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## ACCESS AND QUALITY OF CARE FOR USERS WITH HYPERTENSION AND DIABETES MELLITUS

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### ABSTRACT

The objective of this study is enlarge the access of users to Arterial Hypertension and Diabetes Mellitus in Primary Health Care (PHC). Methodology: This is an action research with actions directed with strategic leaders (1) organization and management of the service; (2) monitoring and evaluation; (3) public engagement; (4) classification of clinical practice. Results: the follow-up of 87.9% hypertensive and 86% diabetic patients, cardiovascular risk assessment, and lifestyle changes. Final Considerations: To increase the access of hypertensive and diabetic users, it is necessary to program the care agenda according to the need of the population.

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### INTRODUCTION

Non-communicable chronic diseases (CNCDs) are a serious public health epidemiological problem in both developed and developing countries. The World Health Organization (WHO, 2012) points out that 80% of NCD deaths affect more low- and middle-income populations, because they are more vulnerable, more at risk and have less access to health services and health and disease prevention, also account for 29% of deaths in adults under 60 years of age. In contrast, these deaths account for only 13% of the high-income population (WHO, 2012, MALTA, 2017). The global socio-economic impact of NTCDS is estimated at \$ 7 trillion over the period 2011-2025 and is threatening the progress of the Millennium Development Goals, including poverty reduction, economic stability, equity and human security, a limiting factor in the development of nations, require continuous attention and efforts from a set of public policies and society at large (MALTA, 2017). The Brazilian population is undergoing social, population and

economic changes, which have significantly altered the country's morbidity and mortality profile. In Brazil, NCDs account for 72% of total deaths, according to 2009 data from the Mortality Information System: percentage that represents more than 742 thousand deaths per year. The most frequent are cardiovascular diseases (31.3%), cancer (16.2%), chronic respiratory diseases (5.8%) and diabetes mellitus (5.2%) (DUNCAN 2012, MALTA 2017, MALTA MERRY, 2010). The surveillance of chronic diseases is an action of great relevance in public health, since it is a tool that allows to know the distribution, the magnitude and the tendency of these diseases and their risk factors in the population and to identify their social, economic and environmental conditions, with the objective of subsidizing the planning, execution and evaluation of prevention and control (DUNCAN 2012). These are characterized by an uncertain etiology, multiple risk factors, long periods of latency, prolonged course, non-infectious origin and because they are associated with functional deficiencies and disabilities, include cardiovascular diseases, such as systemic arterial hypertension (SAH) neoplasms, chronic respiratory diseases and diabetes mellitus (DM), as

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well as mental and neurological, oral, ocular, auditory, bone and joint disorders and genetic alterations (MALTA, 2017). Among these, the relevance of hypertension and DM are important because they are important risk factors for cardiovascular morbidity and mortality and represent a challenge for the public health system, to ensure the systematic follow-up of individuals identified as having these diseases and to find coping mechanisms for these diseases through the promotion and protection of health for the population with NCDs, which can strategically promote improvement in the quality of life of people, who become so vulnerable in the face of the complexity and the aggravations that these diseases can generate. The PSA teams have the challenge of controlling and preventing hypertension, and DM, the work process presupposes a link with the community and the population ascribed, taking into account the racial, cultural, religious diversity and social factors involved. In this context, it is recommended that the lifestyle modifications, which are fundamental in the therapeutic process and in the prevention of hypertension and Diabetes (BRASIL, 2013), be developed. However, the implementation of preventive measures in Systemic Arterial Hypertension (SAH) and Diabetes Mellitus represents a great challenge for professionals and health managers. In Brazil, about 75% of the population's health care is provided by the SUS public network, while the Complementary Health System assists around 46.5 million (MALTA, 2017). Primary prevention and early detection are the most effective ways of avoiding diseases and should be the priority goals of health professionals. In view of this scenario, the objective of the study is to investigate and qualify the access of Primary Health Care to Systemic Arterial Hypertension (HBV) and Diabetes Mellitus (DM) in Primary Health Care (PHC) of a municipality in the state's western border of Rio Grande do Sul (RS).

