

## The role of the health professional in the care of patients with diabetes mellitus and arterial hypertension in primary care – SAH

## O papel do profissional da saúde no cuidado do paciente com diabetes mellitus e hipertensão arterial na atenção básica - HAS

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**Keywords—** Hypertension, Diabetes Mellitus,  
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**Palavras chaves -** Hipertensão. Diabetes  
Mellitus. Cuidados de enfermagem.

**Abstract—** The Family Health Strategy (ESF) has a fundamental role in care and aims to expand, define and consolidate primary health care. The nurse must be part of the ESF team and continuously work on the chronic disease control plan. The aim of this study is to describe the role of nurses in the care of patients with diabetes mellitus and hypertension in primary care. The methodology is a study of narrative literature review with an approach of exploratory, observational, retrospective studies that were searched in the literature 20 articles between 2010 and 2020. Results: In the assessment of the role of nursing cited by nurses' care, predominant nursing related to food and humidity, followed by glycemic control, blood pressure and nursing weight. On the other hand, the nursing process is a technology that allows humanized care in a systematic and dynamic way, with positive results and low cost. It is concluded that the role of the nurse as an educator is essential for both the patient and the family, and they must follow their guidelines in order to understand and realize the importance of the treatment and activities performed to improve the quality of life.

**Resumo—** A Estratégia Saúde da Família (ESF) tem papel fundamental no

*atendimento e tem como objetivo ampliar, definir e consolidar a atenção primária à saúde. O enfermeiro deve integrar a equipe da ESF e atuar continuamente no plano de controle das doenças crônicas. O objetivo deste estudo é descrever o papel do enfermeiro no cuidado do paciente com diabetes mellitus e hipertensão arterial na atenção básica. A metodologia trata-se de um estudo de revisão narrativa de literatura com abordagem de estudos exploratórios, observacionais, retrospectivos que foram buscados em literatura 20 artigos entre 2010 a 2020. Resultados: Na avaliação do papel da enfermagem citada pelos cuidados dos enfermeiros, predomina a enfermagem relacionada à alimentação e umidade, seguida do controle glicêmico, da pressão arterial e do peso da enfermagem. Por outro lado, o processo de enfermagem é uma tecnologia que permite um cuidado humanizado de forma sistemática e dinâmica com resultados positivos e de baixo custo. Conclui-se que o papel do enfermeiro como educador é imprescindível tanto para o paciente quanto familiar, e devem seguir suas orientações de forma a compreender e perceber a importância do tratamento e atividades desempenhadas para o melhoramento da qualidade de vida.*

## I. INTRODUCTION

The Family Health Strategy (ESF) has a fundamental role in care and aims to expand, define and consolidate primary health care (PHC) in Brazil. The ESF seeks to adapt the directions of the work process in order to develop a series of measures, including health promotion and protection, disease prevention, diagnosis, treatment, rehabilitation, harm reduction and especially health maintenance (BARRETO & SOUZA, 2016).

The nurse must be part of the ESF team and continuously work on the chronic disease control plan. Through the recommendations of implementation methods, in most cases, non-drug treatment can favor the consolidation of comprehensive care and the implementation of health for individuals in the community (TORRES et al., 2014; AZEVEDO & DUQUE, 2017).

In these plans, Hiperdia is defined as a strategy implemented by the Ministry of Health to reorganize care for hypertension and diabetes, with the aim of equipping and encouraging professionals involved in PHC to promote actions aimed at these diseases (FERNANDEZ et al., 2016).

Therefore, the nursing consultation can investigate the risk factors and complications of AH and DM, provide treatment prescriptions and assess their effectiveness. It is believed that nursing care is essential to promote, prevent and restore the health of users who are monitored in Hiperdia. However, many prescriptions can be based on the experience and knowledge of professionals in the health sector (DALY et al., 2014; FERRACCIOLI & ACIOLI, 2017).

Therefore, it is very important to implement the care process in the ESF, in order to organize care and provide assistance to patients with AH and DM to meet their needs (VIEIRA et al., 2017).

The use of the NIC classification in nurses' clinical practice can help in the decision-making process and selection of appropriate nursing interventions. Each NIC intervention lists the activities nurses use to implement the selected intervention. Furthermore, intervention can be understood as any method of treatment based on clinical judgment and nurses' knowledge with the aim of improving the results obtained by the individual (BULECHEK, BUTCHER & DOCHTERMAN, 2016).

It is believed that such studies are significant, as they allow determining the care prescribed by PHC nurses to patients with SAH and DM based on scientific principles, in order to systematically contribute to improving the quality of services.

