ISSN: 1981-8963 DOI: 10.5205/reuol.7061-61015-5-SM0906supl201515

CASE REPORT ARTICLE

# UPDATING, MONITORING AND REGISTRATION OF HYPERTENSIVE AND DIABETIC PATIENTS: EXPERIENCE REPORT

## ATUALIZAÇÃO, ACOMPANHAMENTO E CADASTRO DE HIPERTENSOS E DIABÉTICOS, UM RELATO DE EXPERIÊNCIA

## ACTUALIZACIÓN, MONITOREO Y REGISTRO DE HIPERTENSOS Y DIABÉTICOS: INFORME DE EXPERIENCIA

*João Igor Borges de Almeida[1], Jozimar Miranda Neri de Jesus[2], Otoni Silva de Queiroz Souza[3]*

**ABSTRACT**

***Objective***: to report an experience of nursing students in the process of updating the HiperDia Program in a Family Health Unit. ***Method***: a descriptive study and experience report lived by the nursing students from Recôncavo of Bahia after the execution of the interventional project "HIPERDIA Program Update", when 60 people were registered and an educational action was conducted which included the participation of the people from the community and team unity. ***Results***: update of users and receiving them on the importance of controlling these diseases. ***Conclusion***: the activity has afforded approach between the students and the health team with the community, and knowledge to control these diseases. ***Descriptors***: Health Unit; Health Education; Nursing.

**RESUMO**

***Objetivo***: relatar a experiência vivenciada por acadêmicos de Enfermagem no processo de atualização do Programa HiperDia de uma Unidade de Saúde da Família. ***Método***: estudo descritivo, tipo relato de experiência vivenciado por estudantes de enfermagem do Recôncavo da Bahia após a execução do projeto de intervenção "Atualização do programa HIPERDIA", onde foram cadastradas 60 pessoas e foi realizada uma ação educativa que contou com a participação das pessoas da comunidade e a equipe da unidade. ***Resultados***: atualização dos usuários e recepção dos mesmos quanto à importância do controle dessas doenças. ***Conclusão***: a atividade proporcionou aproximação dos discentes e da equipe de saúde com a comunidade, além de incluir conhecimentos nas pessoas para o controle dessas doenças. ***Descritores***: Unidade de Saúde; Educação em Saúde; Enfermagem.

**RESUMEN**

***Objetivo***: presentar la experiencia de los estudiantes de enfermería en el proceso de actualización de Programa HIPERDIA de la Unidad de Salud de la Familia. ***Método***: un relato de experiencia y estudio descriptivo, tipo vivida por los estudiantes de enfermería de Recóncavo de Bahía después de la ejecución del proyecto de intervención "programa de actualización HIPERDIA", donde se registraron 60 personas y una acción educativa que incluyó la participación de la gente se llevó a cabo la unidad de la comunidad y el equipo. ***Resultados***: actualización de los usuarios y recibirlos en la importancia del control de estas enfermedades. ***Conclusión***: la actividad dio el enfoque de los estudiantes y el equipo de salud con la comunidad, e incluye experiencia en las personas para controlar estas enfermedades. ***Descritores***: Unidad de Salud; Educación Para La Salud; Enfermería.

[1]Student, Graduation Course in Nursing, Universidade Federal do Recôncavo da Bahia/UFRB. Santo Antonio de Jesus (BA), Brazil. E-mail: igor_medicina@hotmail.com; [2]Student, Graduation Course in Nursing, Universidade Federal do Recôncavo da Bahia/UFRB. Santo Antonio de Jesus (BA), Brazil. E-mail: Jozimar_mn@hotmail.com; [3]Nurse, substitute professor, Graduation Course in Nursing, Universidade Federal do Recôncavo da Bahia/UFRB. Santo Antonio de Jesus (BA), Brazil. otonisouza_bahia@hotmail.com

ISSN: 1981-8963 DOI: 10.5205/reuol.7061-61015-5-SM0906supl201515



## INTRODUCTION

Between 1940 and 2000 the Brazilian population had an increase of 129 million people, and for the first half of the XXI century it is estimated an increase of 90 million. Thus, it can be highlighted the significant rate of population growth relating it to the decline in mortality and increased life expectancy at borning.[1]

This process of modification of Brazil's demographic profile is called the demographic transition and it is accompanied by changes in the pattern of morbidity and mortality communities. Two health processes are involved in population: on the one hand there are the changes in health conditions, the epidemiological profile of a given site; the second process is the social actions that aim to meet these demands such as actions taken by health services[2].

