

## **NURSING CONSULTATION APPLIED TO HYPERTENSIVE CLIENTS: APPLICATION OF OREM'S SELF-CARE THEORY<sup>1</sup>**

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*The objective was to implant the Nursing Consultation for hypertensive patients, using Orem's Self-Care Theory and to systematize nursing care. Thirty-six patients were interviewed. Of these, 58.9% were women, 75.0% of them ranging from 50 to 80 years of age, 76.4% were married, 42.9% were housewives, 47.2% were retired, and 67.3% completed elementary education. Patients were interviewed with a structured instrument addressing the requirements for universal, developmental, and health deviations self-care. Data analysis made it possible to assess the altered self-care requirements. In patient care planning, support-education actions were our top priority. Orem's self-care theory permitted identifying important aspects, which need to be developed by the nurses.*

*DESCRIPTORS: individualized health assistance; nursing care; self-care; nursing consultation*

## **CONSULTA DE ENFERMERÍA APLICADA A CLIENTES PORTADORES DE HIPERTENSIÓN ARTERIAL: USO DE LA TEORÍA DEL AUTO CUIDADO DE OREM**

*El objetivo fue implantar la Consulta de Enfermería para individuos hipertensos utilizando la teoría del auto cuidado de Orem y sistematizar la atención de enfermería. Fueron entrevistados 56 pacientes, de los cuales 58,9% eran mujeres, 75,0% en el intervalo de edad de 50 a 80 años, 76,4% casados, 42,9% dueñas de casa, 47,2% jubilados y 67,3% con enseñanza fundamental completa. Para realizar el estudio se utilizó un instrumento estructurado abordando los requisitos del auto cuidado universal, de desarrollo y de desvíos de salud. El análisis de los datos permitió la evaluación de los requisitos de auto cuidado alterados. En la fase de planificación de la atención de enfermería, la prioridad fueron las acciones de apoyo educacional. La teoría del auto cuidado posibilitó detectar aspectos importantes para ser analizados por el enfermero.*

*DESCRITORES: asistencia individualizada a la salud; cuidados de enfermería; autocuidado; consulta de enfermería*

## **CONSULTA DE ENFERMAGEM APLICADA A CLIENTES PORTADORES DE HIPERTENSÃO ARTERIAL: USO DA TEORIA DO AUTOCUIDADO DE OREM**

*O objetivo foi implantar a Consulta de Enfermagem para indivíduos hipertensos, utilizando-se a teoria do autocuidado de Orem e sistematizar a assistência de enfermagem. Foram entrevistados 56 pacientes, sendo 58,9% mulheres, 75% na faixa etária de 50 a 80 anos, 76,4% casados, 42,9% donas de casa, 47,2% aposentados e 67,3% com ensino fundamental completo. Utilizou-se instrumento estruturado abordando os requisitos de autocuidado universal, de desenvolvimento e de desvios de saúde. A análise dos dados possibilitou avaliar os requisitos de autocuidado alterados. No planejamento da assistência, as ações de apoio-educação foram prioridades. A teoria do autocuidado possibilitou identificar aspectos importantes para serem trabalhados pelo enfermeiro.*

*DESCRITORES: assistência individualizada à saúde; cuidados de enfermagem; autocuidado; consulta de enfermagem*

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## INTRODUCTION

**W**orking together with clients suffering from a chronic disease like arterial hypertension has been a gratifying experience, especially concerning the challenge this entails for health professionals. The proposal to develop this research with these clients was due to the need to deliver adequate nursing care, based on the application of the nursing process. Up to now, this care occurred in a disorderly way, with a purely medical focus and incipient nursing participation. Another contributing aspect was related to the demand for nursing services to establish the Nursing Process, posed by the São Paulo State Regional Nursing Council [Conselho Regional de Enfermagem (COREn)].

