Journal of Nursing
Revista de Enfermagem
UFPE On Line
ISSN: 1981-8963

ORIGINAL ARTICLE

AGING AND THERAPEUTIC ADHERENCE AS CARE FOCUS ON EDUCATION IN NURSING INTERNATIONAL STUDENT EXCHANGE

ENVELHECIMENTO E ADESÃO TERAPÊUTICA COMO FOCO DE ATENÇÃO EDUCATIVA EM ENFERMAGEM NO INTERCÂMBIO ESTUDANTIL INTERNACIONAL

ENVEJECIMIENTO Y ADHERENCIA TERAPÉUTICA COMO FOCO DE ATENCIÓN EDUCATIVA EN ENFERMERÍA EN EL INTERCAMBIO ESTUDIANTIL INTERNACIONAL

Willian Alves dos Santos[1], Ana Rita Santos Piteira[2], Liliana Filipa Godinho Batista Fernandes[3], Bruna Silva Leite[4], Alberto José Barata Gonçalves Cavaleiro[5], Geilsa Soraia Cavalcanti Valente[6]

ABSTRACT

Objectives: to identify the health needs and problems of the elderly population, prevalent in the risk of non-adherence, and to implement educational strategies. ***Method:*** a descriptive study level II, with 25 clients from Freguesia de São Martinho de Árvore – Coimbra - Portugal. Data were collected in the nursing consultations, through the instrument "Risk evaluation of non-adherence to treatment", and submitted to content analysis. The study was approved by the Ethics Committee, in Research under CAEE number 05164212.2.0000.5243. ***Results:*** health needs are related to physical activity, diet and medication regimen. The more evident nursing diagnosis were: complex treatment regimen (96%) and lack of knowledge (60%). ***Conclusion:*** 28% of the study population had the phenomenon of non-adherence, fundamental to characterize the sample. It is very important the educational activities performed by nurses for therapeutic adherence in elderly. ***Descriptors:*** Chronic Disease; Health Education; Therapy Adherence; Nursing.

RESUMO

Objetivos: identificar as necessidades e os problemas de saúde da população idosa, prevalentes no risco de não adesão terapêutica, e implementar estratégias educativas. ***Método:*** estudo descritivo de nível II, com 25 clientes da Freguesia de São Martinho de Árvore – Coimbra - Portugal. Os dados foram colhidos nas consultas de enfermagem, por meio do instrumento "*Avaliação do risco de não adesão ao tratamento*", e submetidos à análise de conteúdo. O estudo foi aprovado pelo Comitê de Ética em Pesquisa, sob o CAEE nº 05164212.2.0000.5243. ***Resultados:*** as necessidades de saúde estão relacionadas com atividade física, regime alimentar e esquema terapêutico medicamentoso. Diagnósticos de enfermagem mais evidentes: regime de tratamento complexo (96%) e déficit de conhecimentos (60%). ***Conclusão:*** 28% da população estudada apresentava o fenômeno de não adesão terapêutica, fundamental para a caracterização da amostra. É incontestável a importância de atividades educativas realizadas pelo enfermeiro para adesão terapêutica no envelhecimento. ***Descritores*:** Doença Crônica; Educação em Saúde; Adesão Terapêutica; Enfermagem.

RESUMEN

Objetivos: identificar las necesidades y los problemas de salud de la población anciana, prevalentes en el risco de no adhesión terapéutica, e implementar estrategias educativas. ***Método:*** estudio descriptivo de nivel II, con 25 clientes de la Freguesia de São Martinho de Árvore – Coimbra - Portugal. Los datos fueron recogidos en las consultas de enfermería, por medio del instrumento "*Evaluación del riesgo de no adhesión al tratamiento*", y sometidos al análisis de contenido. El estudio fue aprobado por el Comité de Ética en Investigación, sobre CAEE número 05164212.2.0000.5243. ***Resultados:*** las necesidades de salud están relacionadas con actividad física, régimen alimenticio y esquema terapéutico medicamentoso. Diagnósticos de enfermería más evidentes: régimen de tratamiento complejo (96%) y déficit de conocimientos (60%). ***Conclusión:*** 28% de la población estudiada presentaba el fenómeno de no adhesión terapéutica, fundamental para la caracterización de la muestra. Es indiscutible la importancia de actividades educativas realizadas por el enfermero para adhesión terapéutica en el envejecimiento. ***Descriptores*:** Enfermedad Crónica; Educación en Salud; Adhesión Terapéutica; Enfermería.

