

SKILLS AND ATTITUDES OF NURSES IN HOME CARE: BASES FOR PREVENTION OF RISK OF INFECTION

HABILIDADES E ATITUDES DO ENFERMEIRO NA ATENÇÃO DOMICILIAR: BASES PARA A PREVENÇÃO DOS RISCOS DE INFECÇÃO

HABILIDADES Y ACTITUDES DE LOS ENFERMEROS EN LA ATENCIÓN DOMICILIARIA: BASES PARA LA PREVENCIÓN DEL RIESGO DE INFECCIÓN

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ABSTRACT

This study aimed to investigate experts' opinions of the skills and attitudes necessary for nurses to work in the prevention and control of infections in Home Care. This quasi-experimental study used the Delphi technique and was conducted at Basic Health Units in Teresina, Piauí, Brazil and Universities from four regions of Brazil. Study participants were 19 nurses who worked in the Family Health Strategy and 15 researchers, recruited using the snowball method. Data analysis was performed using ALCESTE software (Alceste 4.8) and quartiles were used for descriptive analysis. Experts' consensus evaluation of required skills and attitudes was organized in the form of a list of competencies. The work of home care nurses is characterized by originality, especially as a result of the lack of an infection control program. This study identified a series of aspects related to the skills and attitudes required of nurses in the organization and development of the labor process. These were based on individual and collective consciousness and professional commitment and were supported by scientific and technical principles, ethical responsibility, and values.

Keywords: Home Nursing; Infection; Infection Control; Professional Competence; Nursing.

RESUMO

O estudo objetivou investigar sobre habilidades e atitudes do enfermeiro para atuar na prevenção e controle das infecções em atenção domiciliar a partir da opinião de especialistas. Pesquisa de natureza quase-experimental, subsidiada na Técnica Delphi, realizada nas Unidades Básicas de Saúde de Teresina-Piauí, Brasil e universidades de quatro regiões do país. Os participantes foram 19 enfermeiros atuantes nas equipes da Estratégia Saúde da Família e 15 pesquisadores recrutados pelo método snow-ball. Para a organização dos dados utilizaram-se o software Alceste 4.8 e a análise descritiva em quartis. Após avaliação de consenso dos especialistas elaborou-se uma lista de competências à luz das habilidades e atitudes. Diante da originalidade que caracteriza a atuação do enfermeiro na atenção domiciliar, principalmente pela falta de um programa de controle de infecções, deflagrou-se uma série de aspectos que sustentam as habilidades e atitudes dos enfermeiros na organização e no desenvolvimento do processo de trabalho, apoiado na consciência individual e coletiva, bem como no compromisso profissional, configurados pela responsabilidade ética, valores e princípios técnico-científicos.

Palavras-chave: Assistência Domiciliar; Infecção; Controle de Infecções; Competência Profissional; Enfermagem.

RESUMEN

El presente estudio tuvo como objetivo investigar las habilidades y actitudes de los enfermeros en la prevención y control de infecciones de la atención domiciliar según la opinión de expertos. La investigación, de naturaleza cuasi-experimental y en base a la técnica Delphi, se realizó en las Unidades Básicas de Salud de Teresina-Piauí-Brasil y en distintas universidades de cuatro regiones del país. Participaron 19 enfermeros que trabajaban en equipos de la Estrategia de Salud de la Familia y 15 investigadores contratados por el método snow-ball. Para organizar los datos se utilizó el software Alceste 4.8 y análisis descriptivo por cuartiles. Después de evaluar el consenso de los expertos se elaboró una lista de competencias en base a las habilidades y actitudes. Dada la originalidad que caracteriza la tarea de los enfermeros en la atención domiciliar, principalmente por no haber ningún programa de control de infecciones, surgieron aspectos que sustentan las habilidades y actitudes de los enfermeros en la organización y desarrollo del proceso de trabajo, basados en la conciencia individual y colectiva, así como en el compromiso profesional, la responsabilidad ética y los valores y principios técnico-científicos.

Palabras clave: Atención Domiciliar de Salud; Infección; Control de Infecciones; Competencia Profesional; Enfermería.