Various studies have looked at a wide range of themes using Orem's Self-care Theory. These showed how this theory is applicable and how it can contribute to the development of nursing work. Some of these are: A case study that identified nursing diagnoses in high-risk pregnant women based on the self-care theory, highlighting the importance of accomplishing the nursing process and the possibility of stimulating self-care in these customers<sup>(1)</sup>; A case report regarding self-care in planning hospital discharge after bone marrow transplantation<sup>(2)</sup>; A qualitative study that used the self-care deficit theory in hypertensive women, stressing its contribution in the detection of aspects nurses can explore and which can contribute to arterial hypertension treatment<sup>(3)</sup>; A study based on both Horta and Orem's principles to organize nursing consultations with alcoholic patients in the sobriety stage. The main goal of the study was to meet the patients' self-care-centered basic needs<sup>(4)</sup>; A proposal to systematize nursing care to HIV/AIDS patients based on the self-care deficit theory<sup>(5)</sup>; The promotion of self-care through the Eastern health perspective for patients with migraine<sup>(6)</sup>.

The present study can be justified by its objective to establish the Nursing Process, using the Nursing Consultation as a care modality to meet the needs of hypertensive clients, based on Orem's Self-Care Theory.

## THEORETICAL BACKGROUND

In the general population, adults with a systolic blood pressure lower than 120 mm Hg and a

diastolic blood pressure lower than 80 mm Hg have a lower risk of arterial hypertension<sup>(7-8)</sup>.

Several studies have demonstrated that, although 90% of hypertensive individuals has essential or primary hypertension of unknown origin, several factors, called risk factors, can interfere in the triggering and aggravation of the disease, such as age, gender, previous family history, race, obesity, stress, sedentary life, alcohol use, tobacco use, contraceptive use, and high-sodium and high-fat diet<sup>(7-8)</sup>.

Nursing consultation is a care modality that permits following-up lifestyle changes, so vital nowadays to control the disease, as well as strengthening self-care guidance (counseling) by using the Nursing Process.

This modality is called "target activity". It started in 1968 to assist groups of pregnant women and their children, later extending to other customers, such as patients with tuberculosis, Hansen's disease, diabetes and hypertension. At the São Paulo State Health Secretary level, the nursing consultation is addressed in governmental regulation SS-G6, 03/03/1983 and, at federal level, it is regulated by Brazilian Law 7498/86 and by Decree 94406/87 as a nursing task with a view to direct client care delivery<sup>(9)</sup>.

Through Nursing Consultations, nurses work to improve patients' quality of life, preparing them for self-care<sup>(5)</sup>.

In the present study, Orem's Self-Care Theory was applied to elaborate a Nursing Consultation protocol and establish the Nursing Process.

Orem developed her theory divided into the Self-care theory, the Self-care Deficit Theory, and the theory of Nursing Systems.

The Self-care theory refers to self-care, therapeutic requirements and requirements for self-care. Self-care is defined as the practice of activities performed by an individual to his/her own benefit, seeking to maintain life, health and well-being. When an individual has skills to develop actions that meet his/her needs, he/she is apt for self-care. This aptitude is acquired through learning and influenced by age, life experiences, culture, beliefs and education, among other factors<sup>(10)</sup>.

Therapeutic requirements are classified into universal requirements – that seek to sustain human life, structure and functioning; development requirements – offer the necessary conditions to promote changes along life cycles, permitting

adaptations for his/her own development; health deviations – are self-care needs that appear in the presence of disease, disabilities, and treatments needed for the individual's recovery<sup>(10)</sup>.

The actions needed to maintain life and promote health and well-being are called therapeutic self-care requirements. However, when the requirement is greater than the individual's capacity, self-care deficit emerges. This is the kind of situation nursing professionals are inserted in to act according to different systems: a fully-compensatory system – the ability for self-care is limited or absent. In this case, nurses should take decisions and develop actions to meet self-care requirements; partly-compensatory system – the actions are carried out by both the nurse and the individual who needs them; there is a rotation in the performance of self-care<sup>(10)</sup>.

