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RESEARCH

Evaluation of the care program implementation to people with high blood pressure

Avaliação da implantação do programa de assistência às pessoas com hipertensão arterial

Evaluación de la implantación del programa de asistencia a las personas con hipertensión arterial

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ABSTRACT

Objective: to evaluate the implementation of the care program for people with hypertension in Maringá-PR. **Method:** it is an evaluative research of cross-sectional design. Data were collected through structured interviews with 63 nurses between April and June 2013. **Results:** as missing or insufficient, there were: transportation for outside activities; work equipment; educational materials; training resources; inclusion of the family in the care plan; risk classification of individuals; determination of therapy from the risk classification and referral of the patient to medical and/or specialized tests. **Conclusion:** in addition to qualifying structure, there are: the need to identify people with hypertension as risk factors, perform risk stratification and systematic care planning, establishing an advanced clinical practice, such as support for self-care and management cases, accomplish with existing protocols and develop collective actions based on information systems.

Key words: Health Evaluation; Hypertension; Primary Health Care; Program Development; Health Public Policy.

RESUMO

Objetivo: avaliar a implantação do programa de assistência às pessoas com hipertensão arterial em Maringá-PR. **Método**: pesquisa avaliativa de desenho transversal. Os dados foram coletados por meio de entrevista estruturada, junto a 63 enfermeiros, entre abril e junho de 2013. **Resultados**: identificaram-se como ausentes ou insuficientes: transporte para atividades externas; equipamentos de trabalho; materiais educativos; capacitação dos recursos humanos; inclusão da família no plano de cuidados; classificação do risco dos indivíduos; determinação da terapêutica a partir da classificação do risco e referenciação do paciente para médicos e/ou exames especializados. **Conclusão**: além de qualificar a estrutura, destacam-se: a necessidade de identificar pessoas com hipertensão conforme fatores de risco, realizar a estratificação de risco e o planejamento sistematizado de cuidados, instituir práticas clínicas avançadas, como o apoio ao autocuidado e a gestão de casos, cumprir os protocolos já existentes e desenvolver ações coletivas com base em sistemas de informações.

Descritores: Avaliação em Saúde; Hipertensão; Atenção Primária à Saúde; Desenvolvimento de Programas; Políticas Públicas de Saúde.

RESUMEN

Objetivo: evaluar la implantación del programa de asistencia a las personas con hipertensión arterial en Maringá-PR. **Método:** investigación evaluativa de diseño transversal. Los datos fueron recogidos por medio de entrevista estructurada, junto a 63 enfermeros, entre abril y junio de 2013. **Resultados:** se identificaron como ausentes o insuficientes: transporte para actividades externas; equipamientos de trabajo; materiales educativos; capacitación de los recursos humanos; inclusión de la familia en el plano de cuidados; clasificación del riesgo de los individuos; determinación de la terapia a partir de la clasificación del riesgo y referenciación del paciente para médicos y/o exámenes especializados. **Conclusión:** además de cualificar la estructura, se

destacan: la necesidad de identificar personas con hipertensión conforme factores de riesgo, realizar la estratificación de riesgo y el planeamiento sistematizado de cuidados, instituir prácticas clínicas avanzadas, como el apoyo al autocuidado y la gestión de casos, cumplir con los protocolos ya existentes y desarrollar acciones colectivas con base en sistemas de informaciones.
Palabras clave: Evaluación en Salud; Hipertensión; Atención Primaria a la Salud; Desarrollo de Programas; Políticas Públicas de Salud.

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INTRODUCTION

Today, chronic non-communicable diseases (NCDs) are responsible for the largest burden of morbidity and mortality in many countries, representing one of the major health challenges of global development in the coming decades[1]. Among them, Arterial Hypertension (AH) has attracted the attention of world public health[2] due to multiple risk factors, high prevalence and progressive, asymptomatic clinical course, hard to control[1,3]. If it is not appropriately treated, the AH leads to the emergence of renal complications and cardiac and cerebrovascular diseases, resulting in high medical and socioeconomic costs[4].

Among the several challenges caused by the high prevalence of hypertension and its problems, there is a lack of adequate infrastructure to meet the individual and integral needs of patients in most of the Primary Health Care Services (APS). Also, intervention strategies against the disease should be associated with improvement of process indicators (risk rating, making evidence-based decisions, request for additional tests and drug prescriptions) and outcomes (adherence to treatment, improving control pressure and greater patient satisfaction). Therefore, it is essential the linking of patients to the Family Health Strategy (ESF) and conducting activities to promote health, among others.

