Adherence of hypertension patients in the Brazil’s Family Health Strategy

Anderson da Silva Rêgo, Cremilde Aparecida Trindade Radovanovic

Objective: to evaluate the adherence and associate it to blood pressure control and to follow-up observation of people with hypertension in the Brazil’s Family Health Strategy.

Method: cross-sectional study, conducted with 417 people in treatment of hypertension, living in a municipality located in the Northwest region of the state of Paraná, Brazil. The data were collected in the first 2016 semester, using an instrument adapted and validated for the evaluation of satisfaction with the services offered by Primary Health Care. Analysis of variance and the logistic regression model were used for the treatment of variables.

Results: it was evidenced that people with inadequate follow-up observation evaluate the relations between professional/user and the guidance to the medications used as unsatisfactory.

Conclusion: weak guidelines and ineffective dialogue between health professionals and users might result in an inadequate follow-up observation of blood pressure control and of people with hypertension.

Descriptors: Healthcare; Primary Health Care; Health Services Research; Nursing; Family Health Strategy.

RESUMO

Objetivo: avaliar a adesão/vínculo e associar ao controle pressórico e ao acompanhamento de pessoas com hipertensão arterial na Estratégia Saúde da Família. Método: estudo transversal, realizado com 417 pessoas em tratamento da hipertensão arterial, residentes em um município localizado no noroeste do estado do Paraná, Brasil. A coleta de dados foi realizada no primeiro semestre de 2016, utilizando-se um instrumento adaptado e validado para a avaliação da satisfação com os serviços ofertados pela Atenção Primária à Saúde. Empregou-se a análise de variância e o modelo de regressão logística para tratamento das variáveis. Resultados: evidenciou-se que as pessoas com acompanhamento inadequado avaliavam a relação entre profissional/usuário e a orientação quanto às medicações em uso, como insatisfatório. Conclusão: a fragilidade das orientações e do diálogo entre os profissionais de saúde e usuários pode acarretar na inadequação quanto ao controle pressórico e acompanhamento de pessoas com hipertensão arterial.

Descritores: Acolhimento; Atenção Primária à Saúde; Avaliação de Serviços de Saúde; Enfermagem; Estratégia Saúde da Família.

RESUMEN

Objetivo: evaluar la adhesión/el vínculo y asociar al control presórico y al acompañamiento de personas con hipertensión arterial en la Estrategia Salud de la Familia. Método: estudio transversal, realizado con 417 personas en tratamiento de la hipertensión arterial, residentes en un municipio ubicado en el noroeste del estado de Paraná, Brasil. La recogida de datos fue realizada en el primer semestre de 2016, utilizándose un instrumento adaptado y validado para la evaluación de la satisfacción con los servicios ofertados por la Atención Primaria a la Salud. Se empleó el análisis de variancia y el modelo de regresión logística para el tratamiento de las variables. Resultados: se evidenció que las personas con el acompañamiento no adecuado evaluaron la relación entre profesional/usuario y la orientación hacia las medicaciones en uso, como insatisfactorio. Conclusión: la fragilidad de las orientaciones y del diálogo entre los profesionales de salud y los usuarios puede acarrear en la no adecuación al control presórico y el acompañamiento de personas con hipertensión arterial.

Descripciones: Recepción; Atención Primaria a la Salud; Evaluación de Servicios de Salud; Enfermería; Estrategia Salud de la Familia.
INTRODUCTION

The Family Health Strategy (FHS) program, in force in Brazil since 1994, has shown to be a decentralized, preventive and more efficient healthcare model for Brazilian communities. These type of program provides more access to health services for citizens. Adherence and bond are tools that contribute to the effectiveness of the actions, promoting the safety of users regarding the services offered by health professionals.6-12,21