## MATERIALS AND METHODS

The present study is an action research that investigates the access and quality of Primary Health Care for Systemic Arterial Hypertension (HBV) and Diabetes Mellitus (DM) patients. Its conception maintained close association with the resolution of problems listed from the reality of an APS Unit inside the RS. Thus, the study seeks strategies to improve access and quality of health care for users with SAH and DM, who use the services provided by the unit. The study scenario is characterized as a Basic Unit, located on the periphery of a municipality on the western border of the State of Rio Grande do Sul, whose total population of the unit is approximately 6 (six) thousand inhabitants. The population presents low socioeconomic conditions. The average monthly salary in 2015 was 2.2 minimum wages, with a proportion of 17.2% of employed persons in relation to the general population, the infant mortality rate is among the highest in the state, 18.91 deaths per thousand born live (Brazil 2018). Access to and adherence to clinical treatment is relatively low, there is a large number of hypertensive and diabetic patients, but there is a slight adherence to follow-up and health promotion activities offered by the service. This results in a large number of patients with decompensated blood pressure and glycemic values, with low adherence to drug treatment, and consequent poor quality of life and health. In this sense, it was verified the need to qualify the actions of health promotion and prevention of damages and injuries to this public guaranteeing the longitudinality of attention to the integrality of actions, systematization of specific records that allow the planning,

follow-up and evaluation of actions developed, thus impacting the better quality of life of the population monitored by the Unit. The target audience of the study included those with SAH and / or DM who lived in the unit's area of coverage and the health professionals working in the Unit. The actions carried out included four Strategic axes: (1) Organization and management of the service; (2) monitoring and evaluation; (3) public engagement; (4) qualification of clinical practice.

### *Service Organization and Management Hub*

In the Organizational and Management Hub of the service, the first step was to conduct a workshop with the multidisciplinary team to survey the main barriers to access to users with SAH and DM and the fragilities of the service. In order to analyze the identified problems, we used the interrelations diagram, a strategic planning tool that allows the analysis of the problems identified through the problem panel. From the critical nodes listed, the team drew up strategies to improve the reception based on the Spontaneous Demand Reception in the Ministry of Health (BRASIL, 2013) workshop, establishing workshops for the establishment of flows in the Unit, defining the responsibilities of each member of the Unit. team in the proposed interventions. To organize the actions of the intervention, the Basic Attention of Systemic Hypertension (BRASIL, 2013a) and Basic Care Diabetes Mellitus (BRASIL, 2013b) were used to organize the intervention actions. It was built a mirror sheet for follow-up / monitoring of users, production of printed material, organization of care schedules and educational activities, and was incorporated into the routine of continuing education with multiprofessional participation to update and qualify clinical practice. A survey of the necessary inputs for the intervention was carried out, from the appropriate materials to patient evaluation, pacts with the municipal management to ensure the results were performed in a timely manner, team to fill out the follow-up form, systematize care including foot-diabetic assessment and stratification of cardiovascular risk. The intervention proposal was presented to the municipal managers in order to guarantee inputs and flows that would make the actions feasible. During the visits to the health unit, waiting rooms were searched to assess the main barriers to access of users to health services, and the most reported difficulties were the difficulties of scheduling appointments to maintain clinical follow-up and renewal of long, deadlines in the scheduling of exams, lack of medications in the basic pharmacy, lack of periodicity, systematization and dissemination of educational groups.