Even with the implementation of the ESF (1994), the Care Reorganization Plan for Arterial Hypertension and Diabetes Mellitus (2001) and the Pact in Defense of Life (2005), which together increased the access of individuals to the diagnosis, the medical consultations and medicines, there are still few services geared to promotion activities for health because the biomedical device did not allow to modify the conditions and broader determinants of this process, operating a care model and centralized care in symptoms[5]. In Brazil, there are other factors that greatly aggravate and complicate the implementation of public programs for prevention and control of hypertension, such as the continental size of the country, social inequality, the difference in the distribution and allocation of financial and material resources and the lack of trained human resources and aware of an efficient and problem-solving activities[6].

In this way, given the obstacles that hinder the implementation and maintenance of public health programs in Brazil, the evaluation and identification of points that weaken the role of the ESF teams may represent important management and planning tool. Because, to identify the absence and/or lack of items necessary for the care to individuals with hypertension, the possibility of adapting them to the real demands of customers increases and thus improving the care provided to patients and their families. Therefore, to produce information on the structural, care and organizational obstacles relating to health care of people with hypertension, creative solutions can be elaborate and propose focused on building more efficient services.

It was found that the assessing for implementation of AH Care Program in the city of this study is incipient[7]. Thus, considering the importance of systematic action of the ESF teams in the context of AH and the lack of investigations detailing assessing the hypertension program deployment conditions in the country[3], the aim of the study was to evaluate the implementation of the care program of people with hypertension in Maringá-PR.

METHOD

This study is an evaluative research, cross-sectional design, conducted within the APS in a medium-sized municipality in southern Brazil, with a population of 367,410 inhabitants and Human Development Index of 0.808, considered very high[8]. Since 1994, the ESF is considered the center of health care in the county. In 2013, during the data collection period, there were 27 Basic Health Units (UBS), 65 ESF teams, one team of the Program of Community Health Agents (PACS) and seven teams from the Family Health Support Centers (NASF).

Data collection was carried out between April to June 2013, through interviews using a structured questionnaire. The nurses of the ESF teams were the informants, because, in that municipality, they are the professionals most involved in team management and lower turnover. On the occasion, two nurses were away on medical leave and did not participate in the study.

It is noteworthy that, in studies of evaluative nature, it is healthy the worker´s participation in the preparation of logical evaluation model. With this, there is a greater likelihood that the constructed model be closer to reality for the practical implementation of the program. However, it was not possible to use this building strategy in this study, not only for question time but also by the operating factor. Thus, considering the experience of other researchers[3], the instrument used for data collection was prepared by the recommendations by the Health Ministry to primary care to individuals with hypertension[9], and validated then using the Delphi technique. The instrument consisted of 121 questions, divided into three dimensions: structural, care practices and care organization.

The structural dimension has 79 questions regarding the physical area, materials, and equipment, materials for health education, supplies, laboratory tests, medication and human resources. The dimension "care practices" has 25 questions divided into promoting health and individual care, and the dimension "care organization" has 17 questions.

The interviews were scheduled by phone and held in a reserved area in the UBS. Data were entered and compiled

in Excel for Windows. Then the variables of each dimension were analyzed for frequency of negative responses (absence or failure) and the presence of items needed for the implementation of the care program in individuals with hypertension. Subsequently, the method of Quantic intervals was used based on three equiprobable intervals (tertiles)[10] to select only those variables with frequencies of negative responses contained in the second (33% to 66%) or third tertile (66% to 99 %), that values greater than 33%. The variables were expressed in absolute and relative frequency tables.

The study was developed in line with the resolution 446/12 of the National Health Council and the project was approved by the Permanent Committee on Ethics in Research Involving Human Beings of the State University of Maringá. All participants signed the Informed Consent Form in two ways.

RESULTS

The working time in the ESF of the 63 nurses interviewed ranged from nine months to 13 years with an average of 6.3 years. Most of them (82.5%) worked in the same ESF team for more than three years. According to them, several aspects necessary for primary care to individuals with hypertension were absent and/or lack. Concerning the physical area, for example, more than 50.0% of UBS had no offices for the reception and nursing consultation and almost 40.0% did not have room for the ACS and the development of group activities.

With regard to materials and equipment, nurses highlighted the lack of a car to outside activities whenever necessary (96.8%); sphygmomanometer for the obese people in nursing practice (85.7%) and doctors (66.7%); materials for carrying out health education (81.0%); computer (66.7%) and printer (58.7%). The training of human resources to adequately meet both the hypertensive emergencies and for the continuing care of individuals with hypertension did not occur in a high proportion of professionals (Table 1).