[1]Nurse, Nursing School Aurora de Afonso Costa, Fluminense Federal University /EEAAC/UFF. Niterói (RJ). Brazil. Email: willian.allves@hotmail.com; [2]Nurse, Nursing School of Coimbra. Coimbra, Portugal. Email: ritaa.piteira@gmail.com; [3]Nurse, Nursing School of Coimbra. Coimbra, Portugal. Email: liliana.batst@hotmail.com; [4]Student, Nursing School Aurora de Afonso Costa, Fluminense Federal University /EEAAC/UFF. Niterói (RJ). Brazil. Email: bruna.silvaleite@gmail.com; [5]Nurse, Ph.D. Professor in Nursing Science, Nursing School of Coimbra. Coimbra, Portugal. Email: abarata234@hotmail.com; [6]Nurse, Ph.D. Professor in Nursing, Nursing School Aurora de Afonso Costa, Fluminense Federal University/EEAAC/UFF. Niterói (RJ). Brazil. Email: geilsavalente@yahoo.com.br

INTRODUCTION

This study was developed during the international exchanges experienced by Nursing Undergraduate students of Fluminense Federal University – Brazil, at the Nursing School of Coimbra - Portugal, in 2012, through the Program of International Mobility. In the Clinical Education in Elderly Nursing optional area, developed on the Board Freguesia de São Martinho de Árvore, over a period of eight weeks, the health problems of the elderly population, and the need to promote the autonomy and quality of life was found, in order to contribute to the therapeutic adherence promotion on its various aspects.

The National Program for Elderly Health (PNSPI) presents three basic foundations: promotion of active aging throughout the life, adequacy of health care to the specific needs of the elderly, intersectoral promotion and development of environments enablers of autonomy and independence of the elderly.[1]

According to the National Statistics Institute (INE), in 2011 the total number of individuals in Portugal was estimated in 10,562,178, with a predominance of the number of women in relation to men. It is noteworthy that there was a growing demographic indicator of the elderly population (65 years old and over) of 19.4%. Currently, there is a ratio of 100 young to 131 elderly. According to projections of the same entity, it is expected that by 2025 there are approximately 1.2 billion people worldwide over 60 years old. This fact will be due to low fertility and increase the perspective of the elderly quality of life.[2]

With the increased longevity, it increases the chronic diseases index, as well as the need for several means of treatment by only one individual. The non-adherence is a phenomenon that affects about 50% of the elderly in developed countries, contributing to the increase hospitalization index, admissions to nursing homes, deteriorating quality of life and increased morbidity and mortality in this age group.[2,3]

Understanding the adhesion phenomenon involves taking existing knowledge of different conceptual models, as well as the analysis of the theories assumptions[4] that refer to the models and theories of behavioral change, explaining the adherence. These models aim to explain the relationship between the thought and the behavior of people in issues of health and disease, and are based on the main assumption that by understanding the beliefs, values and attitudes, it is possible to plan more effective interventions enabling to modify and control the behavior adopted.[5]

Thus, the main objective of this process is the achievement of health gains for the client, while patient and consumer of care[6], when adherence to treatment regimens, which may include the adoption as prescribed, health monitoring consultations and attendance, making changes in lifestyle and self-management behaviors that promote health and outcomes of care.[7]

There are factors that influence the adherence process, including low socioeconomic and educational level, illiteracy, unemployment, distance from treatment centers, high transport costs and medication, disease characteristics, factors related to therapy and beliefs linked to the disease and the treatment.[4] Given these factors, it can be stated that some of them are directly related to the client; others to health professionals and, consequently, their interventions.