However, the current panorama of assistance within the Primary Health Care (PHC) framework is undergoing transformations in the work process, requiring diversity in the management of actions to reinforce the care provided.22 In the follow-up of persons with chronic non-communicable diseases (CNCD), PHC has a fundamental role for the success of the control and treatment of these diseases due to the high prevalence of deaths, estimated at over 38 million in 2012.10

Hypertension is one of the most prevalent chronic diseases, affecting approximately 31% of the population worldwide and having an impact on public health policies due to its incapacitating effects. The treatment is commonly based on drug therapy, causing changes in life habits, especially stimulating physical activities and dietary modifications.41

In this regard, interventions to ensure the control and prevention of complications deriving from hypertension are characterized by approaches aiming individual needs, considering the cultural and socioeconomic profile, identifying risk indicators and probability of complications of morbidity. These actions allow the harmonic coexistence with the disease and guarantee a better quality of life, and health professionals help the adherence to the chosen treatment.23

With the objective of guaranteeing the assistance under the FHS with identification of risks, needs and demands of health, the Reorganization Care Plan for Hypertension and Diabetes Mellitus was established in 2001, based on guidelines and goals for the Brazilian Unified Health System (UHS). Among the objectives of this plan we highlight: ensuring the diagnosis of morbidity; creating a bond between health professionals and people recently diagnosed with the disease; initiating and monitoring the treatment; to promote training and updating of health professionals; a more effective control of cases; meeting the health needs of people with quality care.40

Thus, the services provided by PHC are understood as a set of structural elements that contribute to the effective management of these demands and that need to be analyzed. To this end, a reflexive and critical evaluation on the health services offered is indispensable when the intended objective is to provide support in decision-making, which allows the identification of problematic factors in practices and on the management of daily activities.57

Thus, the bond with the user is a tool that can stimulate self-care practices and the continuity of patient care, considering the trust built.46 Adherence characterizes the longitudinality/continuity of the services provided, stimulates humanizing assistance practices, attending the patient’s health needs, and favors empathy with the users, building a respectful relationship, through dialogue and listening.2,40

Thus, the changes produced by the diagnosis of a chronic morbidity, especially hypertension, the patient compliance to treatment, social and cultural characteristics, as well as the emotional factors need to be investigated, considering that low adherence and bond are factors that encourage the inappropriate blood pressure control and the low attendance of the users to routine appointments, which has been discussed in the literature and showed that these services offered to the chronic disease patient need to be evaluated, with focus on the complexity of medications according to the sociodemographic and health profile of these people.22,44,80.

OBJECTIVE

To assess adherence/bond and associate them to blood pressure control and to follow-up observation of hypertension patients in the Brazil’s Family Health Strategy.

METHOD

Ethical aspects

The project was approved by the Permanent Research Ethics Committee with Humans. All participants signed two copies of the Informed Consent Form (ICF).

Study design, location, and period

The study is a cross-sectional research, held in a municipality located in the Northwest region of the state of Paraná, Brazil. The city has an estimated population of 403.063 inhabitants and the municipal health system is decentralized, with 34 Basic Health Units (BHU) in operation and around 74 FHS teams, covering 68.01% of the population.9-10

The data were collected in the first 2016 semester by a master’s student (main researcher), a doctorate student and two undergraduate research students. The main researcher trained the other team members about the application of the instruments used. After this, the initial contact with health managers and nurses of the FHS was made, and they were informed about the objective of the study. Eligible participants who agreed to participate in the research were interviewed individually in a reserved room, while waiting for the HIPERDIA Program meeting.

Population and sample

Users in treatment of hypertension, registered in the HIPERDIA Program and oriented by FHS teams participated in the study. The inclusion criteria were defined as: people aged 18 years or over, living in the urban area of the municipality, registered in the HIPERDIA Program done up to 2014 so the analysis of the follow-up during 2015 could be performed and to have been attended by professionals of health of the BHU over the last six months prior to data collection.