The nursing process proposed by Orem is a method that seeks to determine the self-care deficits, as well as the role played by the nurse (or individual) in order to provide for the requirements necessary to meet self-care<sup>(10)</sup>.

The objectives of the present study were to establish the nursing consultation for hypertensive clients using Orem's Self-Care Theory to guide the Nursing Process; to detect self-care deficits; and to stimulate self-care in these clients.

## METHOD

Approval (492/2000) of our descriptive exploratory study was obtained from the Research Ethics Committee at Botucatu Medical School, UNESP. This study was carried out at a teaching health center, supported by a government institution, located in the interior of São Paulo State, Brazil.

Before the present research started, the medical team was asked to refer hypertensive patients under care at the adult health facility in order to start the nursing consultations, which would alternate with medical consultations. A specific agenda was set up to schedule these particular appointments.

Over six months of data collection, 845 medical consultations were performed. Of these, 94 individuals (about 11% of all medical consultations performed) were scheduled for a nursing consultation. However, 38 patients did not attend the appointment scheduled with the nurses (40.42%). The remaining 56 patients were treated by the researcher herself.

All patients who attended the appointment were included in the study sample, after obtaining free and informed consent from all patients.

Data collection was carried out by one of the researchers. At the time of data collection, she was still a nursing student and was supervised by a nurse faculty-researcher. After the research completion, the same faculty continues treating these same patients until date.

The data collection instrument was based on Orem's Self-Care Theory. It consisted of *personal data* (gender, age, marital status, nationality, origin, education and medical diagnosis); *universal requirements*: physical examination data, daily life habits: diet, smoking, drinking, physical activity, stressor factor, resting, sexual activity and gynecologic data; *vaccination*; *growth and development requirements*: family history, socioeconomic status, previous and current diseases, surgeries and drug utilization; *health deviations*: current complaints, perceptions regarding treatment and disease. After interview and physical examination, nursing diagnoses, nursing prescription, and clinical evolution were performed. Data were analyzed using descriptive statistical analysis.

## RESULTS

### Personal Data

The study population included 56 individuals. Baseline characteristics of patients were as follows: the majority of the study population consisted of women (58.9%), married (76.4%), white (92.6%), ranging in age from 50 to 80 years (75%), housewives (42.9%), and finished elementary education (67.3%).

The universal, development, and health deviation requirements were organized based on nursing diagnoses, which were worked out in detail based on the collected data, according to the classification proposed by Carpenito<sup>(11)</sup>.

### Universal requirements

Universal requirements aim for maintenance of life and promotion of human functioning<sup>(10)</sup>. In this part of the instrument, all physical examination and life habit data were considered, such as food, smoking, drinking, physical activity, stressor factor, rest, sexual activity and gynecological data.

Table 1 – Distribution of individuals according to nursing diagnoses concerning universal requirements

Diagnóstico de enfermagem	Déficit de autocuidado	Percentual
Controle ineficaz do regime terapêutico	Consumo de alimentos de risco, ricos em sal e gorduras	61,8
	Sedentarismo	48,2
	Ausência de consumo diário de alimentos protetores	19,6
	Ingestão de bebida alcoólica	18,2
	Uso de tabaco	7,2
Manutenção da saúde alterada	Presença de fator estressor	80,4
	Pressão arterial descontrolada	70
Nutrição alterada: ingestão maior do que as necessidades corporais	Peso acima do ideal	67,9
Oxigenação alterada	Varizes	28
Não comprometimento	Não realização de exames ginecológicos preventivos	26,7
Excesso de volume de líquidos	Edema de membros inferiores	21,42
Constipação	Dificuldades para evacuação, dieta pobre em fibras	16
Déficit de lazer	Não realização de atividades de lazer	14

### Development requirements

Development requirements offer the necessary conditions to promote changes occurring throughout life, allowing the individual to adjust his/her personal development<sup>(10)</sup>.

These requisites group family history, socioeconomic status, previous and current diseases, surgeries and drug utilization.