The necessary education for self-management involves the individual between educational and behavioral strategies. Nevertheless, to provide information is not enough, there must be the individual motivation, encouragement to treatment adherence and objectives related to lifestyle.[4] In the process of education, active involvement of family and community before the promotion of adherence is important, as well as the continued cooperation among health professionals, researchers, among others.

This set of actions leads to the improvement of the individual´s quality of life and then, to an active aging. In the perspective of the World Health Organization (WHO [2005]), active aging is defined as the *"Optimization of health, participation and security opportunities in order to improve the quality of life as people get older"*.[8] For a successful active aging, the involvement of biopsychosocial factors is essential, taking into account issues such as loss of power of decision by the elderly, with this in mind, either by changing the pattern considered acceptable

by society or just the inability to assume his role in society today.[9]

With this reality, Nursing plays a leading role in promoting or maintaining autonomy and independence/functionality, providing a better quality of life, encompassing the individual conditions and the environmental characteristics. Indeed, there is a direct relationship between active aging and health promotion, aiming at improving the self-esteem of the elderly, expanding the field of choice and imposing some responsibility, thus leading to a more active behavior in society.

As object of this research, there is: *Risk factors and educational strategies of nurses for therapeutic adherence of the elderly with chronic disease*. **Objectives:** To identify the needs and problems of the target population for treatment adherence as well as to identify the most prevalent nursing diagnosis in the risk of non-adherence therapeutic; and to implement educational strategies for the elderly that promote a safe and effective treatment adherence in their biopsychosocial context.

METHOD

The methodological development was supported by two moments: first, conducting literature research on online databases and, second, the methodological construct of simple descriptive research of level II associated with the results obtained in the research field. This research is used when knowledge about a phenomenon is limited. The researcher observes, describes and documents aspects of the studied object.[10]

The descriptive study meets at least two principles: the description of a population concept and the description of the characteristics of a population as a whole. It is considered that, in a descriptive study of level II, the researcher describes factors or variables and detects relationships between these variables or factors.[11]

Given the variables about the adherence process, it was necessary to delimit and describe the sample, creating inclusion criteria for this study, as followed: age less than 65 years old; have been attended in nursing consultations on the Board Freguesia de São Martinho de Árvore; present a therapeutic regimen; reside in the freguesia de São Martinho de Árvore; not exhibit cognitive impairment to impede the active participation in the research; and have formalized the free and informed consent for participation. The study was approved by the Ethics Committee in Research of the Medicine School from Fluminense Federal University, under CAEE number 05164212.2.0000.5243.

Using the Support System to Nursing Consultation (SACE), there were 117 clients (n=117), with higher prevalence of females. In this population, it was possible to observe health conditions, with the most prominent as: Blood pressure (HAS), Diabetes, Dyslipidemia and psychiatric Disease. At this stage, the calculations were performed using Microsoft Office Excel® 2007.

The sample is composed by six men and 19 women, constituting a total number of 25 clients (n=25), in which 24% were male and 76% female. The sample was selected randomly, within the total clients assisted in the nursing consultations. The variables studied were related to socio-demographic characteristics, clinical, economic aspects, medication regimen and characterization of nursing diagnosis. To better representing the population studied, the sample was composed using the random selection technique for socio-demographic data, as shown in Table 1.

Table 1. Distribution of sample data according to its socio-demographic characteristics (n=25)

Variables	n	%
Gender		
Male	6	24
Female	19	76
Age group		
[65 – 69]	6	24
[70 – 74]	6	24
[75 – 79]	8	32
[80 – 84]	3	12
[85 – 89]	2	8
≥ 90	0	----
xmin = 65; xmax = 89; $\bar{x}$ = 74,92; Average = 75; S.D. = 5,92;		
Marital Status		
Married	9	36
Single	0	----
Separated / Divorced	1	4
Widowed	15	60
Education		
Illiterate	10	40
Literate	15	60
Employment situation		
Employed	0	----
Unemployed	0	----
Retired	25	100

The average age of the selected population was 74.92 years old (approximately 75 years old), with 40% illiteracy and 60% of literacy. In the variable employment situation, there was 100% of retirees. Regarding marital status, 36% were married, 60% were widowed and 4% were divorced, presenting a big difference in the proportion of widowed and married and the other groups (single and divorced).