The total number of users considered for the sample calculation were 27,741. Therefore, a representative sample was calculated through the simple random sampling method, with 5% of estimate error and 95% confidence interval, plus 15% more for possible losses. Thus, the sample of the study was of 437 people, stratified according to the number of users in each BHU. Considering losses and refusals, the final sample was 417 patients.
Study protocol
Two instruments were used for data collection. The first assessed the socioeconomic level\(^{(1)}\) and the second was an instrument adapted and validated in Brazil\(^{(2)}\) that assessed the satisfaction of the hypertensive patient concerning the services provided by PHC. The last instrument contemplates the questions on the demographic, clinical profile and attributes related to PHC, as access to diagnosis, treatment, adherence/bond, services, coordination, focus on family and community orientation.

For this study, the adherence dimension was assessed by 10 indicators that correspond to the relation between the health professional and the user according to the follow-up and to the service offered. Interviewees answered questions regarding the domain with a single answer. Using the Likert scale type, values between one and five were attributed to the answers “never”, “almost never”, “sometimes”, “often” and “always”, in addition to the options “does not apply” and “does not know/no reply”\(^{(12)}\).

The blood pressure values measured on the day of the interviews were categorized under “adequate blood pressure control” (systolic blood pressure (SBP) ≤ at 140 mmHg and diastolic blood pressure (DBP) ≤ the 90 mmHg), following the criteria of the VII Diretriz Brasileira de Hipertensão Arterial [VII Brazilian Guideline for Hypertension]\(^{(13)}\). To analyze the regular follow-up of users we followed the criteria established by the Ministry of Health\(^{(8)}\), which consider appropriate the follow-up of the person that attends to the BHU at least three times a year having their blood pressure values measured and registered in medical records\(^{(2)}\). Only the 2015 records were used for this study.

Analysis of the results and statistics
The data were tabulated twice in a Microsoft Office Excel 2010 spreadsheet. The inconsistencies were corrected, and statistical analysis procedures were performed in the IBM SPSS version 20.0 software.

We used the Kruskal-Wallis test to analyze variance, obtaining the average, 95% confidence interval and the standard deviation of the indicators. Subsequently, they were classified based on the averages cut-off point obtained through the test, being divided into satisfactory (≥ 4), regular (< 4 and ≥ 3) and unsatisfactory (< 3) according to the study done by the authors\(^{(8)}\).

Univariate logistic regression analysis was used with the Forward method; the variables that resulted in \(p < 0.20\) were considered and entered in ascending order in the multivariate model. The associations were estimated by the Odds Ratio (OR) calculation, 95% confidence interval as the precision measure, setting \(p < 0.05\) as the statistical significance. The dependent variable used was the average ranking of the evaluation of the indicators “adherence” and the independent variable were the results categorized of blood pressure control and regular follow-up.

RESULTS
Among the respondents, the predominant population was aged over/equal to 70 years (31.9%), women (67.9%), with up to eight years of formal education (61.1%), white (62.3%) and belonging to the C classification (43.9%) according to the Brazilian Institute of Geography and Statistics (IBGE). Regarding the FHS follow-up, 62.8% were classified as adequate and 53.7% maintained the appropriate blood pressure control.

The exploratory analysis of adherence is shown in Table 1. The indicators that had lower averages were: A1 (3.35 ± 1.27), A2 (3.41 ± 1.23) and A3 (3.61 ± 1.23), with a regular evaluation. A10 (4.79 ± 0.23) was the only indicator that had a satisfactory evaluation.

Table 2 shows that the user classified as having inadequate follow-up is 1.63 times more likely to evaluate the dialogue with the professionals about other health problems (A6) as regular. The same is true for A8 which is 1.55 times more likely to evaluate the item as regular. People with inadequate blood pressure control are 1.83 times more likely to evaluate A8 as unsatisfactory (Table 2).

Interviewees with inadequate follow-up are 2.46 times more likely to evaluate A4 as unsatisfactory. People with inadequate blood pressure control are 1.87 times more likely to evaluate A8 as unsatisfactory (Table 3).

