience in HC services⁽¹⁹⁾ and lack of ability and knowledge⁽²⁸⁻²⁹⁾ can negatively influence home care. Analysis of the articles also indicated that these professionals work in environments that are completely different from the environments where they were trained⁽⁴⁹⁾. However, some of these challenges can be overcome by strengthening initiatives for professional training, for example, through adapting the curricula of nursing colleges and schools with the goal of training students in environments more adequate for home care⁽⁴⁹⁾.

In the home environment, it was possible to find various types of required skills employed by nurses^(13,23,30,35). An HC-expert nurse is capable of interacting with patients and families using technical and scientific, sociocultural, ethical and aesthetic knowledge, and also intuitive knowledge in a unique way, being capable of feeling and perceiving situations peculiar to home care and employing them for the common good⁽³⁵⁾.

Skills for perceiving issues and interpreting situations in the home can be influenced by prior knowledge, experience, education, cognitive strategies, care philosophies, and individual perceptions⁽¹³⁾. For this assessment, it is necessary to be professional⁽²³⁾, and to have practical experience^(13,23), knowledge⁽¹³⁾, personal intuition⁽¹³⁾, and decision-making abilities⁽²³⁾.

Knowledge for nursing practice in HC can be obtained by peer experience, experience learning⁽²⁸⁻²⁹⁾, evidence-based practice, and intuition⁽³⁰⁾. Because of the singular aspects of HC, nurses use theoretical knowledge in practice, but this knowledge has to be adapted according to reality⁽³⁰⁾, which makes flexibility crucial for work⁽¹³⁾. It is also necessary to correlate theory and practice in a continuous process of search and improvement, based on a political stance in home practice⁽³⁵⁾.

Furthermore, nurses' actions in HC involve reflective, not mechanistic, practice⁽³⁵⁾. Thus, the need for reflection on the development of work in the home environment was identified^(10,14-15,20,35). Reflection is essential for recognizing weaknesses and/or limits in situations that demand resignification of work in home care. As an example, it was observed that nurses' actions in the field of mental health and reflection on them enable nurses to acquire skills that help clients with mental illness⁽¹⁴⁾.

Reflective practice is important for developing competent work in the home context, which makes it impossible for nurses to work with strictly mechanized actions in this context, with no qualification and little humanization⁽³⁵⁾. Recommendations for practice involve ethical and critical reflection, professional autonomy, self-affirmation, and organizational support⁽²⁰⁾. Nurses' experiences and reflection on these experiences enable the adoption of effective actions in their HC practice⁽¹⁴⁻¹⁵⁾ and reinforce the need for spaces for reflection on care practices⁽¹⁵⁾.

DISCUSSION

Analysis of the methodological descriptions of the selected studies and their respective levels of evidence reveal that, when it comes to the theme of nursing practice in HC, there is a predominance of qualitative studies, literature reviews, and descriptive studies (86%), which makes it possible to infer that it is not a well-explored theme when developing studies such as meta-analyses and experimental studies. Most research has a low level of evidence⁽⁸⁾, an aspect that demonstrates that nursing still has to advance its clinical research.

In this review, it was possible to verify that actions conducted by nurses in the home context are defined by the employment of various technologies⁽⁵⁷⁾. The term "technology," adopted for the analysis of articles, was divided into: soft technology; soft-hard technology; and hard technology⁽⁵⁷⁾. Soft technologies are those employed to establish relations when workers deal with users, through hearing, establishing bonds, and trust. Soft-hard technology expresses the organization of structured skills through protocols, manuals, flows, and specific knowledge. Hard technologies include equipment, machines, instruments and laboratories, imagery, and drug exams.

Review demonstrated that actions performed by nurses in homes employ soft, soft-hard, and hard technologies. In the field of soft technologies, interaction between nurses and patients, family members, and/or caregivers is an important action in HC. Thus, soft care technologies are employed in actions such as active listening, support, comfort, respect, the relationship between help and dialog, effective communication, and establishment of a relationship of confidence with users and family members, which is a fundamental part of these professionals' practice in HC⁽⁵⁸⁻⁶⁰⁾.

Analysis reveals that this process of bonding and interpersonal relationships favors the development, in nurses, of skills and professional competencies adjusted to the needs, demands, and unexpected outcomes that arise in the daily practice of HC.

In the sphere of soft-hard technologies, results reveal the frequent need to teach necessary care actions to patients and families. Nurses that practice in-home care must be sensitive to client demands and, more so, demonstrate a willingness to teach and an interest in seeking well-being for those under their care. Thus, to take the most advantage of the home environment of patient learning, nurses must assess, project, develop, and implement teaching plans that are unique to each situation⁽⁶¹⁾. Moreover, health education is noted in this review as an important practice of HC nurses, a practice that helps patients, families, and caregivers to build knowledge and skills⁽⁵⁸⁻⁶³⁾, thus ensuring their understanding of the therapy project⁽⁵⁾ and continuity of care when the team is absent. Health education is, thus, a technology that must be explored and valued in home-care services so that it is effective.

Analysis revealed that home visits are soft-hard technologies that require planning, organization, and decision-making. Other actions carried out by nurses in home care that incorporate soft-hard technologies are: patient care; clinical supervision; and administrative supervision⁽⁵⁸⁾. It is also possible to notice that, in home care, the nursing professional is considered a source of specialized clinical and technical procedure knowledge. Thus, in the home context, handling of wounds⁽⁶⁾, risk management⁽⁵⁸⁾, and pain management stand out in the list of their specific knowledge, among those considered soft-hard technologies unto themselves.