INTRODUCTION

Infectious diseases are an important cause of morbidity and mortality in most of the world, especially in people who live in poverty and extreme social exclusion, and have poor housing and sanitation. These conditions exponentially increase their vulnerability to infections. For this reason, risk prevention and control activities need to form the basis of the programs implemented in the home environment.¹

Home care (HC) emerged as an alternative to hospital care. It represents the possibility of retaking the concept of home as a space for the production of care and stands out as a “device for the deinstitutionalization of care and introduction of new technological arrangements in health care”, holding great potential for innovation.²

HC makes deinstitutionalization possible and avoids unnecessary hospitalizations through the provision of immediate care services and by supporting primary care teams in their care of patients who need (and benefit from) home health care. It is implemented in accordance with the principles of the Brazilian Unified Health System (SUS), especially, namely, access, user embracement and humanization. Moreover, it can be performed by the Family Health Strategy team in modality 1 (HC1).³ It is a consensus among infectologists that the infection surveillance process in hospitals is systematized and supported by the legislation of the Ministry of Health of Brazil. However, it coexists with precarious information about the occurrence of extra-hospital infections and the almost non-existent information about household infections.^{4,5} In addition, health care providers working in primary care may experience feelings of helplessness due to the diversity of situations and social, cultural and environmental conditions encountered in each household. This is particularly true for nurses who provide direct and uninterrupted care.

Given the above, this study aimed to identify aspects related to the skills and attitudes necessary for successful nursing practice in the prevention and control of infections in the home setting. This paper thus represents a contribution to the care management process and will certainly trigger reflections on the appropriate training of nursing human resources to satisfy new health care requirements. The relevance of the study is also evident in the context of the growing participation of nurses in home care programs, and the recent regulation of home care as a care modality.

METHODS

This quasi-experimental study used the Delphi technique to identify the skills and attitudes necessary for nurses to work in the prevention and control of infections in Home Care. An essential feature of this research type is that researchers control and manipulate the conditions in which they are interested.

Using a simplistic approach, the aim is to, by means of experience, make a change in the value of an independent variable (experts' opinion) and investigate the effect of this change on another dependent variable (competencies).^{6,7}

The Delphi technique is characterized as a method for assessing the knowledge of a large group of experts through questionnaires resent until the responses are convergent and there is a consensus inside the group.⁸ The choice of this technique is justified by the fact that there is a lack of studies on skills required from nurses for the implementation of infection prevention and control actions in HC. Moreover, this technique allows the involvement of professionals from different regions of Brazil, ascribing great value to regional diversity. This study was conducted at 30 Basic Health Units (BHU) in the North, East and Southeast of Teresina, PI, Brazil. These units fully implement the Family Health Strategy, by providing type 1 home care (HC1). In addition to the BHU, 13 universities and colleges (located in the South, Southeast, Northeast and Midwest of Brazil) participated in this study. The teaching staff of these institutions was constituted by researchers in the fields of infection prevention and control, and public health, with emphasis on home care.

Participants were selected according to their experience and knowledge. The first group was composed of 19 nurses who worked in the Family Health Strategy (FHS): two team coordinators and one coordinator of epidemiological surveillance. The second group was recruited by the *snowball method* of sampling,⁹ by which the next person to be contacted is someone recommended by the previous person. This was done until 15 researchers from four different regions of Brazil were selected to participate in the study.

The Delphi technique was applied in three stages, called “subsidized” rounds in previous studies.¹⁰⁻¹² The first stage aimed at compiling an initial list of competencies. Data collection was performed by sending forms to be completed and returned by participants via *e-mail*. 214 (111 general and 103 specific) competencies were identified. Data analysis was performed using the *ALCESTE software* (Alceste 4.8), which analyzes the co-occurrence of words in sentences, in order to organize and summarize the most relevant information. Its methodological basis is a conceptual approach of logic and lexis.¹³ The analysis located 48 Elementary Context Units (UCE): 26 general and 22 specific. These units were used to develop an instrument to operationalize the second round of the Delphi technique. In this second round, participants were asked to evaluate the importance of each competence, using Likert-scale questionnaires.¹⁴ Consensus was defined as agreement by at least 75% of the group in scoring competencies as “important” or “very important”. One competence was excluded from the previous list for not achieving this target.

In the third stage of agreement assessment, a final list of competencies was compiled. Competencies for which the desired levels of consensus had not been achieved in the previous round were excluded from the list. In the end, 47 competencies reached the desired percentile. The study project was approved by the Research Ethics Committee, protocol number 102.196. All participants signed an informed consent form, responding to the ethical principles of Resolution 466/2012 of the National Health Council.¹⁵

RESULTS AND DISCUSSION

The competencies required from nurses to work in the prevention and control of infection in home care that were highlighted by the experts in the three stages of the Delphi technique were organized and analyzed the conceptual and adapted bases.¹⁶⁻¹⁸ Thus, the presentation and discussion of the results obtained is divided into two categories: skills (management, planning, communication, evaluation and "motivational skills") and attitudes (values and aspects of personality).