**Public Engagement Axis:** Ensuring community adherence to actions proposed by health teams is critical to the success of actions and achievement of health goals and indicators and to increase responsiveness. Thus, inserting the community in the construction of the intervention proposal, participating in the construction of agendas and scheduling activities was a strategy to ensure adherence to empowering them in relation to their rights and duties as users of health services, and recognizing their fragilities and limitations as a source of care encouraging community mobilization to train local health councils for the pursuit of local progress. The intervention proposal for improving access and quality of care for users with SAH and DM was presented to the community bringing clarification regarding the prevention of CNCD as well as the importance of tracking and continuous monitoring and control of blood pressure levels. The community was oriented regarding the risk factors for the development of hypertension

and diabetes, were clarified regarding the periodicity of accomplishment of complementary exams and their rights and duties as SUS users. The community was mobilized to participate actively in preventive care, a monthly schedule was established for the health promotion group coordinated by the multidisciplinary team and directed to hypertensive and / or diabetic users enrolled in the Unit. Subsequently, hypertensive and / or diabetic users accompanied by the unit and their families were mobilized for the participation and dissemination of health education actions and formation of educational groups, as a strategy for the sharing of experiences.

**Qualification of Clinical Practice:** For the qualification of the clinical practice, actions of Permanent Education in Health were planned, based on the National Policy of Permanent Education in Health (PNEPS), considering the specificities of the team and their needs for the formation and development of health work. Subjects were asked for and approached by the multidisciplinary team: user acceptance, hypertensive and diabetic user evaluation, cardiovascular risk assessment, foot sensitivity assessment, clinical management, health promotion, completion of the follow-up form and case studies. These themes were worked out in systematic meetings of the team and resumed according to the need felt by the professionals.

**Monitoring and Evaluation Hub:** The monitoring of actions occurred through the continuous monitoring of the number of hypertensive and diabetic users enrolled in the Program. The actions taken were typed by the team members, in Excel spreadsheets, adapted for the intervention. The evaluations of the activities occurred monthly, identifying the evolution of the indicators. The monitoring of the periodicity of the scheduled visits was maintained periodicity of clinical and laboratory examination, the accomplishment of the cardiovascular risk stratification, the periodicity of the consultations with the dentist, the access to the medicines of the popular pharmacy, the nutritional orientation, and the orientation about risks as recommended in the Systemic Arterial Hypertension Notebooks and in the Basic Attention Diabetes Mellitus.

## RESULTS AND DISCUSSION

The results indicated a difficult access to the users as well as weaknesses in the continuity of care. The data were measured at the end of each month of the intervention, for the period of 120 days, the access progressed as the service was modified and qualified. Regarding the coverage of the attention to users with SAH and DM in the Health Unit, it was found that at the end of the first month, the number of hypertensives that had their registrations updated was six (1%), rising to 42 (6.9%) at the end of the second month of intervention, 185 (30.3%) in the third month, totaling the proportion of 536 (87.9%) hypertensive patients in the territory assigned at the end of the fourth month of intervention. At the end of the first month of intervention, 4 (2.7%) were obtained at the end of the second month 18 (12%), at the end of the third month 73 (48.7%), reaching 129 (86%) in the fourth month of intervention. Regarding the proportion of users with SAH and DM with adequate registration in the follow-up form, the estimate of reaching 100% of hypertensive users enrolled in the unit was satisfactorily achieved. On the other hand, there were fluctuations in the attendance of diabetic users. At the end of

the intervention, 128 (99.2%) of the users followed up at the unit had their follow-up records adequately completed.

During the four months of the intervention, the team was mobilized to organize active search strategies, since the number of ACS was not enough to guarantee the coverage of the territory, and at the end of the intervention the active search was carried out of 139 hypertensive users and 59 diabetic patients who had been in delays for more than six (6) months, reaching a proportion of 100% of users enrolled in the Hypertension and Diabetes Control Program (HIPERDIA) who had past appointments and were not registered for more than six months. Considering the proportion of patients with SAH and DM with clinical exams in accordance with the protocol of the 536 hypertensive patients followed up, 437 maintained a clinical examination in accordance with the protocol, corresponding to 81.5% of the hypertensive patients being followed up. Patients with diabetes who were adequately evaluated included assessment of foot sensitivity, of the 129 patients followed up during intervention 112 (86.8%) presented adequate clinical examination including assessment of foot sensitivity. In relation to the proportion of users with complementary exams in accordance with the protocol, the evolution was gradual over the months of intervention reaching a proportion of 417 (77.8%) of users with hypertension and 107 (82.9%) of patients with diabetes at the end of the intervention.