In Table 2, showing the results related to the dimension "care practices", according to the nurses, the ESF teams were not regularly performing strategies for early diagnosis of hypertension in the general population and groups with different risk factors or to stimulate the change of lifestyle among those already diagnosed. Regarding service conducted among individuals with hypertension, most of the teams did not use the Framingham scale (93.6%) for determining the degree of risk and did not direct therapy for this risk (93.6%). Many professionals revealed that they have not carried out home visits to non-adherent patients (47.6%) and new cases (42.8%), and neither a care plan was systematized for the individual´s family with AH (85.8 %).

Table 1 - Distribution of the family health teams, according to absence/lack of items in the structural dimension (N = 63) referred by nurses, Maringá, Paraná, Brazil, 2013

Evaluated items	Absence/ Lack	
Dimension: Structural	**n**	**%**
Physical area		
Covered area and with seats outside the UBS	28	44.4
Waiting room with satisfactory number of seats	22	34.9
Office to host	32	50.8
Office for nursing consultation	32	50.8
Room for collective activities	24	38.1
Room for ACS compatible with number of agents/activities	22	34.9
Materials and equipment		
Sphygmomanometer (obese) in doctor's office	42	66.7
Sphygmomanometer (obese) in nursing office	54	85.7
Sphygmomanometer (child) in doctor's office	22	34.9
Sphygmomanometer (child) in nursing office	40	63.5
Computer available per team	42	66.7
Printer	37	58.7
Enough telephone line	32	50.8
Car to outside activities whenever necessary	61	96.8
Materials for health education		
Materials for conducting the health training	51	81.0
DVD	28	44.4
Multimedia projector	35	55.6
Training to meet the individual with AH		
Doctor	51	81.0
Nurse	47	74.6
Nursing assistant	50	79.4
Health Community Agent	49	77.8
Professional training for emergency service	36	57.1

Notes: ACS: Health Community Agent; AH: Arterial Hypertension

Table 2 - Distribution of family health teams, according to absence/lack of items on the size care practice (N = 63) referred to by nurses, Maringá, Paraná, Brazil, 2013

Evaluated items Dimension: Care practices	Absence/ Lack	
	n	%
Periodicity in carrying out health promotion strategies for:		
Identify individuals over 15 years old with hypertension	56	88.9
Identify individuals with hypertension in the general population	60	95.2
Identify obese individuals with hypertension	59	93.6
Identify diabetics individuals with hypertension	55	87.3
Identify smokers individuals with hypertension	58	92.0
Identify individuals over 40 years old with hypertension	61	96.8
Identify sedentary individuals with hypertension	60	95.2
Identificar indivíduos com HA entre alcoolistas	61	96.8
Identify alcoholic individuals with hypertension	40	63.5
Encourage healthy eating among individuals with hypertension	41	65.1
Individual service		
Systematized medical consultation according to Protocol	25	39.7
Using the Framingham scale	59	93.6
Therapeutic decision as the patient´s risk	59	93.6
Nursing consultation as the protocol	43	68.3
Home visits to non-adherent patients	30	47.6
Systematic care plan written for hypertension in HV*	44	69.8
Systematic care plan written for the family of the hypertensive patient	54	85.8
New cases of monitoring home visit	27	42.9

*Notes: *HV: Home visit; AH: Arterial Hypertension*

Table 3 - Distribution of family health teams, according to absence/lack of items on the dimension of health care organization (N = 63) referred by the nurses, Maringá, Paraná, Brazil, 2013

Evaluated items Dimension: Health care organization	Absence/ Lack	
	n	%
Using HIPERDIA for planning and evaluation of the program	37	58.7
Counter reference system for cardiologist	60	95.2
Counter reference system for specialized tests	55	87.3
Scheduling protocol ensuring consultation and appointment	42	66.7
Control of absences to scheduled appointments	40	63.3
Active search for missing patients	38	60.3
Scheduling frequency of doctor consultations	62	98.4
Semiannual for controlled patients without lesions in target organs	63	100.0
Bimestral para pacientes controlados com lesão de órgãos alvo	63	100.0
Mensalmente para pacientes sem controle da hipertensão	63	100.0

Concerning the dimension "health care organization", most of the nurses reported that their teams did not use the HIPERDIA for planning and evaluation of the program (58.7%) and had no counter-referral for a referral to the cardiologist (95.2%) and conducting specialized studies (87.3%). According to those nurses interviewed, no team held a biannual medical consultation for patients without target organ damage, bimonthly for patients with lesions in target and monthly organ for patients without adequate control of the disease (Table 3).

