CROSS-MAPPING OF TERMS IN THE RECORDS OF HYPERTENSIVE PATIENTS
IN A FAMILY HEALTH UNIT WITH ICNP®
MAPEAMIENTO DE TÉRMINOS EN LOS REGISTROS DE HIPERTENSOS EN UNA UNIDAD DE SALUD
DA FAMÍLIA COM A CIPE®
MAPEO DE TÉRMINOS EN LOS REGISTROS DE HIPERTENSOS EN UNA UNIDAD DE SALUD DE LA
FAMILIA CON LA CIPE®
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ABSTRACT
Objective: to identify in the records of the registration form of HiperDia and in the follow-up form of
hypertensive patients in a family health unit, terms used in nursing care for hypertensive patients and
perform the cross-mapping of the terms identified with the terms set out in the Seven Axis Model of the
ICNP®. Method: a descriptive exploratory, retrospective study. The population of interest consisted of 101
hypertensive patients enrolled and followed in HiperDia at family health unit Timbo I, in João Pessoa,
Paraíba, Brazil. Results: 61 terms applied to nursing practice for hypertensive were identified and then, the
cross-mapping with the terms of ICNP® Version 2.0 was performed, showing 27 included and 34 not included
terms. Conclusion: the results of this study imply support for future research in order to assist the
implementation of the nursing consultation for hypertensive in primary care, through the construction of
nursing diagnoses/outcomes affirmatives and interventions. Descriptors: Nursing; Hypertension; Mapping of
Terms; Primary Care.

RESUMO
Objetivo: identificar nos registros da ficha de cadastro do HiperDia e da ficha de acompanhamento dos
usuários hipertensos de uma unidade de saúde da família, termos utilizados na prática de enfermagem para
atendimento de hipertensos e fazer o mapeamento cruzado dos termos identificados com os termos
constantes no Modelo de Sete Eixos da CIPE®. Método: estudo exploratório descritivo, retrospectivo. A
população de interesse foi constituída por 101 hipertensos cadastrados e acompanhados no HiperDia, na
unidade de saúde da família Timbó I, em João Pessoa, Paraíba, Brasil. Resultados: foram identificados 61
termos aplicados na prática de enfermagem para com os hipertensos e, em seguida, foi feito o mapeamento
cruzado com os termos da CIPE® versão 2.0, evidenciando 27 termos constantes e 34 não constantes.
Conclusão: os resultados deste estudo implicarão no apoio a pesquisas futuras no sentido de auxiliar a
implementação da consulta de enfermagem do hipertenso na atenção básica, por meio da construção de
afirmativas de diagnósticos/resultados e intervenções de enfermagem. Descriptores: enfermagem; hipertensão
arterial; mapeamento de termos; atenção básica.

RESUMEN
Objetivo: identificar en los registros de la ficha de inscripción en el HiperDia y de la ficha de
acompañamiento de los usuarios hipertensos de una unidad de salud de la familia, términos utilizados en
la práctica de enfermería para la atención de hipertensos y hacer el mapeo cruzado de los términos
identificados con los términos constantes en el Modelo de Siete Ejes de la CIPE®. Método: estudio
exploratorio, descriptivo y retrospectivo. La población de interés fue constituida por 101 hipertensos
inscriptos y acompañados en el HiperDia en la unidad de salud de la familia Timbó I, en João Pessoa,
Paraíba, Brasil. Resultados: fueron identificados 61 términos aplicados en la práctica de enfermería con los
hipertensos y, entonces, fue hecho el mapeo cruzado con los términos de la CIPE®, versión 2.0, mostrando 27
términos constantes y 34 no constantes. Conclusión: los resultados de este estudio implicarán el apoyo a
investigaciones futuras con el fin de contribuir a la implementación de la consulta de enfermería del
hipertenso en atención primaria, por medio de la construcción de afirmativas de diagnósticos/resultados e
intervenciones de enfermería. Descriptores: Enfermería; Hipertensión Arterial; Mapeo de Términos; Atención
Primaria.
INTRODUCTION

Arterial hypertension is a chronic non-transmissible disease, considered one of the major health problems for global development in the coming decades. It features a high prevalence, particularly in older age groups, accounting for cardiovascular, brain, coronary, renal and peripheral vascular complications. It is estimated that 40% of strokes, and, around, 25% of heart attacks occurring in hypertensive patients could be prevented with adequate antihypertensive therapy.¹

In Brazil, Hypertension and Diabetes, are the primary cause of hospitalizations in the public health system and according to the National Household Sampling Survey (PNAD) of 2008, 14% of the general population reported being hypertensive and 3.6% diabetic. With regard to the epidemiology profile of hypertension in Paraíba, it was found that the highest percentage of hypertensive patients were females and in the age group over 65, with 63.8%, followed by 57.6% of the female population and aged 55 to 64 years. Males had the highest percentage of hypertensive patients in the age group over 65 years, with 50.9%.¹

The epidemiological situation of Arterial Hypertension fits in the approach of the economic, political, social and cultural transformations produced by human societies throughout decades, resulting in a change in their life style and organization. These changes facilitate and hinder access to more favorable living conditions and to health, impacting directly on the changing patterns of illness.² Among the changes that led to the new patterns of disease were: lifestyle, physical inactivity, obesity and life expectancy.