Table 1 – Indicators of adherence evaluated by users with hypertension of the Family Health Strategy, Paraná, Brazil, 2016

| Label | Adherence/Bonding | Average | SD | IC 95% |
|-------|-------------------|--------|----|--------|
| A1    | When you go to the health unit for the hypertension appointment are you seen by the same professional? | 3.35   | 1.27 | 3.22 - 3.47 |
| A2    | If you have any questions about your treatment, are you able to talk to the same health unit professional that treats you? | 3.41   | 1.23 | 3.29 - 3.53 |
| A3    | When you ask any question to the health unit professional, do you feel understood? | 3.61   | 1.23 | 3.49 - 3.73 |
| A4    | Does the health unit professional from where you are doing the treatment answer to your questions clearly? | 3.78   | 1.21 | 3.67 - 3.90 |
| A5    | Does the health unit professional give enough time for you to speak about your questions or concerns? | 3.62   | 1.25 | 3.50 - 3.74 |
| A6    | When you attend to the appointment at the health unit, the professional talks about other health problems? | 3.65   | 1.23 | 3.53 - 3.77 |
| A7    | Does the health unit professional ask you about all the medicines you are using? | 3.97   | 1.22 | 3.85 - 4.09 |
| A8    | Does the health unit professional explain the importance of following the indicated treatment for the control of hypertension? | 3.79   | 1.21 | 3.67 - 3.91 |
| A9    | Does the health unit professionals have good relations with the people in the community? | 3.88   | 1.18 | 3.85 - 4.09 |
| A10   | Have you ever thought about changing the health unit because of the professionals? | 4.79   | 0.23 | 4.72 - 4.86 |

Note: SD: Standard Deviation, 95% CI: Confidence Interval.

Adherence of hypertension patients in the Brazil’s Family Health Strategy
Rêgo A5, Radovanovic CAT.
Table 2 – Indicators of adherence/bonding and follow-up of the users with hypertension and blood pressure control of the Family Health Strategy, Paraná, Brazil, 2016