The technique applied during nursing visits was an interview for registration information. This is a particular way of verbal communication established between the researcher and the participants, in order to collect data related to research questions formulated.[12] The instrument of "Evaluation of the risk of non-adherence to treatment"[7] was applied, according to CIPE® diagnosis.

To help socio-demographic data collection, a semi-structured questionnaire was used, composed of client´s identification, date of birth, gender, marital status, educational attainment and employment status. It is important to mention that the clinical data, medication regimen and vital parameters were also variables recorded in the instrument, which provided a possible strategy to address the assessment of non-adherence, with a systematization of the client´s reasons for not joining it, guiding the selection of nursing interventions. This instrument is presented organized according to central thematic areas, including physical, mental and behavioral, sociocultural and environmental, and spiritual; and nursing diagnosis corresponding to each, of 39 evaluation and diagnosis with additional questions that allow realizing more details when the client response indicates a potential problem.

RESULTS

The presentation and data analysis are descriptive, reporting the interpretation of the results obtained in order to discuss highlighted them. In customers´ health condition, a prevalence of 44% with hypertension, 24% had diabetes, 20% had dyslipidemia, 16% with respiratory disease and 12% with Kidney Disease was highlighted. In Table 2, there is the prevalence of disease in the study.

Table 2. Distribution of sample data according to health conditions (n and %)

Variables	n	%
Health conditions		
HAS	11	44
Diabetes	6	24
Dyslipidemia	5	20
Respiratory disease	4	16
Kidney disease	3	12
Rheumatism	2	8
Cardiac disease	2	8
Neorologic disease	2	8
Oncologic disease	2	8

With the study and instruments used in the variable of pharmacological therapeutic regimen implementation, it was possible to identify the most commonly medication used. In this context, the most highlighted medication were the antihypertensive pharmacological group [1], responsible for 93% of the elderly medication consumption. Then, there are antacids and anti-ulcer [2] including an amount of 48% of medicine prescriptions.

The prevalence of psychiatric medicines [3] was 36%. The antidyslipidemics [4] had (32%), along with anxiolytics [5] (32%), anticoagulants and thrombolytics [6] (28%); analgesics [7] (20%), antipyretics (20%) [8], medicine used to treat gout [9] (20%) and anti-inflammatory [10] (20%). Through analysis, there was a marked discrepancy between the use of pharmacological groups, antihypertensives [1] and anti-inflammatory [10].

In nursing consultations held in the study environment, besides primary care assistance directed to clients, the instrument called *"Risk evaluation of non-adherence to treatment"*[7] was applied. Through it, it was possible to establish nursing diagnosis according to the Catalogue CIPE®, in order to identify the risk that the sample had for the development of the non-adherence phenomenon.

In nursing diagnosis in Figure 3, 96% of sample subjects showed the complex treatment regimen. The diagnosis lack of knowledge is significantly present in 60% of cases. Illiteracy is also a strong factor and is prevalent in 40%, and the sensory deficit - 36%. Diagnosis exhaust treatment extremely associated with adherence was present in 32% of the study sample. It was found that 28% of individuals had the condition of non-adherence with the prescribed treatment.