Arterial hypertension is defined as a multifactorial clinical condition characterized by high and sustained levels of blood pressure and is often associated to functional and/or structural alterations in target organs such as: heart, brain, kidneys and blood vessels.² Therefore, to make possible a proper assessment of hypertensive patients, cardiovascular risk assessment is essential to guide the therapeutic approach and prognosis of each user. This evaluation is performed through the presence of risk factors, cardiovascular disease and target organ lesions.³

With regard to risk factors for arterial hypertension, the Ministry of Health⁴¬⁵ emphasizes that a healthy diet, weight control, alcohol, physical activity and smoking, are aspects that interfere directly or indirectly in the treatment of this injury, which becomes routine in the adoption of an appropriate therapeutic regimen, to analyze the risk stratification. This risk stratification considers blood pressure values, the presence of target organ damage and estimated cardiovascular risk.

Considering the above context, the basic care Nurse is of paramount importance in strategies to control arterial hypertension, and one must keep in mind that maintaining the patient's motivation not to abandon the treatment, perhaps is one of the most difficult actions faced when dealing with hypertensive patients.³ Thus, for the nurse to be able to technically address the user with arterial hypertension, it is imperative the application of Nursing Care Systematization (NCS) for hypertensive patients.

The NCS in basic health assistance implies the organization of work of the entire nursing team that acts at this level of complexity of care. This organization should involve health practices beyond the almost silent consultation by the customer, in other words, including host, link, health promotion and surveillance, programmatic actions, extended clinic, among others.¹ Thus, nurses must use a working method to plan, execute and evaluate their actions toward hypertensive patients, replacing the empirical and disordered way, by records that show how, in fact, people under its professional responsibility were assisted in any environment of the health system.⁶

It is believed that, in order to systematize care it is necessary to involve the biological, social and spiritual aspects. Thus, the Nursing Care Systematization should be guided in the operationalization of the nursing process, deliberately and systematically, in all environments, public or private. When held in institutions providing outpatient health services, households, schools, community associations, such as the work performed in basic health care, this is Nursing Consultation process, according to the following steps: Nursing data collection (or Nursing History); Nursing diagnosis; Nursing planning; Nursing Implementation and Evaluation.⁷

Based on some of the stages of this process, there have been developments of several classification systems of nursing, including the International Classification for Nursing Practice (ICNP⁸), which aims to standardize and establish a common language that represents Nursing in the world, concepts of practice, care, and enable comparison of nursing data between populations, to
encourage research and provide data on the practice, capable to influence the education in nursing and health policies.4

ICNP® is a rating system that allows the professional nursing team to use in their work environment, a particular technical vocabulary, using terms that reflect the practice of nursing.5 Furthermore, from these terms, Catalogues or Terminological subsets of ICNP® that assist the process of Nursing work may be created.

Prior to construction of a terminological subset of ICNP® for patients with hypertension, there is a need to identify the terms related to this area in nursing practice. In view of the above, the research objectives were to identify in the records of the registration form of HIPERDIA and of the monitoring forms of hypertensive patients of a Family Health Unit, terms used in nursing care for hypertension and do the cross-mapping of the terms identified with the terms set out in the Seven Axis Model of ICNP®.

METHOD

A descriptive exploratory, retrospective study. The population of interest consisted of users affected by arterial hypertension, registered and monitored in the Family Health Unit Timbo I, located in the Health District III, city of João Pessoa. The unit provides health care to 3075 users, with 369 being hypertensive patients, to identify terms in the records of the registration form of HIPERDIA and in their follow-up reports.

It is noteworthy that the criteria of choice of the Family Health Unit took into consideration the following: accessibility of nursing records and nurse authorization. The data sources used in the research were nursing records present in the registration form of HIPERDIA and in the follow-up form of users affected by hypertension. The study sample consisted of 101 registration and follow-up forms of users with arterial hypertension.

To achieve the objective of the research the following steps were structured: initially, the identification of the users with arterial hypertension enrolled in the Family Health Unit was performed; development of an instrument to select, in the HIPERDIA registration form and follow-up chart of the hypertensive patients, terms used in nursing practice on the theme consisting of the following variables: patient identification data, socio-demographic data, physical examination data, treatment data, risk factors and exams data. It is emphasized that the selection of the terms of nursing practice was performed after careful reading of each sheet of the hypertensive user, both from the enrolment form of the HIPERDIA, and the follow-up form of the hypertensive patients.