| Label | Classification | Adequate follow-up | Univariate analysis | Multivariate Analysis | Appropriate blood pressure control | Univariate analysis |
|-------|----------------|--------------------|---------------------|----------------------|------------------------------------|---------------------|
|       |                | Yes | No | OR | IC 95% | p | Yes | No | OR | IC 95% | p |
| A1    | Satisfactory   | 92  | 62 | 1  |        |   | 92  | 69 | 1  |        |   |
|       | Unsatisfactory | 69  | 38 | 0.62 | 0.37-10.5 | 0.081 | 46  | 55 | 1.61 | 0.98-2.67 | 0.060 |
|       | Regular        | 101 | 55 | 0.73 | 0.46-1.16 | 0.187 | 85  | 70 | 1.10 | 0.70-1.71 | 0.671 |
| A2    | Satisfactory   | 97  | 71 | 1  |        |   | 123 | 110| 1  |        |   |
|       | Unsatisfactory | 59  | 30 | 0.69 | 0.40-1.18 | 0.182 | 24  | 30 | 1.39 | 0.77-2.53 | 0.270 |
|       | Regular        | 106 | 54 | 0.69 | 0.44-1.09 | 0.113 | 77  | 53 | 0.77 | 0.49-1.18 | 0.237 |
| A3    | Satisfactory   | 128 | 80 | 1  |        |   | 113 | 95 | 1  |        |   |
|       | Unsatisfactory | 49  | 33 | 1.07 | 0.63-1.01 | 0.779 | 38  | 44 | 1.37 | 0.82-2.30 | 0.221 |
|       | Regular        | 85  | 42 | 0.79 | 0.49-1.25 | 0.320 | 73  | 54 | 0.88 | 0.56-1.37 | 0.573 |
| A4    | Satisfactory   | 152 | 88 | 1  |        |   | 127 | 113| 1  |        |   |
|       | Unsatisfactory | 32  | 29 | 1.56 | 0.88-2.76 | 0.121 | 25  | 36 | 1.61 | 0.91-2.86 | 0.098 |
|       | Regular        | 78  | 38 | 0.84 | 0.52-1.34 | 0.470 | 72  | 44 | 0.68 | 0.43-1.08 | 0.104 |
| A5    | Satisfactory   | 126 | 80 | 1  |        |   | 112 | 94 | 1  |        |   |
|       | Unsatisfactory | 48  | 27 | 0.88 | 0.51-1.53 | 0.665 | 38  | 37 | 1.16 | 0.68-1.96 | 0.582 |
|       | Regular        | 88  | 48 | 0.85 | 0.54-1.34 | 0.508 | 74  | 62 | 0.99 | 0.64-1.54 | 0.994 |
| A6    | Satisfactory   | 125 | 89 | 1  |        |   | 115 | 99| 1  |        |   |
|       | Unsatisfactory | 46  | 25 | 0.76 | 0.43-1.33 | 0.343 | 38  | 33 | 1.00 | 0.58-1.72 | 0.975 |
|       | Regular        | 91  | 41 | 1.63 | 1.40-2.00 | 0.050 | 71  | 61 | 0.99 | 0.64-1.54 | 0.993 |
| A7    | Satisfactory   | 144 | 89 | 1  |        |   | 128 | 119 | 1  |        |   |
|       | Unsatisfactory | 33  | 21 | 1.03 | 0.56-1.89 | 0.925 | 25  | 22 | 0.94 | 0.50-1.76 | 0.863 |
|       | Regular        | 85  | 45 | 0.85 | 0.54-1.34 | 0.498 | 71  | 52 | 0.78 | 0.50-1.21 | 0.284 |
| A8    | Satisfactory   | 146 | 101| 1  |        |   | 99  | 69 | 1  |        |   |
|       | Unsatisfactory | 27  | 20 | 1.07 | 0.56-2.01 | 0.832 | 39  | 50 | 1.83 | 1.09-3.09 | 0.021 |
|       | Regular        | 89  | 34 | 1.55 | 1.34-1.88 | 0.013 | 86  | 74 | 1.23 | 0.79-1.91 | 0.345 |
| A9    | Satisfactory   | 163 | 95 | 1  |        |   | 136 | 122 | 1  |        |   |
|       | Unsatisfactory | 30  | 18 | 1.02 | 0.54-1.94 | 0.929 | 24  | 24 | 1.11 | 0.60-2.06 | 0.730 |
|       | Regular        | 69  | 42 | 1.04 | 0.66-1.65 | 0.853 | 64  | 47 | 0.81 | 0.52-1.28 | 0.382 |
| A10   | Satisfactory   | 249 | 144| 1  |        |   | 214 | 179 | 1  |        |   |
|       | Unsatisfactory | 6   | 5  | 1.44 | 0.43-4.08 | 0.552 | 5   | 6  | 1.43 | 0.43-4.77 | 0.557 |
|       | Regular        | 7   | 6  | 1.48 | 0.48-4.49 | 0.487 | 5   | 8  | 1.91 | 0.61-5.95 | 0.263 |

Note: *included in multivariate analysis; OR: Odds Ratio; 95% CI: Confidence Interval.

Table 3 – Indicators of adherence/bonding and follow-up of the users with hypertension and blood pressure control of the Family Health Strategy, Paraná, Brazil, 2016

