



## Nursing interventions related to health promotion in hypertensive patients

*Intervenções de enfermagem relacionadas à promoção da saúde em portadores de hipertensão*

*Intervenciones de enfermería relacionadas a la promoción de la salud en portadores de hipertensión*

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### ABSTRACT

**Objectives:** To identify the health promotion competencies of nursing interventions for patient with hypertension. **Methods:** The methodology of an integrative literature review was followed, using the eight competencies for the practice of health promotion that were defined at the Galway Consensus Conference. Sixteen articles were analyzed. **Results:** The domains of competence for health promotion practice that were most evident were: catalyzing change, assessment of needs, and partnerships. Only one article mentioned the use of nursing taxonomies for planning care in patients with hypertension. **Conclusion:** The results of this study will support nursing competencies for practicing health promotion in patients with hypertension.

**Keywords:** Nursing; Health promotion; Hypertension; Evidence based nursing;

### RESUMO

**Objetivos:** Identificar as competências de promoção da saúde em intervenções de enfermagem em portadores de hipertensão arterial. **Métodos:** Seguiu-se a metodologia de revisão integrativa da literatura, utilizando as oito competências para a prática de promoção da saúde definidas na Conferência de Galway. Foram analisados 16 artigos. **Resultados:** Os domínios de competência para a prática de promoção da saúde mais evidenciados foram Catalisar mudanças, Avaliação das necessidades e Parcerias. Apenas um artigo mencionou o uso das taxonomias de enfermagem para o planejamento da assistência em portadores de hipertensão arterial. **Conclusão:** Os resultados deste estudo poderão subsidiar as competências dos enfermeiros para a prática da promoção da saúde em portadores de hipertensão arterial.

**Descritores:** Enfermagem; Promoção da saúde; Hipertensão; Enfermagem baseada em evidências

### RESUMEN

**Objetivos:** Identificar las competencias de promoción de la salud en intervenciones de enfermería en portadores de hipertensión arterial. **Métodos:** Se siguió la metodología de La revisión integrativa de la literatura, utilizando las ocho competencias para la práctica de la promoción de la salud definidas en la Conferencia de Galway. Fueron analizados 16 artículos. **Resultados:** Los dominios de competencia para la práctica de promoción de la salud más evidenciados fueron Catalizar cambios, Evaluación de las necesidades y sociedades. Sólo un artículo mencionó el uso de las taxonomías de enfermería para la planificación de la asistencia en portadores de hipertensión arterial. **Conclusión:** Los resultados de este estudio pueden subsidiar las competencias de los enfermeros para la práctica de la promoción de la salud en portadores de hipertensión arterial.

**Descriptorios:** Enfermería; Promoción de la salud; Hipertensión; Enfermería basada en la evidencia

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## INTRODUCTION

Over the course of its history as a profession, nursing has attempted to keep pace with societal changes. Consequently, nursing professionals have been required to reflect on the client care process to provide individualized care and health-promotion efforts. As a result, nurses have been developing awareness of care in practice, teaching, theory and research and building a theoretical body specific to nursing<sup>(1)</sup>.

According to belief, nurses, as members of the multidisciplinary health team and leaders of the nursing team, should develop safe and effective interventions while taking into account health promotion. Such care practices improve the quality of patient care and contribute to the recognition of nursing's importance at any level of health care<sup>(2)</sup>.

Many publications address nursing care for patients with arterial hypertension. However, the development and implementation of health promotion strategies targeted toward this population are inadequate. Within this scope of action, the nurse plays a key role in caring for patients with arterial hypertension because, in face of the increasing epidemic of diseases, health promotion interventions provide illness control, prevent complications and improve the quality of life of patients and their families.

According to the Ottawa Charter, health promotion is a process that enables community members to take actions that improve their quality of life and health and participate more actively in the control of this process. To achieve a state of complete physical, mental and social well-being, groups and individuals should be able to identify their aspirations, satisfy their needs and favorably modify their environments<sup>(3)</sup>.

Nurses must incorporate specific competencies to provide health promotion care for patients with arterial hypertension. The competencies required for health promotion and health education were defined at the Galway Conference, held in Ireland in June 2008. A major focus was the importance of health professionals' qualifications for addressing acute and chronic health problems, including the development of competencies<sup>(4)</sup>.