There was a change in the health profile of the population, where chronic diseases and their complications which generate high cost to health services and longer treatment time became more prevalent than infectious and parasitic diseases. According to IBGE data[3], the elderly population has the highest prevalence of deaths from chronic diseases. In Brazil, more than half of the deaths in the elderly were caused by diseases of the circulatory system, almost 47%.[4]

Diabetes Mellitus (DM) and Hypertension (SAH) are chronic diseases that most affect the Brazilian population. The onset of both diseases is related to genetic and behavioral factors. Thus, it is considered that the lifestyle that each subject develops is a determining factor and determinant of health-disease process.[5]

The DM and hypertension are the main population risk factors for cardiovascular disease, why are treated as a public health diseases. Diabetes mellitus is a syndrome of multiple etiologies, wherein the absence of insulin and/or the inability of insulin to exert its effects, causes an increase of the glycemic levels.[5] The systolic blood pressure is defined as the highest pressure or equal to 140 mmHg and a diastolic blood pressure greater than or equal to 90 mmHg in people who do not engage in anti-hypertensive treatments.[6]

Risk factors for the two diseases are obesity, increased waist circumference, elevated triglyceride levels and cholesterol, family history of diseases, sedentary lifestyle, socio-economic factors, among others. Thus, a performance of a multidisciplinary team in these risk factors is very important in developing these diseases.[7]

Hypertension is present in 69% of people who have had a myocardial infarction, and 77% who owned a cerebral stroke.[8] Diabetes mellitus is expected to affect over 300 million people by 2025[9]. Therefore, the control of these two diseases is relevant in the prevention of complications.

Approximately 60 to 80% of cases can be treated in basic health network.[10] Thus, the access to health services is a relevant factor for the proper development of health care actions; so inadequate access hinders the patient care because there is a delay in diagnosis and treatment, moreover the lack of user's satisfaction and distrust in health team [5]. Thus, the family health team that is usually formed by a multidisciplinary team should act in full on the assistance of people with hypertension and DM, favoring a reorganization and improvement of quality of service for these people.[11]

Given this new socio-economic and epidemiological profile of Brazilian society, the Federal Government has identified the need to create a program that would enable the identification and monitoring of persons with diabetes and hypertension with a view to preventing the diseases that these diseases can cause.[12]

On March 4, 2002, by Ordinance No. 371 / GM, the Hiperdia Program which is a system of Registration and Monitoring Hypertensive Diabetics, where all municipalities must register and keep up people who have hypertension and or DM. [12] This update consists of register, monitor, distribute medication as prescription, defines the epidemiological profile of the population, and development of public health strategies to improve the quality of this people.[13] From this to make public the information on hypertension and diabetics in the country public managers should provide information to feed the national database of HIPERDIA for these data be sent.[14]

The study aims at reporting an experience of nursing students in the process of updating HiperDia Program of the Family Health Unit (USF) of Recôncavo of

Bahia. The research starts from the perspective that the SISHIPERDIA of the Municipality has presented failures in the upgrade process, so this work is of great importance, enabling registering new users, removing those who died and those who do not live in the catchment area, formulating strategies for joining the Hiperdia program at USF, educating users about the importance of consultations, the correct use of medicines and the change in lifestyle, providing a reduction in potential complications.

The involvement of the whole Family Health Team is crucial for qualification of actions and health services, seeing the realization of multi-professionalism in the context of primary care, and enabling closer ties between community and Health Team of humanistic and welcoming way.

## METHODOLOGICAL PROCEDURES

This project is a descriptive study and experience report experienced by students of the 8th semester of nursing course at the Federal University of Recôncavo of Bahia (UFRB) in the practical implementation of the component curricular Supervised Stage I (ES-I). The study was conducted in a community of Recôncavo of Bahia with users registered in a USF, which had systemic hypertension and/or diabetes mellitus.

The objective was to identify the demands that needed resolution in both the internal and external environment of the health unit. The contributions of nurse and community health workers were very important for the recognition of the unit's needs. Among the various proposals made, it was decided to work with the update of users on HIPERDIA program and promoting the health of people included in this program because according to reports of the professionals, there are several hypertensive and diabetics who do not have registration in HIPERDIA program, which were died and others who do not reside in the catchment area of the USF, furthermore, do not achieve adequate control of the disease form occurring consequently long-term complications.

We used the following techniques for data collection: activity schedule for completion of the intervention project, hospital records of users, participation in clinical and managerial activities of the unit and consult in the municipal health department.

Data collection was done through a screening when blood pressure, blood sugar, weight, height and waist measurements were performed; and we observed if they were or not registered in the program. And so, subsequently, we accomplished the registration of these people. To properly get the number of updates to the program, we have a partnership of nurse practitioners and physician who referred us patients who had one of the diseases; in addition, during visits to the ACS we performed the update in the residences of users with hypertension and/or diabetes.

In the implementation of project it was first performed with a discussion on the topic and built a schedule where we settled the steps, the runtime and those responsible for implementation; the expected results of each stage and evaluation indicators. They were also carried out educational materials as folder and posters presenting the SAH and DM issues.