The aim of this study is to describe the role of nurses in the care of patients with diabetes mellitus and hypertension in primary care.

## II. MATERIALS AND METHODS

The present work is a narrative review of the literature carried out through a literature review focused on describing the role of nurses in the care of patients with diabetes mellitus and hypertension in primary care.

The bibliographic research had as a problem question: What is the role of nurses in the care of patients with diabetes mellitus and hypertension in primary care? Articles that sought to explain the role of nurses in the care

of patients with DM and SAH were selected from scientific articles, in Portuguese, English and Spanish, were used to translate the articles into another language the translator available on the website <https://translate.google.com.br/>.

The organization of this review took place between the months of June 2020 to January 2021, thus providing guidance for researchers in relation to the topic addressed, so that they can formulate hypotheses in an attempt to seek resolution of frequent problems related to care provided in previous studies.

For data collection, the following databases were used: National Library of Medicine -PUBMED, Latin American and Caribbean Literature on Health Sciences - LILACS, Virtual Health Library of the Ministry of Health - BVS, Scientific Electronic Library Online - SciELO, Revista Brasileira de Enfermagem – REBEN with the search for key words such as: Nursing, Hospital care, Urgency and Emergency. Twenty articles containing publications between the years 2010 and 2020, which dealt with the chosen topic, were analyzed regarding the topic.

### III. LITERATURE REVIEW

The Unified Health System (SUS), implemented since 1988, has undergone changes and innovations in the management, organization and financing of its services, seeking to meet the principles of universality, equity, integrity and sociality. In this case, emphasis was placed on the implementation and expansion of family health strategies at the primary care level. With the objective of promoting the improvement and consolidation of the SUS, electing primary care as the focus of attention and establishing a relationship of solidary responsibility between health professionals and the population, the Ministry of Health formulated the Family Health Plan (PSF) in 1996. The main objective is to follow the biopsychosocial model recommended by the World Health Organization (WHO) and organize a new care practice that can promote the improvement of the quality of life of the Brazilian people (PERREAULT et al., 2016).

The family health program (PSF) in Brazil is composed of at least one medical team. Since its implementation, the team has consisted of a nurse, a doctor, a nursing assistant and four to six community health agents. Each professional is responsible for enriching the control and prevention of hypertension and diabetes mellitus (CARVALHO et al., 2011). The absence of other health professionals on the team is one of the basic problems, especially with regard to recovery from chronic and degenerative diseases. The role of nurses in the PSF also needs further clarification. The Ministry of Health's

specific plan for the PSF expressed sociopolitical interests and priorities, which deserve reflection. The concepts of community, family, gender and race; understanding of the right to health and citizenship; need to be deepened to improve the PSF. Furthermore, according to the principle of universality throughout society, there are not enough positions and teams to serve all people (this leaves recipients, especially those without assistance, frustrated) (RIOS, 2014).

As for the concept of nursing in care practice as a political role and, therefore, a moral role is to treat the patient's happiness as a normative practice in health relationships (whether doctor-patient, nurse-patient, patient physiotherapist etc.), it is said to bring a northern perspective, so that patients understand health and hope to use it as their own health experience. Therefore, it has the characteristic of being democratized in response to the patient's civil society concerns. The supervisor function is usually performed by a nurse trained in biomedical models and automatically reproduces the models used at the secondary and tertiary care levels. Because they have greater responsibility and a leadership role, nurses must take the lead in reflecting on attitudes and guidelines in relation to the ACS so that the PACS achieves its main objective of social transformation (PERREAULT et al., 2016).

In the legal documents that govern the health and occupational systems, the practice expected by nurses in primary care is clearly described, however, in this study, the intention is to approximate the content specified in the legal documents. The exercise of the professional work of nurses between research, nursing and public health policies. Therefore, when nursing achieves the expected results, this can lead to problematization of the practice and its theoretical and ethical assumptions, triggering critical and active debates about its contributions and limitations (BARBIANI, NORA & SCHAAEFER, 2016).

Group activities are aimed at specific pathologies or diseases - such as hypertension, diabetes, asthma, mental health and tobacco (23, 31) - or aimed at specific groups of people, such as pregnant women, women, children, the elderly and members of the extended family, in service (NAUDERER & LIMA, 2010; ROCHA et al., 2010; ROECKER & MARCON, 2011).

Based on this, it is noted the importance of evaluating the role of nursing cited by nurses' care within the PSF, with a focus on food and humidity, followed by glycemic control, blood pressure and nursing weight. These findings are consistent with another Brazilian study that determined the accuracy of nursing interventions for diabetic patients undergoing outpatient treatment. The author highlights that

the most common NIC nursing interventions are nutritional counseling, control of hyperglycemia / hypoglycemia and exercise promotion (SCAIN et al., 2013).