The domains of competency defined at the Galway Conference were Catalyzing Change, Leadership, Assessment of Needs, Planning, Implementation, Impact Evaluation, Advocacy and Partnerships<sup>(4-5)</sup>.

The following question arose from this context: Which interventions are nurses using to promote the health of patients with hypertension?

The aim of the present study was to identify the health-promoting competencies in nursing interventions for patients with arterial hypertension via a review of published articles. It is hoped that this study will contrib-

ute to a critical reflection on the impact of nursing care practice on health promotion for individuals with arterial hypertension by providing a summary of the available knowledge regarding these competencies.

## METHOD

An integrative review method was chosen. This method enables the search, critical evaluation and synthesis of the available evidence on a certain topic, and its final product is the current state of knowledge on that topic, the implementation of effective interventions in health care and the identification of gaps that can direct future research<sup>(6)</sup>.

The integrative literature review was performed using the following steps: identification of the research topic and purpose of the study, literature search, evaluation, data analysis and presentation<sup>(6)</sup>.

Articles were selected via *online* access to five databases: Latin American and Caribbean Health Sciences Literature (Literatura Latino-Americana em Ciências de Saúde [LILACS]), PubMed (U.S. National Library of Medicine and National Institutes of Health), the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Scopus and Cochrane. Several databases were used to broaden the scope of the survey, thus minimizing potential biases.

The literature review was conducted in September 2009 using Virtual Health Library (Biblioteca Virtual em Saúde [BIREME]) and Medical Subject Headings (MeSH) descriptors in Portuguese, English and Spanish.

The inclusion criteria for the references used in the present review were the following: full articles available electronically; articles available in Portuguese, English or Spanish; full articles that addressed nursing interventions related to health promotion in adults with arterial hypertension; and articles that respond to the research question. The article selection process is shown in Table 1.

It should be noted that articles that were initially unavailable in the databases during the data collection period were searched for in the periodical portal of the Brazilian Federal Agency for Support and Evaluation of Graduate Education (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior [CAPES]).

The results obtained from the study were presented in a table format and analyzed according to the eight competencies for health promotion practice, as defined at the Galway Conference and published by several authors<sup>(4-5)</sup>.

## RESULTS

All of the 16 articles selected had been published after 2003, seven in American countries and four in European countries. According to the classification of

**Table 1.** Distribution of articles found and selected.

Articles/Database	LILACS	PUBMED	CINAHL	SCOPUS	COCHRANE	Total	%
Found	1	5	373	47	19	445	100
Excluded	1	5	363	41	19	429	96.4
Selected	0	0	10	6	0	16	3.6

the study's evidence level <sup>(7)</sup>, nine were classified as Level VI and only one as Level I. It should be noted that the majority of the articles (10) focused on more than one competency domain.

Arterial hypertension is a chronic disease that responds effectively to changes in lifestyle and clinical interventions focused on health promotion <sup>(8)</sup>. The domains of health promotion competency that were most evident in the selected articles were Catalyzing Changes, Assessment of Needs and Partnerships. It is noteworthy that all of the nursing interventions described for patients with arterial hypertension were related to a domain of health promotion competency that was proposed at the Galway Conference. The domains and nursing interventions associated with health promotion are shown in Figure 1.

## DISCUSSION

The Leadership domain, which guides strategies and opportunities for participating in the development of healthy public policies, mobilization and management of resources for health promotion and capacity building, was not identified in any of the selected articles <sup>(4-5)</sup>

Nurses play an important role in the detection, monitoring, treatment and prevention of diseases and in health promotion in the community <sup>(9)</sup>. Consequently, health education and empowerment were the main nursing interventions used to promote health in patients with arterial hypertension within the Catalyzing Change domain, which focuses on enabling changes and empowering individuals and communities to improve health <sup>(4-5)</sup>.