DISCUSSION

The study results point out the aspects that exist or are not enough, related to the implementation and maintenance of the care program to individuals with AH in a city in southern Brazil, compromising the care to a greater or lesser degree. Some methodological limitations, such as not having been evaluated the results of the program from the perspective of patients, and not incorporating workers in the construction of the evaluation process, circumscribe the findings of this research to the components of the structure and process, guided by an ideal model recommended by protocols. It is also important to ratify the respondents of this study were nurses, which makes the findings of absence or lack of resources required for the implementation of the program relating to their perceptions.

However, this study does not cancel the scientific value of the results found since it was noticed that the choice of the professional nurse to be the respondent for this study was right, as data showed that the average time of performance of this professional in the ESF teams in the city was more than six years, which reinforces the reliability of information collected and allows inferences backed by the professional practices.

Regarding the structural dimension, the absence of a specific physical space for accommodating (50.8%), the nurse´s office (50.8%) and ACS rooms (39.4%) and the no structure for the development of group activities

(38.1%) were identified. This shows that despite the municipality having the ESF as health care model since 1994, it has not fully incorporated the theoretical and practical of this model bases, which prioritize continuous care, promoting health, group calls the and community work of ACS on the staff.

A study with ESF nurses in a capital of the Brazilian Midwest pointed to weaknesses in the physical structure of the UBS and lack of inputs such as educational materials, which stimulate the performance of activities of the individuals with hypertension. This has compromised their practices, by restricting the actions to actions imposed by the physical structure that privileged enough offices only to the medical staff, and therefore regard only to the biomedical model. On the other hand, They also revealed that they have to live with daily requirements of managers[11]. Thus, it was observed that sometimes the flaws are in the structural dimension, avoiding the direct control of health professionals. However, charging for various practices of those hegemonic, in line with protocols and manuals, continues relapsing in the professionals.

Concerning the sub dimension "materials and equipment", nurses negatively highlighted that most of the ESF teams do not have the vehicle available to perform outside activities whenever necessary. Only the rural team had a car every day, one team from the urban area twice a week and the other only once a week, and only part-time (morning or afternoon). It is up to the staff conducting a comprehensive home care and other community spaces, as well as surveillance and health promotion to outside health units[9]. However, besides the lack of means of transportation, other factors intervene so that this activity does not achieve its purpose. Qualitative research conducted with ten nurses from ESF noted that the lack of professionals in the community is also justify by the large number of visits within the health facilities, the lack of time and excessive bureaucratic services[12].

Nurses revealed that most UBS do not have sphygmomanometer for checking the blood pressure (BP) in obese patients and children, especially in the nursing team offices. The absence of sphygmomanometer for obese people was also evidenced in the study in a northeastern capital[3]. This is worrisome because the manuals highlight the importance of the cuff being compatible with the circumference of the patient´s forearm[13]. Thus, the absence of appropriate equipment raises doubts about the quality of care provided in health facilities across the country, as well as to the data records and information systems, mainly by the constant association between hypertension and obesity. In these cases, either the BP is not being checked or is being incorrect.

Also in materials and equipment, here is the fact that more than half of UBS does not provide one computer per team, or even a printer. It should be noted that the municipality was in the electronic medical record computerization process and this is no longer the today´s reality. However, if the same UBS acted two, three and up to four ESF teams, it is inconceivable that did not exist at least one computer per team, as this depends on the update of the Information System data of primary care (SIAB), HIPERDIA, among other information systems.

Regarding the sub dimension "materials for health education", 51 (81%) nurses indicated that their teams did not have brochures and videos that addressed the issue of AH specifically. It is likely that this lack arises from a failure in the organizational process and planning of active teams, since the other nurses noted the presence of the material, which indicates at least that they are available by the municipality. This is very important since the relationship between education, health and their practices are conditioned by multi-determined and complex structures in the pursuit of creating links between medical action and thinking and doing every day of the population[14].

From this perspective, a study conducted in China with 360 individuals with hypertension showed that after two years of professional monitoring through interactive health education workshops, it was observed significant improvement in patients' knowledge about the disease and decrease in factors clinical risk for the prevention of complications related to AH[15]. Therefore, the development of educational activities for health becomes a major factor in stimulating adherence to treatment of the disease.

About the training of professionals, it was observed that most of them had not received training for the adequate management of patients with hypertension. Thus, currently, most of the activities carried out within the APS is oriented toward acute problems and the urgent needs of patients[1]. Increased attention to people with chronic diseases requires a focus on compliance and long-term monitoring[16]. While the blame for the failure to follow the prescribed regimens is imputed to patients, non-adherence is fundamentally also a failure of the health system. The health care (which provides support, constant monitoring and, above all, timely information) increases the patients' knowledge and improved treatment adherence[17]. This assistance logic reduces the number of complications of the disease and provides a better quality of life for individuals and their families[18], especially if health professionals are engaged in continuing training practices.