Hard technologies are employed especially when conducting some specific care actions, especially intravenous antibiotic therapy, parenteral nutrition, peritoneal dialysis, and oxygen therapy. Medication administration, as a hard technology, requires standardization⁽⁵⁹⁾. It should be noticed that even in actions based on essentially hard technologies, in HC nurses also employ soft and soft-hard technologies. From this perspective, their actions in the home context are permeated by bonds, dialog, negotiation, support, and comfort for patients and families and health education aimed at improvements in home care.

Thus, nursing practice in home care incorporates these different and complementary types of technologies. They carry out care, educational, and care management actions and qualify attention through technological innovation, prioritizing the use of soft and soft-hard technologies. Moreover, the nurses' ability to reflect during their HC practice, which is permeated by listening, support, and knowledge-centered interpersonal relationships, varied skills, experiences and responsibilities contributes for their practice to be considered central to the development of complex action in home care.

Analysis of the articles also made it possible to learn that HC has specific aspects because of unexpected circumstances that take place in homes. It must also consider the daily lives of families in their domain, customs, and culture, with a sensibility and resolution in a variety of situations that arise in the home context⁽²⁻³⁾.

It can be perceived that nursing practice in HC happens in the articulation of skills that enable the mobilization of competencies through the acquisition of knowledge associated with experiences in work and reflection (Figure 2).

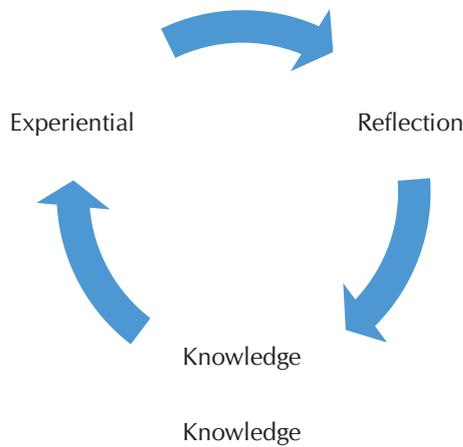


Figure 2 – Skills For nursing practice in home care, Belo Horizonte, state of Minas Gerais, Brazil, 2016

Considering the specificity and complexity of home care, HC practice requires nurses to be qualified and have unique competencies, because lack of those can cause negative interference⁽⁵⁸⁾. Home-care practice also requires the use of specific competencies, such as skills related to interpersonal relationships, in order to work with patients, families, and multi-professional teams, in addition to technical and scientific knowledge⁽³⁾. This results in the need for specialized training to respond to the increasing complexity of the HC field.

However, in nursing education there is a predominance of the biomedical teaching model - in other words, disease-centered care, not subject-centered, with a focus on hospital care^(3,6). This makes it possible to recognize that the home environment presents specific aspects that must be considered during the educational process⁽⁶⁴⁾.

For HC practice, it is crucial that nurses have technical and scientific knowledge, as well as sociocultural, ethical, aesthetic, and intuitive knowledge, in a constant search to remain up to date. Such knowledge can be acquired through experience exchange, learning through experience, and intuition, as well as through studies focused on evidence-based practice. It should be stressed that use of knowledge needs to be adjusted to home care, given its singular nature. Knowledge employed in home care results, above all, from experience, including learning how to respond to unforeseen situations, a particular aspect of home care⁽⁴⁾. Home-care nursing thus involves complex aspects and requires flexibility, creativity, and adjustment to the realities of environmental, cultural, and social differences⁽⁶⁵⁾. Furthermore, home care enables reflecting on the relationships among health workers, patients, and families from a more horizontal perspective⁽³⁾.

With this in mind, it can be concluded that nursing practice in homes demands the use of various areas of knowledge and

elements of innovation that must be incorporated into these professionals' training.

CONCLUSION

Studies selected for this review demonstrated that nursing actions in HC go beyond clinical and administrative supervision and care mediated by relational, educational, and technical procedures, requiring different technologies to be used in the home context. Nurses perform crucial roles in HC, both in coordinating care plans at home and in the bonds they establish with users, families, and caregivers.

It is worth noting that these characteristics can also be present in health work in other contexts. However, there is the additional fact that HC is a non-traditional health care space, in which professionals perform care in homes, i.e., the patients' domain. Furthermore, such care goes beyond a variety of practices and technologies. It is unique, especially when it comes to the central role of users and families in structuring and managing therapeutic roles.

Analysis of the articles made it possible to learn that the role of nurses in homes has unique features and, as consequence, work process is influenced by the profile of the individual patient and by the logic that organizes their homes.

It was also possible to learn that insufficient training or little experience with HC and lack of preparation and knowledge can influence HC, generating challenges for practicing nursing, which can be alleviated by strengthening initiatives for professional training.

It became clear that, in the context of homes, various kinds of knowledge are necessary, with the interaction between theory and practice being crucial, in a constant improvement of actions based on a political stance when practicing in homes. Knowledge is acquired through sharing peer experiences and also learning from one's own experience.

The need for reflexive practice in nursing work in this type of care is also clear, because in it there are events that can bring challenges to these workers' daily lives. Some difficulties can be overcome through improving professional training, while others require intuition and reflection on care.

Therefore, home nursing practice is fundamental and widespread. Relational and educational actions stand out as necessary even to technical care. The review evidences that nurses use a variety of technologies in the HC context, especially soft and soft-hard.

It must be emphasized that this study's evidence does not represent a guarantee of the feasibility of all actions in all HC scenarios, because such activities are considered complex and present unique features case by case. Furthermore, it is relevant to conduct research that describes nursing practice and the training process for HC, with the aim of analyzing these workers' potential for responding to demands for complex care by their patients.

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