**Figure 1.** Distribution of articles according to domains of competency and nursing interventions. Fortaleza, 2009

Domain of competency	Nursing interventions
1. Catalyzing Change	<ul style="list-style-type: none"> <li>- Patient empowerment<sup>(10-11,13-19)</sup></li> <li>- Health education<sup>(8-9,1-15,18)</sup></li> <li>- Nurse-patient relationship<sup>(18)</sup></li> <li>- Patient-centered treatment<sup>(10,15)</sup></li> <li>- Emotional support<sup>(18)</sup></li> <li>- Sexual counseling<sup>(17)</sup></li> <li>- Activities designed to promote health<sup>(16)</sup></li> </ul>
2. Leadership	- No specific interventions were described for this domain.
3. Assessment of Needs	<ul style="list-style-type: none"> <li>- Identification of health threats<sup>(12,15,19)</sup></li> <li>- Evaluation of lifestyle<sup>(14-15)</sup></li> <li>- Evaluation of the psychosocial context<sup>(12,15)</sup></li> <li>- Management of clinical cases<sup>(9)</sup></li> </ul>
4. Planning	<ul style="list-style-type: none"> <li>- Health care team planning for health promotion<sup>(16,18-19)</sup></li> <li>- Use of theoretical concepts in care planning<sup>(8,20)</sup></li> <li>- Use of nursing taxonomies in care planning<sup>(18)</sup></li> </ul>
5. Implementation	<ul style="list-style-type: none"> <li>- Coordination of services to maximize independence<sup>(18)</sup></li> <li>- Teamwork<sup>(16)</sup></li> </ul>
6. Impact Evaluation	- Evaluation of health promotion activities <sup>(16,20)</sup>
7. Advocacy	- Patient advocacy <sup>(9)</sup>
8. Partnerships	<ul style="list-style-type: none"> <li>- Partnerships between health professionals and patient<sup>(18-19)</sup></li> <li>- References to other health professionals and/or institutions<sup>(9,14)</sup></li> <li>- Multidisciplinary team<sup>(14,16)</sup></li> </ul>

Health education is designed to improve health by increasing people's theoretical and practical knowledge and to encourage changes in attitude regarding health behaviors<sup>(10)</sup>.

In the context of arterial hypertension, some of the health education topics that nurses should address include instructions for checking blood pressure, preventing complications and adhering to pharmacological and nonpharmacological treatments, such as physical exercise, healthy diet, smoking cessation, moderating drinking habits and reducing stress<sup>(9,11-12)</sup>. Additionally, the centered self-care approach encourages behavior changes both during and after the education process<sup>(13)</sup>.

Patients with arterial hypertension require support to adhere successfully to their prescribed therapeutic regimen, and nurses have the leading role in providing relevant information to encourage the empowerment of patients with this disease<sup>(14)</sup>.

One study of health promotion behaviors used the telephone as a health education method to promote patients' self-care and self-efficacy, thereby promoting their empowerment<sup>(11)</sup>. The author of a study on contemporary nursing care for arterial hypertension states that nurses should encourage their patients to identify lifestyle factors that affect hypertension management, recognize potential areas for change and create a collaborative treatment plan focused on the patient's goals for preventing secondary complications<sup>(14)</sup>.

The patient-centered approach and empowering them in their encounters with health professionals helps them acquire valuable competencies and knowledge on managing their health problem. Such approaches also increase their satisfaction with and adherence to treatment, which improves health outcomes and promotes opportunities for patients to actively participate in their own treatment<sup>(10,15)</sup>.

Of the numerous health promotion activities available to elderly patients, some have been identified as having an important influence on quality of life. These activities include walking, stretching, leisure, community therapy and commemorative activities. Assessments of the impact and effectiveness of these activities revealed improvements in the biological aspects of quality of life and improvements in personal balance, self-esteem, mobility, reflexes, posture, agility and socialization<sup>(16)</sup>.

Sexual dysfunction is one of the numerous difficulties that elderly people with chronic illnesses experience. Particularly in patients with hypertension, sexual dysfunction is linked to pharmacological treatment. Sexual counseling is important for improving these patients' quality of life<sup>(17)</sup>.

In addition to the biological aspect of the improvements, which focus on lifestyle changes, a study showed that emotional support promotes increased patient

confidence in therapeutic interventions and self-care<sup>(18)</sup>.

Nursing interventions within the Assessment of Needs domain identify and analyze cultural, social and environmental behaviors and are directly associated with the Planning domain, which aims to develop targets based on the assessment of needs and to identify strategies based on knowledge derived from theories, evidence and practice<sup>(4-5)</sup>.

Studies show that evaluating sociodemographic data, physical and mental health history, lifestyle and psychosocial context<sup>(10,12,14-15)</sup> is important to health promotion planning<sup>(16,18-19)</sup>. It is worth mentioning the importance of using nursing taxonomies in the coordinated planning of care, including home care, to achieve the goals of the prescribed treatment<sup>(18)</sup>.