CATEGORY "SKILLS"

CATEGORY "MANAGEMENT SKILLS" (MS)

This category emphasizes the importance of training multidisciplinary teams and providing them with the same goal. The basis of this management model is the formation of "production units", with independent professional teams who are committed to and feel responsible for the health of the population, and, at the same time, are have some degree of job satisfaction. According to the experts' opinion, they should:

Be able to work in teams, in order to provide a comprehensive, multi-/inter-/transdisciplinary care to patients, considering the complexity and dynamics of home care work, as well as the multiple realities, knowledge and skills of communities.

Be able to administer and manage health services, physical and material resources, and information.

With regard to aspects related to technological density and complexity, it is important to note that HC in the context to primary care is often viewed in a simplistic way as a group of low complexity activities, because it uses lower density technologies. When BHC is considered from the perspective of comprehensive care and bonding, there is the use of highly complex technologies in this context. It requires a set of knowledge, skills and attitudes that are intrinsic to the relationships

that are permanently established in every encounter between professionals and health care users, and requires the ability to support and cope with the different individuals and differences between individuals:¹⁹ "being able to supervise the care provided at home by the nursing staff under their responsibility, following the principles of participatory management."

The description of this competence stresses the need for nurses to recognize their leading role in the nursing team or even in the health care team that performs home care, by being able to supervise the care provided by nursing technicians in order to ensure the quality of care received by home care patients. It is also necessary that the health care team and these professionals are able to recognize household infection risks, and prevent and control the transmission of infectious agents by using quality materials in the provision of health care services, among other measures.

CATEGORY "PLANNING SKILLS" (PS)

Being able to recognize the mission of home care and to properly plan infection control and prevention strategies (actions and goals), i.e., having the ability to recognize demands and cater to them.

Being able to train home care professionals to act in the prevention and control of infectious diseases.

Professionals need to learn and update their knowledge continuously. They should learn to learn, take responsibility for, and commit themselves to the education and training of future generations of professionals, not only by transmitting knowledge, but also by creating conditions for a mutual exchange of information between current and future professionals.¹⁰

Being able to develop teaching strategies on prevention, control and treatment of infections for lay home caregivers who are responsible for the comprehensive home care of older patients and bedridden people.

In health education situations in which community members (including lay caregivers) are actively involved, nurses can share knowledge specific to their field of practice in order to enable health care users to act as facilitators in the prevention and control of infections in home care. With regard to lay caregivers, it is necessary that nurses develop health education actions to construct knowledge through dialogue, reflection, questioning and shared actions. This could contribute to the achievement of changes in the behavior and lifestyle of caregivers and the people they care for: ¹⁰ "being able to plan and implement health care activities such as health promotion and protection programs, both at individual and collective level".

The Ministry of Health began a systematic process of training SUS managers and professionals in order to support them in the task of planning and evaluating health promotion strategies in the various regions of the country.²⁰ In this process, it was emphasized the importance of analyzing some fundamental elements for the practice of health promotion, such as the concept of sustainability, which, according to these authors, refers to the ability of knowing whether a health care action will “survive”. In other words, whether they will continue to exist even after a governmental transition; whether there will be a consolidation of these actions, so that they produce significant changes in the living conditions of the population; and, finally, whether the effects of these strategies/initiatives will last for a long time.

Being able to develop and implement protocols for the prevention and control of infections in home care.

Being able to organize and participate in committees for infection control in primary care.

Being able to develop, participate in and apply research findings and/or other forms of knowledge production (programs, projects, scientific events).

These skills are also in line with public policies for the prevention and control of hospital infection (such as Ordinance No. 2616 of 1998), and epidemiological surveillance,²¹ which determine the creation of programs, commissions and services for prevention and control of infections in all hospital institutions. The challenges and difficulties of implementing this model in other health-care settings are undeniable.

Although health care-associated infections represent a significant public health problem in Brazil and in the world, basic health care, and especially home care, are still unable to satisfactorily prevent and control them. This is due to the fact that Basic Health Units suffer from a severe shortage of human and material resources, there is a lack of commissions and programs for infection control in these settings, and many professionals who work in this area do not possess the adequate knowledge for meeting the role responsibilities. This can result in higher rates of infection in these services, undetected outbreaks, propagation of bacteria resistant to many antibiotics, and high occupational risk.