| Label | Classification | Adequate follow-up | Multivariate Analysis | Appropriate blood pressure control | Multivariate Analysis |
|-------|----------------|--------------------|----------------------|------------------------------------|----------------------|
|       |                | Yes | No | OR | IC 95% | p | Yes | No | OR | IC 95% | p |
| A2    | Satisfactory   | 97  | 71 | 1  |        |   | 92  | 69 | 1  |        |   |
|       | Unsatisfactory | 59  | 30 | 0.53 | 0.29-0.99 | 0.048 | 46  | 55 | 1.43 | 0.51-4.00 | 0.489 |
|       | Regular        | 106 | 54 | 0.71 | 0.45-1.14 | 0.159 | 85  | 70 | 1.17 | 0.61-2.26 | 0.625 |
| A4    | Satisfactory   | 152 | 88 | 1  |        |   | 127 | 113| 1  |        |   |
|       | Unsatisfactory | 32  | 29 | 2.46 | 1.12-5.42 | 0.024* | 25  | 36 | 10.4 | 0.54-1.98 | 0.902 |
|       | Regular        | 78  | 38 | 0.94 | 0.52-1.70 | 0.861 | 72  | 44 | 1.30 | 0.78-2.16 | 0.298 |
| A8    | Satisfactory   | 146 | 101| 1  |        |   | 99  | 69 | 1  |        |   |
|       | Unsatisfactory | 27  | 20 | 0.71 | 0.31-1.64 | 0.436 | 39  | 50 | 1.17 | 0.61-2.26 | 0.625 |
|       | Regular        | 89  | 34 | 0.90 | 0.51-1.57 | 0.713 | 86  | 74 | 1.87 | 1.08-4.28 | 0.022* |

Note: *Statistical significance in multivariate analysis; OR: Odds Ratio; 95% CI: Confidence Interval.
DISCUSSION

Although more than half of respondents have appropriate follow-up and blood pressure control, it is important to present the level of satisfaction of these users regarding the adherence/bonding established with the professionals, since the participation of the latter is considerably important for the success on the results of the treatment\textsuperscript{12,14}. The bond between users and health professionals means a respectful relationship and characterizes the longitudinality/continuity of the care provided according to the participation of the user in the treatment of the morbidity, as an active member of the process who has the right to listen, question and opine\textsuperscript{22}.

The service provided by the same professional was one of the attributes among those with the lowest average in the evaluation, and it did not have a significant association between the appropriate follow-up and the blood pressure control of the participants. The results of a qualitative study conducted with people treating hypertension had continuous changes in the health team, leading to difficulties of adherence and bonding between the professional and the user\textsuperscript{14,15}.

We note that the regular follow-up of the person with hypertension by the same professional allows both to be closer and provides better adherence and compliance to the treatment, considering that hypertension is a chronic disease, with prolonged treatment and may cause other health problems due to its chronicity\textsuperscript{14,15}.

Doubts from the patient regarding the disease are very common, especially when new facts occur or when there therapeutic measures of blood pressure control are not successful. The A2 item, which questioned the reception by the health professionals obtained the lowest average when compared to the other indicators, it also pointed to the frailties in continuous dialogue with the user, especially to identify situations of social, physical, psychological and even spiritual vulnerability, which interfere in a better knowledge and understanding of the disease and in a better compliance to the treatment.

A study performed in Ceará, Brazil, showed that the patient’s insufficient knowledge about the disease causes the non-adhesion to the pharmacotherapy and leads to insufficient self-care, increasing the occurrence of hypertension complications\textsuperscript{13,14}. The results of another research showed that these complications, associated to hospitalizations, were more frequently associated with hypertensive crisis, cardiovascular and cerebrovascular problems and improper blood pressure control, all associated to non-adherence to pharmacotherapy and to the presence of other morbidities. Thus, the chronicity of hypertension and the impact generated on the morbimortality profile of the Brazilian population makes it difficult to guarantee follow-up observation and actions in health and prevention of diseases\textsuperscript{16,17}.

Assiduity can reduce tensional symptoms primarily through holistic assessment performed by health professionals and by changing the therapeutic treatment. However, we reiterate the importance of developing the ability to listen, providing time for the user to expose his needs and questions, so the professional trust can be developed/strengthened, and the treatment can be effective\textsuperscript{17}.