The studies also showed evidence of using theoretical frameworks as a basis for health promotion planning. Such approaches were associated with positive outcomes in the patients' health conditions<sup>(8)</sup>. Nola Pender's Health Promotion Model was the theoretical framework observed in the selected articles<sup>(8,20)</sup>.

The multidimensional nature of individuals and the need for interpersonal and environmental interaction is the theoretical basis for this model. Both types of interaction contribute substantially to improving health. The Health Promotion Model seeks to evaluate the behaviors that lead to health promotion using three basic components: individual characteristics and experiences (prior behaviors, personal factors); the individual's feelings and knowledge of the behavior he or she wants to achieve (perceived benefits, obstacles, self-efficacy, interpersonal influences); and desirable health promotion behaviors (commitment to the plan of action, demands and preferences)<sup>(21)</sup>.

It should be noted that only one article based nursing care planning on nursing taxonomies, indicating a scarcity of publications on caring for patients with arterial hypertension that are based on the nursing process<sup>(18)</sup>.

Service coordination to maximize independence and teamwork were important nursing interventions within the Implementation domain, a domain that seeks effective and efficient implementation, including human and material resource management, to improve patients' health<sup>(4-5,16,18)</sup>. Teamwork aims to promote health and seeks to provide participants with well-being and information on solving difficulties and problems. It also encourages reciprocal aid, in which individuals take care of themselves and others, as well as the community and the environment<sup>(16)</sup>.

Another domain of health promotion competency is Impact Evaluation, which supports interventions that improve programs and sustainability and promotes the dissemination of strategies used for patients with arterial hypertension<sup>(4-5,16,20)</sup>.

Patient and Community Advocacy, one of the domains of competency observed in the selected articles, aims to improve health and well-being by favoring important quality of life and health promotion aspects<sup>(4-5,9)</sup>.

Cooperative work between disciplines, professionals, sectors and patients increases the impact and sustainability of health-promoting programs and policies. These partnerships enable appropriate intervention choices for patients with arterial hypertension by providing assistance for this population within a psychosocial context<sup>(14,16)</sup>. Moreover, when necessary, partnerships with institutions facilitate rapid and comprehensive patient care, thus decreasing the chances of complications due to a lack of specialized care. Such partnerships should consider the patient a coparticipant and active member in the planning, implementation and evaluation of health-promoting care.

According to data shown in the present study, a nurse must develop several competencies to promote health in patients with arterial hypertension. These competencies include supporting interventions to improve programs and sustainability; providing education on the importance of quality of life and health promotion issues; improving the impact and sustainability of health-promoting programs and policies; and establishing partnerships with institutions and among professionals.

A study that enumerated the competencies that health professionals working in primary care should develop identified competencies similar to those found in the present study. These competencies included a comprehensive approach that included an evaluation of the patient's psychosocial context; knowledge management; individual- and family-centered care; teamwork; communication between professionals; coordination between health care levels; planning; and evaluation<sup>(22)</sup>.

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Currently, these competencies provide a conceptualization and a way of managing human resources to improve their interaction with work and education and, thereby, the health of the population<sup>(22)</sup>.

## CONCLUSION

Sixteen articles on nursing interventions for health promotion in patients with arterial hypertension were assessed. The most common domains of health promotion competency observed in the publications were Catalyzing Changes, Assessment of Needs and Partnership. The Leadership domain was not reported in any of the articles. A congruency was noted between nursing interventions and competencies for health promotion that were proposed at the Galway Conference.

Only one article mentioned the use of nursing taxonomies for planning the care of patients with arterial hypertension. Therefore, there is an urgent need for studies using nursing knowledge and encouraging organized, systematic and quality care.

Given that only one article was developed in Brazil, the data analysis may have suffered cultural interferences due to the scarcity of Brazilian studies addressing the topic in question.

## PRACTICAL IMPLICATIONS

The significant prevalence of arterial hypertension in the Brazilian population suggests the need for nursing studies linking health promotion and arterial hypertension to support an evidence-based nursing practice.

The results obtained in the present study may support nursing activities for health promotion in patients with arterial hypertension and may encourage nurses to adopt leadership strategies and the use of nursing taxonomies.

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