Thus, given the lack of a single implementation regulation on infection control in HC in Brazil, infection control runs according to rules and routines that are based on professionals' previous experience working in hospitals and/or on common sense. It involves preventive and educational activities, ranging from guidance on biosecurity and accident prevention, to isolation measures, and instructions for the proper cleaning and disinfection of health care items.

CATEGORY “COMMUNICATION SKILLS” (CS)

The category “communication” refers to the ability to disperse information in a clear and concise manner. When discussing the concept of competence, scholars traditionally place emphasis on the importance of communication in the development of a management model for organizations. This is because to communicate is to understand “the other” and ourselves. For that, the professional should be prepared to share standards and make agreements on common organizational goals:²² “being able to establish an ongoing dialogue, with sensitivity to make deals and working contracts, and review these aspects whenever necessary”.

Thus, if a nurse intends to produce quality health care, it is necessary that he/she not only intervene in patients who have a certain disease, but also understand them in a more complex way, beyond their diseases. This makes sensitive listening a core competence to be acquired.

To achieve this, it is necessary to invest in the development of communication skills during the training of nurses, given that this skill enables the whole process of relations between people and requires the acquisition of conceptual, procedural and contextual knowledge.

CATEGORY “EVALUATION SKILLS” (ES)

This category refers to the ability to ascertain the actions taken and the results obtained, analyze the causes for their success or failure, and characterize individuals and their context.

Being able to perform individual and collective evaluations of patients who receive home care, taking into consideration the way they live, and the possibilities and practices to prevent and control common infections.

The competence mentioned above describes skills that corroborate the recommendations of the APIC/JCAHO Infection Control Workbook¹, especially when it states that evaluation make it possible to improve the quality of care, because it enables the identification of successful activities and activities that need to be modified in order to improve the results of infection control programs.

CATEGORY “MOTIVATIONAL SKILLS” (MOS)

It is the ability to influence the interests and motives of individuals in order to encourage them to participate effectively in the proposed actions, overcoming difficulties and barriers.

Being able to promote socialization and autonomy in order to reduce the occurrence of infections by raising the awareness of individuals and their families about the importance of preventing infectious diseases, which occurs when personal and household hygiene habits are developed.

In order to promote autonomy, care delivery should be cross-sectional, multidisciplinary and inter-institutional. Thus, ensuring the validation and sustainability of human existential dignity prevails over biological survival. Human attitude and attention precede technical skills and competencies, but does not exclude them. The development of operational, educational, political, social, cultural and managerial strategies in all health care levels is essential for the effectiveness of the process, because they will enable the fulfillment of values and responsibilities that exist in their content in a coherent and shared way, adding new knowledge to it.²³

CATEGORY “ATTITUDES” (AT)

This category is directly related to professional ethics, because it refers to the behavior adopted by nurses in the most different daily work situations, based on their moral and ethical values.

Being able to demonstrate leadership, commitment, safety, responsibility and empathy for the team and the population. Showing high self-control and commitment in the face of conflict situations, in order to make decisions with initiative and creativity.

Showing recognition that health is a universal right and a duty of the State, by acting according to the Humanization Policy of the Unified Health System (SUS).

Thus, it is imperative that home care organizations formulate instruments to standardize infection control practices in HC. These instruments should include not only aspects related to safety in the performance of procedures, but also encompass the singularities of the family panorama, seeking to break with “fragmented” health care practices by implementing actions centered on the user.

The analysis and discussion of the data revealed the diversity of skills and attitudes required from home care nurses. These health care providers are constantly required to assume different attitudes and make important decisions in the face of the adversities that arise during work. Thus, due to the lack of protocols and public policies for the prevention and control of infections in home care, ethical attitudes are often shaped and adapted in accordance with the diversity of situations.

FINAL CONSIDERATIONS

To date, there are few studies investigating biological risks in home care settings. As a space for the delivery of care, however, the home can also present a risk to professionals and pa-

tients. Therefore, the application of and adherence to all safety principles should be emphasized and ensured. Several international guidelines have tried to guide and organize those practices developed in the context of HC, based on professionals' previous hospital experiences or common sense.

The work of home care nurses is characterized by originality, especially due to the lack of an infection control program. In this study, we could identify a series of aspects related to the skills and attitudes required from nurses in the organization and development of the labor process. These are based on individual and collective consciousness, and professional commitment, and supported by scientific and technical principles, ethical responsibility and values.

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