Similarly, over half of the nurses said that professionals in their team did not receive training for emergency service when patients arrive at the UBS with a severe hypertensive crisis or cardiac arrest, brought by relatives. UBS, in general, is the closest health service to the residence and where the family seeks immediate care. Thus, gaps in training of health professionals to work in the face of chronic and emergency conditions must be overcome, and continuing education practices appropriate to the new optics of health care, considering a model of care for chronic conditions in the APS, ruled on extensive host in risk stratification and management of clinical through supported self-care and case management has been proposed in the Brazilian scenario[19].

When the level of implementation of the Care Program of AH is evaluated concerning the dimension "care practices", it is observed that the teams were very incipient. This is because over 87% of them did not develop strategies to diagnose individuals with hypertension in the general population, and, when developed, these activities were associated with municipal programs to promote health, created under the municipal health department. Thus, it is clear that the teams, mostly were limited to check the BP only for the spontaneous demand, either in

patients with any complaints or general acceptance. A similar situation was found in the study conducted in Recife (PE), in which the gathering of new patients with AH was made predominantly by BP measurement of UBS patients, and only 25% of the teams used other strategies to diagnose new cases, such as campaigning and joint efforts in the community[3].

Regarding promotion of health group practices, it was found that most teams did not stimulate the change in lifestyle through the programmed physical activity or by changes in diet. Studies show that those most assiduous among individuals accompanied by AH programs to meetings in the community (group activities) promoted by the professionals show a greater reduction of blood pressure[16,20]. The presence of the patient in group activities appears to constitute a determining condition for the proper management of the treatment of hypertension, maybe by promoting individual motivation and generating attitudes that contribute to reducing BP. The patient in this type of activity identifies with other patients with similar problems and learn to express their fears and expectations. Thus, he comes to share the experiences of each and discuss real solutions to the health problems that are similar, favoring adherence to treatment[16,21].

It should be noted that even with the inclusion of the Family Health Support Centers (NASF) in 2010 in the municipality, with support teams, with the accountability actuation, shared management and support the coordination of care in ESF teams, most of these teams did not incorporate the development of activities aimed at promoting health and disease prevention, materialized through the creation and maintenance of the groups of the healthy habits of life stimulus, such as walking and healthy eating.

In individual care, it was found that 26 teams (41.3%) did not engage in consultation with a medical history and complete physical examination. The care of patients with AH was conducted in groups that meet every three months, with the limited objective of verifying the BP and weight as well as prescribe and dispense medicines. On these occasions, it is not stratified and not differentiated care according to the degree of risk and the need of each. Patients are only consulted individually by the doctor when they have a complaint and spontaneously seek to UBS for this purpose, with the absence of scheduled appointments.

The frequency of consultation of individual with AH varies depending on the disease control. Thus, according to the clinical condition of every person, the return can be scheduled for periods ranging from one week to six months to decompensated patients and stabilized patients, respectively[9]. The standardization of a consultation schedule for patients with hypertension is not recommended for the most suitable and decisive care plan is the one that suits individual needs and characteristics and evolution of each case[22].

Another problem related to individual care is the assessment and classification of the patient's risk according to the Framingham scale because 93.6% of the teams did not use this classification or otherwise stratify individual risk. However, this procedure is pointed out in the protocols as essential to the therapeutic decision making and management of the case[9,13]. From risk identification, it is recommended appropriate measures on lifestyle: healthy eating, smoking cessation, alcohol abuse and physical inactivity. In cases of high risk, the healthcare team should consider the classification to define drug treatment[9,14].

In this study, it was observed that the care provided to patients did not consider their individual needs and risks, which are attended evenly, because for most of the cases the return was scheduled every three months, being held group meetings and without clinical examination. These figures are worse than those reported in another study, which showed that at least 50% of professional teams stratified cardiovascular risk[3]. Thus, patients who for various reasons routinely or sporadically did not attend the quarterly meetings of the group necessarily need enter the spontaneous demand line to have access to medical consultations and medicines that although available in UBS, mostly are dispensed during meetings. This fact hinders the individual´s relationship with the health team and their adherence to treatment of chronic disease.

Also in individual care, it appears that the nursing consultation is an underutilized strategy because most nurses (68.3%) reported not carry it out according to the protocol but simply to check blood pressure and weight during group activity or only for spontaneous demand and do not constitute as a routine service.