During the educational activities it was proceeded the discussion of the topic and objective of the work with users when they brought their doubts. During the activity it was approached about high blood pressure (hypertension) and diabetes mellitus (DM), and the importance of the Registration Program and Monitoring of Hypertensive Diabetics (HIPERDIA), which is inserted in the health unit care agenda.

To discuss on the topic we made folders and posters with information about epidemiology, the concept of disease, risk factors, medication and non-medication treatment and complications. At that point the contributions of ACS, the unit staff and the users themselves were very important for the activity to take place properly and so that we could reach our goal.

## RESULTS AND DISCUSSION

The project began on 02/19/2014 at USF in the city of Santo Antônio de Jesus-BA, and finished on 03/18/2014. While performing the update of registered users in HIPERDIA, the team unity was very important for realization of the project because there was an involvement of everyone: getting along with the municipal health department the list of hypertensive

and diabetics to attract users to perform the upgrade, going to their homes, transmission of information about the importance of our project with the community and conducting educational activities.

Two action strategies were used to accomplished performance: at the clinic and at users' homes. In the health unit we conducted the update in the days when there were more patients with hypertension and diabetes, as these days the doctor and nurse only met this kind of users. Thus we had the opportunity to identify those who had one of the two diseases and were not registered.

In the waiting room of the unit we held educational activities related to both diseases, identifying users' prior knowledge, for they to participate in health education, finally we held a screening of these people. During consultations we upgraded those who were not registered and we provided information to these patients about diet, exercise, proper use of medications among others.

In home visits with the ACS, the people who have one of the two diseases were identified. In these households we conducted the updating of the registration of these people. During the upgrade we always use health promotion guiding the people for we realize that many people who live in the community have high blood pressure and glucose levels, for not performing physical activity, and have unbalanced diet, excessive intake of alcohol, improper use of drug are the determining factors for this cause.

During the project we registered 60 people and excluded 26 of the list of registered of City Health Department because nine were dead based on SINAN data, 15 were with duplicate names and two no longer resided in the area, which made the SINAN information in the area untrusted with respect to hypertension and diabetes.

On the last day a meeting was held with hypertensive and diabetics of the respective unit, at 07:30, lasting 2 hours, which had the participation of 20 community members and ESF. A discussion was two-way approach, occurring interaction between the community and the speakers. During the activity we see the participation of people who brought their questions and their living habits; and there was a greater participation of staff with the community, identifying their needs and their complaints that influence the monitoring of diseases.

We realized during the execution of the activity the acceptance of participants to acquire knowledge, always inquiring about the impact of these diseases on their lives and on the risk factors. Thus, we introduce the participants with knowledge that will help them in having more control over these diseases and prevent consequences.

At the end of the activity we offered fruit salad for breakfast for all participants, it was a moment to consolidate the educational activities, for advising on physical education practices, healthy nutrition, proper use of drugs, as well as greater participation in consultations of HIPERDIA, especially with the nurse, because few users have attended in the unit.

The lack of some ACS was the biggest problem for the operation because of from the six ACS, four ones were on leave or vacation, and because of this many people are no longer enrolled in the program. However, with both ACS present in the unit we managed to cover their micro areas, leaving 37 users to be registered.

It is important to highlight the role of teamwork in the construction and development of the project because all professionals have contributed in suggestions for the planning and operation of the activity. The nurse had a very important role in the search of data with the secretariat, the doctor indicated users who need to update the register and further monitoring of the unit. The ACS were always present in the home visits to perform the update of the users' registration.

## FINAL REMARKS

To assist the individual with hypertension and/or diabetes to make changes in lifestyle habits by increasing the level of knowledge and public awareness about the importance of promoting the health, proper eating habits, maintaining the ideal weight and active life to help in reducing blood pressure and glucose levels is a key role of the nurse as soon as the USF is seen as the gateway to the NHS. In order to have that effective monitoring it is necessary that these users are registered with their

respective records updated in both SMS and in medical records at USF.

This study showed that nurses' decision-making and critical thinking are fundamental in the community registration and monitoring process in this program, thus promoting a better quality of life for service users, in addition to showing that it is possible to have a control of this risk group, through a theoretical and scientific knowledge put into practice at USF. For the community this study provided a better understanding of Hiperdia, because having only the card was not enough for a quality follow-up because the registration form is the one that does contain all the necessary data for a control in the program. In addition, the University has played an important role in the construction of this project as soon as teaching, research and extension favors for the student a broad view of how the service works, and thus to be able to put into practice the theoretical knowledge covered in the classroom.