As a strategy to face this reality and maintain the SUS, primary care has been recognized by people and assumes increasing responsibilities for being considered the gateway to the system and the clear position and coordinator of the health care network. The policy is guided by the principles of universality, accessibility, integration, continuity of care, comprehensive care, accountability, humanization, equity and social participation, which are the guiding principles of the new medical model implemented by the SUS. Actions to promote prevention and use of the system should be carried out in a privileged way in the context of primary care, mainly through the Family Health Strategy (ESF), through which regions and regions with greater population coverage can be contemplated. The role of nurses is strategic and essential to ensure their entry into the team and the region through the plan and legal framework of the SUS (BRASIL, 2012).

However, in this type of intervention space, due to the repositioning of the nursing model, the positive aspects of social and professional requirements are complicated, and since the day-to-day it has generated internal professional and ethical, theoretical, methodological and technical problems operational. The demand still reflects the advantages of the biomedical model, which usually provides more care in the hospital environment through technical measures and procedures, treatment and diagnosis (BARBIANI, NORA & SCHAAEFER, 2016).

In primary health care (PHC), the development of health promotion measures in the context of encouraging healthy eating and physical exercise is part of the nursing practice of nurses. The increased consumption of ultra-processed foods and excessive sodium, fat and sugars and other unhealthy foods is directly related to the increased prevalence of SAH and DM. Therefore, when considering the improvement of blood pressure and blood sugar levels, encouraging a change in lifestyle, maintaining healthy eating habits and regular physical exercise are important to reduce the risk and incidence of these diseases (BAJOREK et al., 2017).

In almost all countries, the prevention and control of SAH are of great importance, as the use of new strategies and methods can more accurately identify high-risk groups, in addition to bringing benefits to hypertensive patients and society. However, as it is a chronic disease, the control of SAH requires lifelong monitoring and treatment, including pharmacological and non-

pharmacological measures (REINERS et al., 2012; EGAN, 2013).

The team physicians and nurses must explain to the patient the occurrence of possible adverse reactions, the possibility of possible changes in the treatment methods used and the time to complete the treatment. Provided that specific indications and contraindications are protected, any of the antihypertensive and antihyperglycemic medications on the market can be used for the treatment of hypertension and diabetes mellitus. To reduce the number of patients with hypertension and diabetes, the joint role of community health workers, nurses and technicians is essential to determine the location of patients and the subsequent treatment and monitoring of diabetes (CUTINO, 2014; AMAYA, 2016).

On the other hand, the nursing process is a technology that allows humanized care in a systematic and dynamic way, with positive results and low cost. Allows you to understand, describe and / or explain how the client responds to health problems and important processes, and to determine which areas require nursing intervention (MOURA et al., 2011).

In this case, we highlight the role of nurses in patient care through nursing counseling, which aims to expand the patient's understanding of DM and / or SAH and make them aware of the importance of changing behaviors and attitudes so that they can be in the family live together with more happiness in the social environment. Another function of the nurse is to demand the inspection prescribed by the Ministry of Health. If there are no complications, the medications must be repeated to assess "diabetic feet", control capillary blood glucose and control hypertension. All consultations, except for the examination required for evaluation (CARVALHO, 2012).

Excess weight related to accumulation of mesenteric fat (obesity is called central, visceral, or androgenic) constitutes the greatest risk of atherosclerotic disease. Furthermore, in general, individuals with this type of obesity have dyslipidemia, insulin resistance and systemic arterial hypertension, which are characteristics of the metabolic syndrome. The syndrome is a progressive disease that can increase the total mortality rate by 1.5 times and cardiovascular disease by 2.5 to 3 times confirms the importance of calculating waist circumference, weight and height to assess waist circumference ( CARVALHO et al., 2011).

In Brazil and worldwide, systemic arterial hypertension (SAH) is a serious public health problem. It is one of the most important risk factors that lead to the development of cardiovascular, cerebrovascular and renal diseases, leading to at least 40% of deaths from stroke, 25% of deaths from



coronary heart disease and diabetes combined, and 50% of cases of advanced renal failure (RADOVAOVIC et al., 2014).

This is a great challenge that medical professionals and nurses who will face in the daily practice of care for hypertensive and diabetic patients. It is correct to consider the prevalence of non-adherence to treatment an indicator of quality problems in the medical process. In addition, adherence to treatment is essential for the care of hypertensive patients, as professionals can develop clinical and educational interventions to meet the real needs of users and those with difficult adherence (SANTA-HELENA, NEMES & ELUF-NETO, 2010).