Case-control study conducted in Sweden, along with 212 hypertensive people divided into two groups, showed that the intervention group, which received regular nursing visits for two years had a significant reduction in heart rate, body mass index, weight, waist, low-density cholesterol, waist-hip ratio and perceived stress[23]. In assisting the individual with AH, it is during the nursing consultation that the BP is checked, stratifying the individual risk, orienting about the disease and the use of drugs and their adverse effects, the reported symptoms is evaluated and guidance on personal lifestyle and family is provided, and this activity does not interfere directly with patient compliance with the treatment plan proposed, whether medicated or not[16].

Such adherence as well as being influenced by the nursing consultation, is strongly associated with the services provided through home visits and guidelines[24], which reinforces the importance of considering the high frequency of teams that did not perform home visits for non-adherent patients or new cases. Home visits also can constitute family involvement factor in the therapeutic process, which facilitates adherence to treatment[24]. It is also worth mentioning the high lack of care plans directed to the family, considering that when the assistance to the person with AH inserts and incorporates the family as a unit care, it provides a broader understanding of the health/disease process and non-curative interventions needs[25], besides stimulating the activity and participation in the care necessary to control the disease.

In summary, the analysis of dimension "care practices" pointed to a care model still focused on health care, with few nurses inserted in the care of patients with hypertension through nursing consultation. And, based on this biomedical model, there is little room for qualified listening, acceptance and understanding of suffering, which is reflected in a fragmented care to the individual and his family. In this perspective, control of blood pressure is not limited to approach the patient's body, being necessary to consider the life experience

and subjectivity of people as indispensable aspects in the process of getting sick and to care for themselves[26].

Concerning the dimension "health care organization", it was found that all teams have a specific instrument to document registration, monitoring, and evaluation of program activities, the HIPERDIA. However, more than half (58.7%) of the teams does not use this information for planning, evaluation of the Assistance Program for Hypertension and monitoring of followed patients. These results are similar to those found in an evaluative study in a northeastern Brazilian capital, where the use of information for action planning was not part of the routine of the studied teams[3]. These data allow to infer that the system of program information is seen by most teams just like a bureaucratic procedure of registration of individuals with hypertension and its use as a management tool, and monitoring of patients is still incipient.

I is repeated once again that the care model is centered on medical care because by identifying the active search for missing patients is not performed, nor even valued by other team members, point to the disparities between ACS responsibilities and nurses, regarding the search for missing patients, but what opposite to what is expected of these professionals. The active search, along with the rescheduling of appointments, meets one of the essential attributes of the APS and the model of care to individuals with NCDs, which is the longitudinal care, improving recognition of the needs of patients, reducing costs and hospitalizations, prevention, and promotion of health and patients´ satisfaction. Thus, over time the trust between professional and patient is established, leaving them more comfortable to expose their problems and discuss their self-care measures. In the same way, when professionals, in fact, know the patients and their needs, performing faster and more thorough assessment of the problem[27].

About the treatment based on care networks, it became clear that most teams presented difficulties for transporting the individual to medical and/or specialized tests. The mechanisms of coordination for healthcare services network are necessary to ensure the integration between levels of care. Assistance to NCDs, in particular, requires the use of resources, which in technological complexity, are not only located in APS, so that access to other levels of care should be coordinated and performed by primary care, as it should be a way for individuals in the health system[1].

CONCLUSION

The results of the study indicate that, from the perspective of nurses, aspects that have hindered the implementation of the assistance program to the individual with AH, such as the absence or lack of transportation for outside activities; work equipment; educational materials; training of human resources; systematic planning of care with individuals and families; determination of therapeutic from the risk classification and, finally, the referral of the patient to medical and/or specialized tests. It also points out that the work performed not completely matched with that proposed by the Ministry of Health nor the protocols developed in the county. According to nurses, medical consultation, for example, was not set and in many cases, care was replaced by the group for distribution of the medicines.

The study also found that according to the nurses, the greatest difficulties in implementing the program are related to care practices dimensions and organization of health care, which involve the work process of the teams and each professional individually. Accordingly, to carry out the standardized care professional faces some conditions imposed by every day: unpredictability, variability, and distortions that prevent compliance with the current rules and protocols, leading them to create their ways to perform the service.

It is believed that the findings can sensitize municipal managers and units to seek assurance of financial resources and political representation, and also to community involvement in improving the framework for the care and own training and motivation of staff to achieve the advanced level of attention from program implementation to hypertension in the municipality. It is highlighted the need to conduct active surveillance to identify people with hypertension as risk factors, perform risk stratification and systematic care planning, establishing an advanced clinical practice, such as support for self-care and case management, comply with existing protocols and develop collective actions based on information systems.