With regard to the proportion of hypertensive and diabetic patients with access to medications in the popular pharmacy or municipal basic pharmacy, the analysis of the prescriptions according to the medications offered by the popular pharmacy, 358 (70%) hypertensive patients and 51 (60%) of the diabetic users your medications available at the unit's pharmacy / and or popular pharmacy. Regarding stratification of cardiovascular risk, at the end of the 4 (four) months of intervention, 534 (99.6%) of the users followed up for hypertension and 128 (99.2%) were submitted to cardiovascular risk stratification. Regarding the access to oral health of the user with SAH and DM, 95 (17.7%) of the patients with SAH and 60 (46.5%) of the DM patients had access to dental evaluation during the intervention. Considering the proportion of users with SAH and DM who received guidance on healthy eating, regular physical activity practice and smoking risk, it can be seen that 100% of users with SAH and DM followed up during the intervention received these guidelines, end, the proportion of 100% of users oriented to healthy lifestyle. This study aimed to investigate and qualify APS access for SAH and DM patients in PHC identified the difficult access of these users to both care and access to medications. A poor quality of care and consequently low adherence of users to the continuity of care. This is corroborated by other studies where access to APS is still limited (SOUZA, ANDRADE, NASCIMENTO, ET AL, 2018; STRECK, GOMES, CARVALHO, SODER, WEILLER, DAMACENO, 2018).

According to the results of the study, attention to people with diabetes mellitus and systemic arterial hypertension is marked by an action oriented to the biomedical model. Notwithstanding this perspective of care, it beckons for only partial fulfillment of the strategies for the care of the person with chronic illness (BRASIL, 2013). This study developed strategies to overcome the actions focused on the biomedical model. In this way, the strategic situation planning, the involvement of the multidisciplinary team and community

participation were important tools to change the supply of health services and actions, as well as the adherence and quality of care to users. The study of hypertension and diabetes was one of the central points to understand the need for interaction between professionals in the care of the user (MALTA, 2017, MALTA, MERHY 2017, SCHIMIDT et al, 2011). The contribution of a multidisciplinary team made the professionals involved advance in the complexity of the cases. Therefore, attention to hypertensive and diabetic users has become a shared responsibility of the entire team and the adequacy of the offerings to those who are targeted has been a challenge, since health policies that are primarily targeted at the most vulnerable populations (MALTA, 2017, SCHWAB, MOISÉS, KUSMA, 2014). In situations such as the one studied, the majority of users come from socio-cultural contexts that make it difficult to assimilate the benefits of attention models based on the idea of bonding, continuity of care, scheduling, and practices aimed at changing lifestyles (SCHWAB, MOISÉS, KUSMA, 2014). From this perspective, it can be inferred that multiple factors contribute to the difficult access of these users, among them we can highlight, the lack of community health agents and the high turnover of professionals, factors that interfere in access and quality of care in health services. APS (STRECK, GOMES, CARVALHO, SODER, WEILLER, DAMACENO, 2018). Another factor that interfered with the continuity of care was the lack of return with complementary exams and the non-adherence to the health promotion groups developed in the PHC unit. Therefore, it is important to maintain a dynamism in attending to users using the tools provided by the host, valuing the technical skills of each professional (BRAZIL, 2017). The study revealed that the adoption of instruments for the organization of care enabled the improvement of clinical practices and the continuity of care. Therefore, the follow-up mirror sheet allowed us to evaluate the profile of the users monitored, as well as their clinical conditions, degree of dependency and family situation, facilitating the active search of misconduct users. The use of the Framingham Score and renal risk scale by the Cockcroft-Gault formula contributed to define the patients who need more attention from the health team, allowing the team to rethink the care and to establish a minimum space between the consultations, from of the indicators collected.