Nurses understand the members of the community in which they work, so they can intervene in a simple and interactive way, in addition to offering education and guidance activities on diabetes and SAH for patients and their families, in addition to providing an easy-to-use language, which it will definitely make a difference and help control metabolism and reduce complications (CARVALHO et al., 2011).

In addition, adherence to treatment is essential for the care of hypertensive patients, as the professional can develop clinical and educational interventions to meet the real needs of users that are difficult to adhere to. In order to act effectively, propose and implement actions that meet the real needs of the population, professionals need to know the patient and determine the patients who adhere to the treatment and those who do not adhere to the treatment, and propose the reasons why they do not meet the hypertensive patients in the following treatment (REINERS et al., 2012).

To increase the efficiency of Hiperdia, nurses can use the nursing consultation prescribed by the Federal Professional Council through Resolution No. 358/2009, which stipulates the conditions for the implementation of nursing procedures in a public or private environment, by nurses (COFEN, 2009; SANTANA et al., 2011). Therefore, the nursing consultation can assess the risk factors and complications of AH and DM, as well as nursing prescriptions and assess their effectiveness (DALY et al., 2014; FERRACCIOLI & ACIOLI, 2017).

Regarding the treatment, the nurses' knowledge is of extra importance, as due to the use of artificial insulin, the person with Diabetes Mellitus (DM) can also be called insulin dependent. For DM patients, awareness and continuous treatment are extremely important, as the dose of insulin used varies according to their habits (VANCINI & LIRA, 2011).

The use of artificial insulin is the nurse's responsibility to guide it from storage to use, as it is closely related to the

patient's lifestyle, who must dedicate themselves to physical exercise and to maintain a healthy diet, which is essential for treatment of diabetes. Therefore, the control of these activities and nutrition favors blood glucose control and can reduce the dose of artificial insulin that is essential for the functioning of the carrier organism (VANCINI & LIRA, 2011; VIEIRA, 2016).

For the common problems that DM1 patients and their families may have, the nurse's knowledge plays an extremely important role in providing guidance and explanation. Thus, maintaining a relationship of trust, necessary to improve the quality of life of these people and restore health. Nurses involved in diabetes care must promote the health of these diabetics through plans with new care habits, as treatment adherence and self-care are important considerations (VIDAL et al., 2016).

Therefore, the nursing consultation can assess the risk factors and complications of AH and DM, as well as nursing prescriptions and assess their effectiveness (DALY et al., 2014; FERRACCIOLI & ACIOLI, 2017). It is believed that nursing care is essential to promote, prevent and rehabilitate the health of users who are monitored in Hiperdia. However, many prescriptions can be made based on the experience and knowledge of health professionals, therefore, it is very important to implement the nursing process in the ESF to organize care and provide assistance to patients with hypertension and DM. To meet your needs (VIEIRA et al., 2017).

Therefore, the work strategy for the empowerment of patients with SAH and DM is to encourage the individual to actively participate in the formulation of their care plans during the period of the nursing consultation, emphasizing their responsibility for achieving the desired results. The psychosocial approach adopted by nurses in nursing consultations allows people to identify factors that affect eating habits, lack of motivation to practice physical exercise and factors that do not adhere to medication (DALY et al., 2014). Therefore, considering psychosocial needs is an essential factor to achieve the intended results (CEREZO, JUVE-UDINA & DELGADO, 2016).

The role of nurses in nursing is vital for patients with diabetes and hypertension, from the guidance, monitoring and even acceptance of patient behavior, promotes encouragement and health education so that patients learn to live with patients. Disease (VIEIRA, 2012). Diabetic patient care should aim to prevent complications, assess and monitor risk factors and guide self-care. Ability as a nurse to carry out nursing consultations in accordance with the procedures or technical standards established by the municipal manager, request inspections and copy conventional medicines, formulate health education

strategies and make referrals when necessary (OLIVEIRA & OLIVEIRA, 2010).

#### IV. FINAL CONSIDERATIONS

Based on the objective of the study, it is concluded that the nurse has a fundamental role in the care of primary care through nursing consultation. The interventions used by nurses are extremely important in the implementation of care and the health education process for patients with diabetes mellitus and arterial hypertension.

Regarding the problem question, the role of the nurse as an educator is essential for both the patient and family member, and they must follow their guidelines in order to understand and realize the importance of the treatment and activities performed to improve the quality of life.

The nursing consultation must be carried out individually and also in a family group, because as an advisor, the nurse must carefully go through all the guidelines on food, medication and also change in the physical and dietary habit, so that the patient/family member sees the importance of the guidelines and strictly follow all the guidelines to improve the patient's life.

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