REFERENCES

1. Schmidt MI, Duncan BB, Silva GA, Menezes AM, Monteiro CA, Barreto SM, et al. Chronic non-communicable diseases in Brazil: burden and current challenges. Lancet [Internet]. 2011[cited 2015 Apr 24];377(9781):199-61. Available from: http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(11)60135-9.pdf
2. Lu Z, Cao S, Chai Y, Liang Y, Bachmann M, Suhrcke M, et al. Effectiveness of interventions for hypertension care in the community-a meta-analysis of controlled studies in China. BMC Health Serv Res [Internet]. 2012[cited 2015 Jan 8];12(216):1-12. Available from: http://www.biomedcentral.com/content/pdf/1472-6963-12-216.pdf
3. Costa JMBS, Silva MRF, Carvalho EF. [The implementation analysis of the arterial hypertension care by the Family Health teams in Recife city (Pernambuco, Brazil).] Ciênc Saúde Colet [Internet]. 2011[cited 2014 Dec 15];16(2):623-33. Available from: http://www.scielo.br/pdf/csc/v16n2/v16n2a26.pdf Portuguese.
4. Souza CS, Stein AT, Bastos GAN, Pellanda LC. Blood Pressure Control in Hypertensive Patients in the "Hiperdia Program": A Territory-Based Study. Arq Bras Cardiol [Internet]. 2014[cited 2014 Nov 18];102(6):571-8. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4079021/pdf/abc-102-06-0571.pdf

5. Brasil. Ministério da Saúde. Mortalidade por doenças crônicas no Brasil: situação em 2009 e tendências de 1991 a 2009. Brasília (DF): MS; 2010.

6. Malfatti CRM, Assunção AN. [Hypertension and diabetes in the Family Health Strategy: an analysis of the frequency in the follow-up care by the teams of Family Health.]. Ciênc Saúde Coletiva [Internet]. 2011[cited 2014 Dec 18];16(Supl 1):1383-8. Available from: http://www.scielo.br/pdf/csc/v16s1/a73v16s1.pdf

7. Silva RLDT. Avaliação da implantação da assistência às pessoas com hipertensão arterial em um município do estado do Paraná. [tese]. Maringá (PR). Programa de Pós-graduação em Enfermagem. Universidade Estadual de Maringá – UEM; 2013.

8. Instituto Brasileiro de Geografia e Estatística (IBGE). Cidades [Internet]. Rio de Janeiro, 2013 [cited 2013 Apr 24];. Available from: http://cidades.ibge.gov.br/xtras/perfil.php?lang=&codmun=411520&search=parana|maringa

9. Brasil. Ministério da Saúde. Secretaria de Atenção a Saúde. Departamento de Atenção Básica. Hipertensão arterial sistêmica para o Sistema Único de Saúde. Brasília: DF; 2006.

10. Nagahama EEI. [Evaluation of the implementation of reproductive health services in Maringá, Paraná State, Brazil.].Cad Saúde Pública [Internet]. 2009[cited 2015 Feb 15];25(Sup2):279-90. Available from: http://www.scielo.br/pdf/csp/v25s2/10.pdf Portuguese.

11. Pedrosa ICF, Corrêa ACP, Mandú ENT. Influencias da infraestrutura de centros de saúde nas práticas profissionais: percepções de enfermeiros. Ciênc Cuid Saúde [Internet]. 2011[cited 2014 Apr 22];10(1):58-65. Available from: http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/13288/pdf

12. Bertoncini JH, Pires DEP, Scherer MDA. [Work conditions and renormalization of nursing activities in family health]. Trab Educ Saude [Internet]. 2011[cited 2015 Apr 24];9(Supl 1):157-73. Available from: http://www.scielo.br/pdf/tes/v9s1/08.pdf Portuguese.

13. Sociedade Brasileira de Cardiologia; Sociedade Brasileira de Hipertensão; Sociedade Brasileira de Nefrologia. VI Diretrizes Brasileiras de Hipertensão. Arq Bras Cardiol [Internet]. 2010[cited 2014 Oct 15];95(1):1-51. Available from: http://publicacoes.cardiol.br/consenso/2010/Diretriz_hipertensao_associados.pdf

14. Silva CMC, Meneghim MC, Pereira AC, Mialhe FL. [Health education: a historical reflection of its practices]. Ciênc Saúde Coletiva [Internet]. 2010[cited 2014 Oct 28];15(5):2539-50. Available from: http://www.scielo.br/pdf/csc/v15n5/v15n5a28.pdf Portuguese.