Table 2 – Distribution of individuals according to nursing diagnoses concerning development requirements

Diagnóstico de enfermagem	Déficit de autocuidado	Percentual
Efeitos adversos da terapia anti-hipertensiva	Não tomam o medicamento conforme o recomendado	64,7
	Falta de recursos financeiros e horários inadequados para o uso dos medicamentos	48,9

### Health deviations

Health deviations are defined as self-care needs, which manifest themselves in the presence of diseases, disabilities, and treatments necessary for individual recovery<sup>(10)</sup>. Data were organized concerning current complaints and disease perception.

Table 3 shows the nursing diagnoses related to health deviations.

Table 3 – Distribution of the individuals according to nursing diagnoses concerning health deviations

Diagnóstico de enfermagem	Déficit de autocuidado	Percentual
Não comprometimento	Negação da doença	14,85
Pesar	Frustração, desânimo com o tratamento	10,7

### DISCUSSION

Regarding patient characterization variables, the data found in the present study are in accordance with arterial hypertension literature<sup>(7-8)</sup>.

There are several risk factors associated with arterial hypertension, such as age, gender, race, heredity, high-sodium and high-fat diet, alcohol, tobacco, sedentary lifestyle, obesity, stress and contraceptive use. Some of them, including age, gender, race and heredity cannot be modified throughout life, but the installation of diseases can be prevented along individuals' life. The remaining variables related to individuals' lifestyle can be modified in order to minimize the risk of complications<sup>(7-8)</sup>.

Lifestyle changes are part of non-pharmacologic arterial hypertension treatment and its modifications and adjustments depend on the sick individual with a view to a successful treatment<sup>(7-8)</sup>.

By detecting the clients' life habits, it was possible to associate these factors to the health requirements and to verify the presence of self-care deficit or not, in order to analyze the results in line with the theoretical background.

It is observed that the self-care deficit is present in the different requirements in accordance with Orem's Self-Care theory; some of the self-care deficits are present in most of the requirements, while others occur less.

The most prevalent (%) nursing diagnoses based on the universal requirements are those associated to the individuals' lifestyle. Ineffective control of therapeutic regimen was detected related to feeding (61.8%) and to sedentary lifestyle (48.2%). The diagnosis of imbalanced nutrition: more than body

requirements affected 67.9% of the study participants. These are critical aspects to control arterial hypertension.

In a study with hypertensive women in which the self-care deficit theory was used, the following was detected: inadequate feeding, obesity, and lack of salt and fat intake control. The patients did not have any interest in losing weight and did not focus on keeping adequate behaviors to control the disease. Such factors were related to the difficulty to keep a regular diet regimen, despite awareness of its significance to maintain arterial hypertension control. As to losing weight, there was a lack of knowledge about the relation between obesity and arterial hypertension. That study acknowledged the difficulty to maintain behaviors that met treatment requirements, involving components like pleasure, social interaction and lifestyle<sup>(3)</sup>.

Feeding is an important component in the hypertensive patient's quality of life because there are some foods that contribute to increase pressure levels (risk foods), due to their high level of salt and fats. Moreover, this type of food favors dyslipidemia and obesity which, when associated with a sedentary lifestyle, contribute to the high prevalence of arterial hypertension and coronary disease<sup>(7-8)</sup>.

The individual's commitment to his/her own health and his/her involvement with self-care can be evaluated by his/her presence at the appointments, regular use of prescribed medications and lifestyle changes<sup>(12)</sup>.

The self-care deficit in these specific clients are clear and the nurse has a huge task in guiding, stimulating, and helping all these patients assume self-care.

The patient care planning developed by the researcher was based on the reinforcement of risk advice concerning the risk patients were running when they did not comply with non-pharmacologic treatment and the importance of changing their lifestyle in order to control arterial hypertension. An individual contract was made with each of the patients, seeking to adequate their needs to their reality and stimulating them to talk about their difficulties to perform such changes, making them ponder over the problem and trying to convince them that self-care is the way to control the disease and to prevent complications.