Regarding the quality of the clinical practice, it was observed the lack of systematization of care, often overwhelmed by excessive demand, the lack of registration and non-physical examinations to obtain the correct diagnosis of the patient. It is also fundamental actions of Permanent Education in Health for the team, reinforcing the importance of evaluation, monitoring and registration of information, as well as discussion of cases. Nursing has a preponderant role in the effectiveness of PHC, and a great sensitivity in the approach to the human being considered its integrality, the Nursing Consultation is an independent and private activity of the nurse, whose objective is to provide conditions to improve the quality of life through a contextualized and participatory approach, and is legally supported, so the nursing professionals need to have knowledge, security, autonomy and support of the manager to act dynamically, optimizing the flow of care (BRASIL 2017, BRASIL 2013). In Brazil, the nurse can perform the user's request for complementary examinations, the prescription of medications, in accordance with protocols or other technical regulations established by the federal, state, municipal or Federal District manager and subject to the legal provisions of

the profession (BRASIL, 2013). Inserted in a broad concept of health, oral health transcends the technical dimension of dental practice, and oral health is integrated with other collective health practices. Oral health is of fundamental importance in the care of patients with DM, and the primary role of the Oral Health team is to be integrated with the Primary Care team, so that adequate attention can be given to people, contributing to the maintenance of their health and well-being (BRASIL, 2017).

Access to oral health in the intervention scenario presented many barriers, among them the demand greater than the supply of care, organization of the territory, lack of physical structure and inputs. This scenario is in conflict with the criteria established by the Ministry of Health, where it is recommended that facilitated access to dental care especially for patients with DM, since the presence of infections, such as periodontal disease, stimulates the inflammatory response, which increases tissue resistance to insulin, which causes worsening of glycemic control, and adequate management of periodontal infections in patients with DM without glycemic control can restore normal glycemic values (BRASIL, 2013b). Among the chronic diseases, hypertension and DM are the most common, whose treatment and control require behavioral changes in relation to diet, physical activities, lifestyle and adherence to treatment (DUNCAN 2012; RADIOLONGA, SOUZA, CORDONI, 2015). Therefore, adherence to a healthy lifestyle, balanced diet, smoking cessation, regular physical activity and stress management can prevent hypertension and diabetes such as excluding or controlling the intensity of risk factors (Brazil, 2013a, b). Therefore, to ensure adherence to physical activity practices and institute the healthy weight loss group with the follow-up of nutritionists, physical educators and psychologists. In order to achieve the objectives and goals established in this intervention, teamwork has gone through the "techniques", breaking "crystallized patterns" of producing health, bypassing the difficulties of local management in order to organize the work process in health, in order to reach the goals articulate the attention to the spontaneous and programmed demand and to increase the possibilities of solvency of the local demands (BRASIL, 2017). Teamwork in a coordinated way has proved to be fundamental for increasing access and adherence of users, as well as the existence of guidelines and protocols for care, permanent education actions, as well as user empowerment for self-care

## Conclusión

With this action research it was observed that the access of the user of arterial hypertension and Diabetes Mellitus occurs frequently by spontaneous demand in the PHC services, being the access and adherence to the actions of prevention in health fragile. Often, the team is absorbed by excessive demand, since one of the prerogatives of Family Health teams is to keep the unit open, meeting spontaneous demand in order to respond to the needs of the population. This intervention provided the organization and management of the health unit, where specific practices gave way to discussion in a team, changes in the guidelines for care of the adult with hypertension and / or DM, case study, definition of norms and routines to improve the quality of attention to this group, and inserted the culture of monitoring and evaluation of health actions. Following the strategic axes of service organization, monitoring and evaluation, public engagement and qualification of clinical practices, actions developed in this

intervention, which have been successful, may be applied in other lines of Primary Health Care care. However, this study has limitations they must be circumscribed to a municipality of RS, so the generalization to other regions of the country or the world should be better studied.

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