15. Lu CH, Tang ST, Lei YX, Zhang MQ, Lin WQ, Ding SH, et al. Community-based interventions in hypertensive patients: a comparison of three health education strategies. BMC Public Health [Internet]. 2015[cited 2014 Oct 28];15(33):1-9. Available from: http://www.biomedcentral.com/1471-2458/15/33

16. Barreto MS, Ganassin GS, Matsuda LM, Marcon SS. Dissatisfaction with the Health Service and Non-Adherence to Antihypertensive Medication Treatment in Brazil. Open J Nursing [Internet]. 2015 [cited 2015 Mar 02];5(1):49-5. Available from: http://www.scirp.org/journal/PaperInformation.aspx?paperID=53331#.VTzcXCFViko

17. Barreto MS, Reiners AAO, Marcon SS. Knowledge about hypertension and factors associated with the non-adherence to drug therapy. Rev Latino-Am Enfermagem [Internet]. 2014[cited 2014 Sep 10];22(3):491-8. Available from: http://www.scielo.br/pdf/rlae/v22n3/0104-1169-rlae-22-03-00491.pdf

18. Martins AG, Chavaglia SR, Ohl RI, Martins IM, Gamba MA. Compliance with outpatient clinical treatment of hypertension. Acta Paul Enferm [Internet]. 2014[cited 2014 Dec 07];27(3):266-72. Available from: http://www.scielo.br/pdf/ape/v27n3/en_1982-0194-ape-027-003-0266.pdf

19. Mendes EV. As redes de atenção à saúde. Ciênc Saúde Coletiva [Internet]. 2010[cited 2015 Apr 26];15(5):2297-305. Available from: http://www.scielo.br/pdf/csc/v15n5/v15n5a05.pdf

20. Serafim TS, Jesus ES, Pierin AMG. Influence of knowledge on healthy lifestyle in the control of hypertensive. Acta Paul Enferm [Internet]. 2010[cited 2014 Nov 19];23(5):658-64. Available from: http://www.scielo.br/pdf/ape/v23n5/en_12.pdf

21. Fernandes MTO, Silva LB, Soares SM. [Use of technologies working with groups of diabetic and hypertensive individuals in Family Health]. Ciênc Saúde Coletiva [Internet]. 2011[cited 2014 Nov 19];16(Supl. 1):1331-40. Available from: http://www.scielo.br/pdf/csc/v16s1/a67v16s1.pdf Portuguese

22. Carvalho AKM, Abreu RNDC, Moreira TMM, Diógenes MAR, Abreu AAC, Souza ACC, et al. Consulta de enfermagem na percepção dos portadores de hipertensão atendidos na estratégia saúde da família. REME Rev Min Enferm [Internet]. 2011[cited 2014 Oct 19];15(3):341-7. Available from: http://www.reme.org.br/artigo/detalhes/43

23. Drevenhorn E, Bengtson A, Nilsson PM, Nyberg P, Kjellgren KI. Consultation training of nurses for cardiovascular prevention: a randomized study of 2 years duration. Blood Pressure [Internet]. 2012[cited 2014 Nov 19];21(5):293-9. Available from: http://www.tandfonline.com/doi/pdf/10.3109/08037051.2012.680734

24. Ribeiro AG, Cotta RMM, Silva LS, Ribeiro SMR, Dias CMGC, Mitre SM, et al. Hipertensão arterial e orientação domiciliar: o papel estratégico da saúde da família. Rev Nutr [Internet]. 2012[cited 2014 Nov 22];25(2):271-82. Available from: http://www.scielo.br/pdf/rn/v25n2/09.pdf

25. Gomes TJO, Silva MVR, Santos AA. Controle da pressão arterial em pacientes atendidos pelo programa Hiperdia em uma Unidade de Saúde da Família. Rev Bras Hipertens [Internet]. 2010[cited 2014 Nov 19];17(3):132-9. Available from: http://departamentos.cardiol.br/dha/revista/17-3/03-controle.pdf

26. Pires CGS, Mussi FC. Refletindo sobre pressupostos para o cuidar/cuidado em saúde na educação em saúde da pessoa hipertensa. Rev Esc Enferm USP [Internet]. 2009[cited 2014 Oct 27];43(1):229-36. Available from: http://www.scielo.br/pdf/reeusp/v43n1/30

27. Baratieri T, Marcon SS. Longitudinalidade do cuidado: compreensão dos enfermeiros que atuam na estratégia saúde da família. Esc Anna Nery [Internet]. 2011[cited 2015 Jan 07];15(4):802-10. Available from: http://www.scielo.br/pdf/ean/v15n4/a20v15n4.pdf