These individuals were also invited to take part in group activities offered at the care facility, as a second opportunity to reinforce guidance and stimulus for self-care.

In a study involving high-risk pregnant women, it was observed that, during the implementation of nursing care, the patients were not always aware of the importance of self-care to maintain life, health and well-being. Encouragement and guidance were needed to engage the patient in self-care, as participation was fundamental for self-care to occur<sup>(1)</sup>.

Regarding development requirements, a single nursing diagnosis was made: Antihypertensive therapy adverse effects.

Pharmacological treatment should be based on the choice of adequate medication, with the following criteria: progressively decreased blood pressure, except urgency cases; start with agents capable of gently reducing blood pressure, with lower incidence of side effects<sup>(7-8)</sup>.

Asymptomatic diseases like arterial hypertension can lead the patient to non-compliance with routine controls (or total refusal), because they do not present symptoms. This explains, in some cases, noncompliance with medication and the prescribed medication<sup>(13)</sup>.

To stimulate treatment compliance, it is important: to make sure the patient understands that arterial hypertension can be controlled but not cured, and that they should not interrupt the treatment without talking to the practitioners who are taking care of them; to minimize treatment costs; and to stimulate the patients to talk about their problems and concerns<sup>(7)</sup>.

The occurrence of health deviations in the study sample was not significant, but the diagnoses made are related to the denial of the disease (14.85%) and sorrow about the treatment (10.7%).

The deficit regarding the understanding of the health-disease process observed in the study with hypertensive women was as follows: lack of knowledge, indifference and apathy regarding the aspects related to arterial hypertension, all of which could be associated to the different meanings of being a hypertensive person. The fact of being an asymptomatic disease facilitates this apathy and, as some symptoms, when present, can be ascribed to other causes, there is no association with arterial hypertension<sup>(3)</sup>.

It is not enough for an individual to have knowledge about the forms of treatment and the risks arterial hypertension can cause, but how he/she behaves and uses this information to control the disease.

The practice of self-care should always consider the individuals' choices because self-care is an attitude of each. Despite the information about the disease, some individuals keep their lifestyles, which can hamper the treatment, leading to persistent self-care deficit in these cases <sup>(5)</sup>.

Arterial hypertension, due to its chronic characteristics and because it does not cause exacerbated physical changes that make individuals present uncomfortable signs and symptoms, needs constant counseling, so that patients can understand and accept the orientation necessary for treatment. Such orientations require some cognitive aspects in order to be understood and accepted by patients easier. Education can contribute to this understanding.

Regarding the systems established by Orem, it was observed in the current study that the supportive-educative system is critical to attend to therapeutic self-care demands, as this system allows nurses to help individuals to be prepared to be agents of their self-care.

## CONCLUSIONS

Orem's Self-Care Theory applied to hypertensive patients permits guiding care towards self-care, as well as to organize and apply the nursing process in several phases, such as interview and

physical examination, nursing diagnosis and evaluation.

The analysis of the universal requirements regarding development and health deviations detected self-care deficits related to inadequate feeding, overweight, lack of control on stress situations, lack of blood pressure control, ineffective pharmacological therapy management, all of which are considered critical aspects to control arterial hypertension and prevent complications.

It was also verified that the supportive-education system was the main point for nurses' actions, as these professionals seek to guide and prepare their clients for self-care. Constant follow-up is necessary through return and routine consultations, so that this aspect to be constantly checked and reinforced by the nurse at each meeting, considering that incorporating lifestyle changes, which are critical to meet self-care demands, requires dedication and motivation from the diseased patient.

In order to have a detailed assessment of how these clients are incorporating self-care into their daily routine, of how they are incorporating the orientations received when they return for a new consultation, and if they are really motivated to and aware of self-care, further study is needed. What we can assure is that the application of Orem's Self-Care Theory facilitated the organization of nursing attention delivery, as well as nurses' performance towards these patients.

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