Even with the delay of the SMS in sending the registered list and absence of half of the ACS at USF, the project was developed arbitrarily and in a concise form, as the active participation of the community was instrumental in the implementation process of the same, as soon as the result has provided an improvement in the quality of both the service and in the life of hypertensive and diabetics.

## REFERENCES

1. Instituto Brasileiro de Geografia e Estatística (IBGE). Estimativas anuais e mensais da população do brasil e das unidades da federação: 1980-2020 [Internet]. 2004 [cited 2015 July 12]. Available from: http://www.ibge.gov.br.

2. Lebrão, ML. O envelhecimento no Brasil: aspectos da transição demográfica e epidemiológica. Saúde Coletiva [Internet]. 2007 [cited 2015 July 12];4(17): 135-140. Available from: http://www.prefeitura.sp.gov.br/cidade/secretarias/upload/saude/arquivos/pessoaidosa/EnvelhecimentoBrasil-Transicao-MLLebrao-SaudeColetiva2007.pdf

3. Instituto Brasileiro de Geografia e Estatística (IBGE). Censo demográfico de 2000 [Internet]. 2000 [cited 205 July 12]. Available from: http://www.ibge.gov.br. Acesso em 29 Mar 2014.

4. Maia FO, DuarteYeda AO, Lebrão ML. Análise dos óbitos em idosos no Estudo SABE. Rev esc Enferm [Internet]. 2006 [cited 2015 July 12];40(4):[about 5 p.]. Available from: http://hygeia.fsp.usp.br/sabe/Artigos/2006_Flavia_obitos_REEUSP.pdf

5. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Hipertensão arterial sistêmica – HAS e Diabetes mellitus – DM PROTOCOLO / - Brasília: Ministério da Saúde, 2001. (Cadernos de Atenção Básica, n. 7 ( Série A. Normas e Manuais Técnicos [Internet]. 2001 [cited 2015 July 12]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/cd05_06.pdf

6. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Diabetes Mellitus / Ministério da Saúde, Secretaria de Atenção à Saúde. Departamento de Atenção Básica. – Brasília: Ministério da Saúde, 2006. (Cadernos de Atenção Básica, n. 16) (Série A. Normas e Manuais Técnicos). [Internet]. 2006 [cited 2015 July 12]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/diabetes_mellitus.PDF

7. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Hipertensão arterial sistêmica para o Sistema Único de Saúde / Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Atenção Básica. – Brasília : Ministério da Saúde [Internet]. 2006 [cited 205 July 12]. Available from:http://dab.saude.gov.br/docs/publicacoes/cadernos_ab/abcad15.pdf

8. López-Jaramillo P. Latin American consensus on hypertension in patients with diabetes type 2 and metabolic syndrome. J of Hypert [Internet]. 2012 Nov [cited 2015 July 12];31(2)223-38. Available from:http://www.hipertension.cl/guias/Latin_American_consensus_on_hypertension_in.2.pdf

9. Aronow, WS. Treatment of systemic hypertension. J Cardio Dis [Internet]. 2012 [cited 2015 July 12];3(2):160-170. Available from: http://www.medscape.com/viewarticle/583678

10. Bastaki, S. Diabetes mellitus and its treatment. J Diabetes & Metab [Internet]. 2005 [cited 2015 July 12];13(8):111-134.

Available from: http://ijod.uaeu.ac.ae/iss_1303/a.pdf

11. Pinto APP, Jose HMG. Hypertension and adherence to the therapeutic regímen in primary health care [Internet]. 2012 [cited 2015 July 12];6(7):1638-1047. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/3057/pdf_1297

12. Brasil. Ministério da Saúde. Portaria nº 371/GM/ [Internet]. 2002 [cited 2015 July 12]. Available from: http://www.mp.sc.gov.br/portal/site/conteudo/cao/ccf/quadro%diabeticos.pdf

13. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Manual de Operação. HIPERDIA - Sistema de Cadastramento e Acompanhamento de Hipertensos e Diabéticos. Brasília: Ministério da Saúde [Internet]. 2002 [cited 2015 July 12]. Available from: http://www.saude.es.gov.br/download/34698_HIPERTENSO_DIABETES_MIOLO.pdf

14. Brasil. Ministério da Saúde. Portaria conjunta nº 112/ [Internet]. 2002 [cited 2015 July 12]. Available from: *sna.saude.gov.br/legisla/legisla/...b/SE_SPS_PC112_prog_farm_b.doc*

Submission: 2014/04/08
Accepted: 2015/05/14
Publishing: 2015/07/15

**Corresponding Address**

Joao Igor Borges de Almeida
Universidade Federal do Recôncavo da Bahia
Centro de Ciências da Saúde
Departamento de Enfermagem
Avenida Carlos Amaral, 1015
Bairro Cajueiro
CEP 44574-490 – Santo Antonio de Jesus
(BA), Brazil