The next stage of the research was the process of cross-mapping of the terms found in the nursing records with the terms included in the Seven Axis Model of the ICNP® version 2.0, to classify terms as included and not included. The cross-mapping technique was used to cross the terms included in the ICNP® version 2.0 with the terms identified in the first stage of the study, using the programs Excel and Access for Windows to identify which of the terms of nursing practice with patients with hypertension are already included in the ICNP® and which were not included in this classification, considered specific terms of the local nursing care. Next, terms considered not included were classified according to the ICNP® axis and their definitions were elaborated.

It is emphasized that this study is part of the project “Proposal of a terminology subset of the International Classification for Nursing Practice (ICNP®) for hypertension in primary care” and received favorable approval by the Ethics in Research Committee of the Hospital Universitário Lauro Wanderley of the Universidade Federal da Paraíba, according to the ethical observances recommended by Resolution number 196/96, of the Ministry of Health, that involves humans, and was approved by the Protocol number 125/2011.10

RESULTS

Of the 101 records analyzed, 76 are from female users and 29 from males; for the education variable it is highlighted that 22 users could not read or write, 20 are literate, 21 reported having incomplete primary education (incomplete 1st degree), totaling 63.3% of the sample with low educational profile. Regarding race 51 users were brown, 25 white, 18 black, 4 yellow and 3 sheets did not have a color identified.

With regard to the age group of hypertensive users, the study identified that 32 users are in the 51 to 60 years group, 26 in 41-50 years, 23 in 61-70 years, 15 aged over 71 years and 5 aged 31 to 40 years. Regarding family situation 45 users reported living with a partner and children, 16 living with a partner with marital ties and children, and 11 live with a partner, children and/or other relatives.

Using the criteria of classification of blood pressure in mild, moderate and severe,
proposed by the Ministry of Health, it was possible to emphasize that by analyzing the sheets the following result was obtained: 29 users had blood pressure within the normal range (Systolic Blood Pressure 120-139 mmHg or Diastolic Blood Pressure 80-89 mmHg), 53 were classified with mild hypertension (Systolic Blood Pressure 140-159 mmHg or Diastolic Blood Pressure 90-99 mmHg), 8 with moderate hypertension (Systolic Blood Pressure 160-179 mmHg or Diastolic Blood Pressure 100-109 mmHg) and 11 users with severe hypertension (Systolic Blood Pressure \( >180 \) mmHg or Diastolic Blood Pressure \( >110 \) mmHg).

After sample characterization, the authors used the knowledge and experience in the program HIPERDIA, as well as the use of ICNP® to analyze the lists of terms extracted from the records and identified 61 terms that could be applied in nursing practice with hypertensive patients. From this result, the cross mapping with the terms of ICNP® Version 2.0 was performed, indicating, in this classification, 27 terms included and 34 not included in the ICNP®. The not included terms underwent the process of normalization to group synonymous terms, ending in 12 terms not included in the ICNP®.

The 27 terms included in the ICNP® version 2.0 were distributed as follows: one in the Action axis, 2 in the Customer axis, 18 in the Focus axis, 1 in the Judgment axis, 3 in the Location axis and 2 in the Axis Means (Figure 01). It is emphasized that no terms were identified in the axis Time.

The 12 terms classified as not included in the ICNP® were classified according to the Seven Axis Model of ICNP®, with nine terms being identified in the Focus axis, 1 term in the Location axis and 2 terms in the Time axis, and next, definitions were constructed based on the literature of the field (Figure 02).

**Figure 01.** Distribution by axis of terms included in the ICNP® identified in the registration and follow-up forms of users with Arterial Hypertension registered in the HIPERDIA Program. João Pessoa, 2012. *Terms in parentheses represent the way they were mentioned in the records.*

The 12 terms classified as not included in the ICNP® were classified according to the Seven Axis Model of ICNP®, with nine terms being identified in the Focus axis, 1 term in the Location axis and 2 terms in the Time axis, and next, definitions were constructed based on the literature of the field (Figure 02).

**Figure 2.** Distribution by axis of terms not included in the ICNP® identified in the registration and follow-up forms of users with Arterial Hypertension registered in the HIPERDIA Program. João Pessoa, 2012.
DISCUSSION

In the case of classification parameters of arterial hypertension and characterization of the population, this study revealed that 24.7% of users reported having white color, which agrees with the literature record when revealing that arterial hypertension is twice more prevalent in white individuals. Regarding the education level, at the beginning of the acquisition of the clinical history, the level of education must be investigated, so that the language used in the nursing consultation is of easy understanding for the user and family, since the education level may interfere in the communication. Thus, all these aspects should be considered in Nursing Consultation in the health unity under study, since 63.3% of the sample cannot read/write or have incomplete primary education.