Regarding blood pressure control, the results showed that people with inadequate control have better chances to evaluate the A8 item as unsatisfactory. Despite the clinic differences, these results are close to the results of a study carried out in Serra, Espirito Santo, Brazil, with women treated by PHC professionals\textsuperscript{12}. A study conducted in the rural area of the state of Paraná had a high prevalence of non-adherence to hypertension pharmacological treatment – the sample had inadequate knowledge about the disease, the prescribed medications were too complex and they were not satisfied with the services provided\textsuperscript{19}.

The results of a randomized clinical trial conducted with people under hypertension treatment in a public service of Malaysia presented that the interventions conducted through guidelines about medication and treatment statistically increased the knowledge of the population about the disease, and thus the adherence to drug therapy, reducing the blood pressure of the participants\textsuperscript{20}. The importance of health education and educational actions for the population is reiterated, considering interprofessional practice in the follow-up programs in force in Brazil.

In this panorama, we consider the Cuido as Condições Crônicas (Care for Chronic Conditions) in the PHC important, being collaborative care a suggested tool to improve assistance actions that need to be implemented. Thus, we emphasize the importance of this study and of research related to health assessment for professionals to understand the need for organizational change, the first step to implement the Modelo de Atenção às Condições Crônicas (Model of Care to Chronic Conditions) (MACC) in health units and improve the quality of life of the population, with effective assistance to the health needs\textsuperscript{21}.

We note that most of the respondents did not want to attend other BHU for reasons related to the assistance received from the health professionals. Despite the constant change of doctors being an attribute evaluated as unsatisfactory, the choice of care on the BHU closest to the residence is still the most viable option. To ease the shortage of primary health care doctors, the Brazilian Ministry of Health implemented the Mais Médicos (More Doctors) Program (MMP) in October 2013, by Law No. 12.871, which aims to meet the need and ensure the right to health care to the entire population. The program still raises doubts and insecurity regarding assistance despite the efforts, mainly for political issues. However, current evidence indicate the positive impact of MMP in Brazil and its potential in diagnosing diseases, improving and treating specific cases and sensitive to PHC\textsuperscript{22}.

Nursing appointments can be an efficient approach and that may reduce the dissatisfaction with the changes of medical professionals, since the presence of nurses can strengthen bonds and build more trust with patients, noting that such an approach does not reduce the importance and tasks of the doctors in the diagnosis, treatment and control of morbidities\textsuperscript{23}. Thus, this action could contribute to treat tensional symptoms of hypertension and – along with constant evaluation of the clinical profile – to reduce the risk of complications, hospitalizations by preventable causes and the amount spent by the government with the UHS\textsuperscript{24-25}.

A study conducted in the United Kingdom reported the importance of the nurse as the leader in the healthcare process, being the professional that is closest to the community and
the appointment carried out by the nurse favors the understanding of the needs of the user. The study also points out the need of individual assistance to ensure the right to health equally, since the professionals working in the English health system organized the work process and the management of prevention and control of chronic diseases through scientific evidence based on clinical protocols.

MACC suggests an assistance with the identification of health particularities for the control and treatment of diseases, which can be integrated to the assistance practices offered by PHC in the country, identifying the health needs, with interprofessional work for accessible, understandable and effective care programs. The results of an intervention study pointed out evidences relating interprofessional activities with the reduction of the blood pressure of the participants and that the activities fostered autonomy and self-care. Moreover there was the perception the process of facing the chronic condition could be shared, promoting guidelines according to the needs, increasing the importance of adherence to the treatment.

**Study limitations**

The unavailability of information contained in the electronic records or inadequate actions consistently carried out by the professionals is one of the limitations. There are also difficulties related to the electronic system of some teams that still use printed records, highlighting the need for constant professional training, considering technological advances and equipment that are developed to improve and enhance the assistance.

**Contributions to the field of Nursing, health, or public policies**

The findings of this study can contribute to the planning of nursing actions, resulting in the re-evaluation of assistance practices and the management of health actions that are directed towards people with hypertension, with a more holistic attention to the population and identifying needs, with effective assistance and improvement on the quality of life.

Furthermore, we suggest that further research can be conducted, mainly referring to the recent changes in the health care of people with chronic diseases in the country, which could possibly may result in the low adherence of people with hypertension and/or diabetes Mellitus. Thus, we reiterate the need for research with qualitative methodologies to complement the results of this study, as well the identification of organizational barriers that interfere in the assistance provided by FHS.

**CONCLUSION**

We conclude that in the adherence/bond dimension most respondents evaluated as regular the questions related to being treated by the same professional, resolution of questions about the medications in use for the control and treatment of the disease and about other health-related matters. We found significant association between users who declared follow-up as inadequate, and that there were higher chance to evaluate the dialogue with the professionals about other health problems as regular. People with inadequate blood pressure control have higher chances of evaluating the orientation of the health unit professional about the importance of following the recommended treatment for the control of hypertension as unsatisfactory.

We noted that the adherence/bond between people with hypertension and the BHU professionals have frailties directly related to the organizational mode and the availability of human resources in the areas where the study was conducted. In this regard, we encourage the re-evaluation and the reorganization of the actions performed, mainly in relation to hosting, which can still reverse the evaluation of the indicator about the guidelines provided by healthcare professionals about medications and their possible adverse effects.

**ACKNOWLEDGEMENTS**

The authors would like to thank Dr. Neir Antunes Paes for the authorization to use the instrument of his authorship for data collection. We also thank Dr. Rosana Rosseto de Oliveira and the Department of Statistics of the State University of Maringá (UEM) for the aid in the process of sampling, statistical processing of data and results of the study.

**REFERENCES**

1. Rego AS, Oliveira RG, Macerau WMO, Molena-Femandes CA, Mathias TAF, Radovanovic CAT. Stratification of family risk in the context of family health strategy. J Nurs UFPE [Internet]. 2016 [cited 2016 Sep 11];10(3):977-84. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/9143/pdf_9818
2. Silva CS, Paes NA, Figueiredo TMRM, Cardoso MAA, Silva ATM, Araújo JSS. Blood pressure control and adherence/attachment in hypertensive users of primary healthcare. Rev Esc Enferm USP [Internet]. 2013[cited 2016 Sep 11];47(3):584-90. Available from: http://www.scielo.br/pdf/reeusp/v47n3/en_0408-6234-reeusp-47-3-00584.pdf
3. World Health Organization (WHO). Health statistics and information systems. Geneva: World Health Organization [Internet]. 2014 [cited 2016 Sep 05]. Available from: http://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html
4. Girão ALA, Freitas CHA. Hypertensive patients in primary health care: access, connection and care involved in spontaneous demands. Rev Gaúcha Enferm [Internet]. 2016 [cited 2016 Sep 11];37(2):e60015. Available from: http://www.scielo.br/pdf/rgenf/v37n2/en_0102-6933-rgefn-1983-144720160260015.pdf
5. Radovanovic CAT, Santos LA, Carvalho MDB, Marcon SS. Arterial Hypertension and other risk factors associated with cardiovascular diseases among adults. Rev Latino-Am Enfermagem [Internet]. 2014[cited 2016 Sep 10];22(4):547–53. Available from: http://
26. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Estratégias para o cuidado da pessoa com doença crônica. Brasília, DF: Ministério da Saúde, Departamento de Atenção Básica, 2014.

27. Radovanovic CAT, Bevilaqua CA, Molena-Fernandes CA, Marcon SS. Multi-professional intervention in adults with arterial hypertension: a randomized clinical trial. Rev Bras Enferm [Internet]. 2016[cited 2016 Sep 16];69(6):1005-11. Available from: http://www.scielo.br/pdf/reben/v69n6/en_0034-7167-reben-69-06-1067.pdf