For the evaluation of the variable age, it is known that this is directly related to Arterial Hypertension, which differs from the data presented in the sample. The population most affected by arterial hypertension was included in the age group 41-71 years with 95%, with 32 users with age from 51 to 60 years, 26 users 41 to 50 years, 23 users 61 to 70 years, 15 of 71 years or more, and 5 of 31 to 40 years.

Another aspect that deserves attention to the results listed was the identification of 45 terms applicable in the assistance of users with Arterial Hypertension, which represents 60% of the terms ranked as present when crossed with the terms of ICNP Version 2.0. This result reveals that members of the nursing staff of the Family Health Unit use specific language terms standardized by them, such as the ICNP. Therefore, it may be emphasized that the use of terms included in the ICNP and terms not included outlines nursing practice even without the implementation of any classification system. Regarding the thematic area of Arterial Hypertension focused on Basic Health Care, it is up to the nurse to serve this clientele, systematizing their actions through the Nursing Consultation, with the need of creation of history, diagnosis, planning, implementation and evolution, so that their work and knowledge lead to the continuous rethinking of the professional practice and development of specific skills.

After analyzing the 27 terms included in the ICNP 2.0, it was observed that 18 belonged to the axis Focus, which represents a percentage of 66%. The use of terms from the axis Focus can be explained by definition. Focus is the area of attention that is relevant for Nursing, directing assistance to the patient. Therefore, it is about terms that represent the focus of attention of the practice that nurses identify using clinical reasoning to the area of Arterial Hypertension. Moreover, the assistance record of customers with Hypertension in the Family Health Unit uses a standardized instrument for monitoring, containing variables of the focus of the practice and enabling the standardized registration of these terms. The remaining terms were distributed less frequently on the axis action, client, judgment, location and means. It is believed that the use at a lower frequency of the terms of the other axis of ICNP occurs for failing to register at the Health Unit all phases of the Nursing Consultation.

For the terms extracted from the Nursing records not included in the ICNP version 2.0, but that are relevant to the practice of nursing there was an attempt to classify them according to the organizational structure of the ICNP. Such evidence may support the process of submitting new nursing terms to this classification system, from the identification that nurses and other professionals consider as important concepts of the nursing practice.

For the terms identified as not included in the ICNP there was the development of concept and the classification according to the Seven Axis Model of the ICNP. Therefore, the 12 terms not included were analyzed in theoretical and practical context, with regard to their meaning and coherence with the meanings of the axis, obtaining the following classification: Axis Focus: Color (Yellow, White, Brown, Indigenous and Black); Education, Marital Status, Body Mass Index, Consanguineous ties, Marital ties, Diabetic foot, Physical inactivity, Gender (Male and Female); Axis Location: Abdominal circumference; Axis Time: Age group and Age.

The product of this research study may subsidize researches that enable the construction of diagnoses/outcomes affirmatives and nursing interventions that can be used in the implementation of the nursing consultation of Hypertensive patients in basic care. All this theoretical framework of terms used in nursing practice of Arterial Hypertension allows nurses to pursue service excellence in order to be present at all stages of care. Step which begins from the choice of device for checking blood pressure, and lasts during the guidance of its management, completing the activities diary, the exam itself, being finished in the issuing of the report.
It is noteworthy that the skills for daily nursing records are not just technical or manual, passing through the ability of the Nursing professional to become agents of social transformation, a critical-reflective being, that uses the tool of self-reflection, that learns to know, to do, to be and to live collectively.18

Another highlight for the discussion of the knowledge of nursing terms for a given health priority - Arterial Hypertension - is the search for the standardization of the nursing language in this area. The existence of a standardized nomenclature gives visibility to nursing performance, which contributes to the development of care processes, teaching and research.19

CONCLUSION

Research on nursing records for hypertension in basic care allowed to identify, although there is no implementation of the nursing consultation, as well as the use of a classification system, terms that are included in the ICNP© and terms that are not included that outline the nursing practice. The importance of these terms to construct affirmative nursing diagnoses, outcomes and interventions is stressed, which can be used in the implementation of nursing consultation to Hypertensive patients in basic care in the city of João Pessoa-PB.

From the analysis of the results it was possible to identify, in this study, mainly, terms under the focus of nursing practice related to physical examination, treatment and test results of hypertensive patients. This highlights the importance of using nursing records during the course of the nursing consultation, which enables to evaluate the therapeutic conduct of the hypertensive patients, since it is a chronic disease. The results of this study will imply in the support for future research in order to allow the construction of affirmative diagnoses, outcomes and nursing interventions that could be used by nurses working in public health.

REFERENCES