The committed management capacity was identified in 24% of clients. It is important to note that 16% of the sample shows lack of social support may be linked to 60% of the sample being widows. Below, Table 3 details the identified diagnosis:

Table 3. Nursing diagnosis identified with the application "Evaluation of risk in non-adherence to treatment" (n and %)

Variables	n	%
Nursing diagnosis		
Complex treatment regimen	24	96
Lack of knowledge	15	60
Illiteracy	10	40
Sensory deficit	9	36
Exhaust treatment	8	32
Non-adhesion	7	28
Commited management capacity regimen	6	24
Commited memory	5	20
Lack of social support	4	16
Inadequate performance	4	16
Absence of answer to treatment	3	12
Impaired ability to adjustment	2	8
Pain	2	8
Activity intolerance	2	8
Lack of trust to the health professional	2	8
Cognition committed	1	4
Side effects of the medication	1	4
Musculoskeletal commitment	1	4
Fatigue	1	4
Lack of hope	1	4
Absence of transportation	1	4
Sum of present diagnostic consultation (n=25)		

xmin = 2; xmax = 10; $\bar{x}$; = 4,28; Average = 4; S.D. = 1,79;

For the health needs of this population about treatment adherence, aspects of physical activity, diet and medicine regimen were highlighted. Education sessions for health were conducted, covering these three spheres. Regarding the session on the topic about physical activity, entitled *"Movement is Life",* six elderly were present and an immediate assessment was conducted, using a range of easy, with four distinct variables (I did not like it, I like it a little, I reasonably liked it and I really liked it). The results were two, (33.3%) elderly identified the variable "I reasonably liked it" and four (66.6%) who identified "I really liked it".

Within the topic healthy eating and hydration, the results concerning the educational sessions will be presented in Table 4:

Table 4. Distribution of data obtained through the pre-test and post-test questionnaire of the educational session "Healthy eating and hydration."

	1ª Evaluation		2ª Evaluation	
Variables	n	%	n	%
Healthy eating and hydration are important in my treatment (day by day)				
Totally Disagree	0	---	0	---
Disagree	0	---	0	---
Neither agree nor disagree	0	---	0	---
Agree	5	41,66	1	8,33
Totally agree	7	58,33	11	91,66
My plate of food should be colorful				
Totally Disagree	0	---	0	---
Disagree	1	8,33	1	8,33
Neither agree nor disagree	1	8,33	0	---
Agree	8	66,66	1	8,33
Totally agree	2	16,66	10	83,33
I should eat foods with little salt				
Totally Disagree	0	---	0	---
Disagree	0	---	0	---
Neither agree nor disagree	0	---	0	---
Agree	5	41,66	1	8,33
Totally agree	7	58,33	11	91,66
I should eat foods high in sugar				
Totally Disagree	7	58,33	11	91,66
Disagree	2	16,66	1	8,33
Neither agree nor disagree	0	---	0	---
Agree	3	25	0	---
Totally agree	0	---	0	---
I should eat plenty of vegetables and fruits				
Totally Disagree	0	---	0	---
Disagree	0	---	0	---
Neither agree nor disagree	0	---	0	---
Agree	5	41,66	1	8,33
Totally agree	7	58, 33	11	91,66
I should eat pork every day				
Totally Disagree	8	66,66	10	83,33
Disagree	2	16,66	0	---
Neither agree nor disagree	0	---	1	8,33
Agree	2	16,66	1	8,33
Totally agree	0	---	0	---
Drinking at least two liters of water a day is good for health.				
Totally Disagree	0	---	0	---
Disagree	0	---	0	---
Neither agree nor disagree	1	8,33	0	---
Agree	6	50	1	8,33
Totally agree	5	41,66	11	91,66

The evaluation of the educational session (healthy eating and hydration) as an intervention strategy for the promotion of the importance of diet, responding to the health needs highlighted, has been demonstrated significant and valid. Observing Table 4, the average of 12 elderly people who attended the session, it is possible to say that the answers of the questions in the pre-test moment (1st evaluation) were in a negative way, taking into account the appropriate answers that should have been answered. At the post-test moment (2nd evaluation), clients were more sure in their responses, being possible to note a significant positive change in the level of knowledge on the topic.

At the pre-test moment, with the statement "Healthy eating and hydration are important in my treatment", 58.33% of clients said they "totally agree". At the post-test moment, after the implementation of the educational activity, showing the multiple amounts of conducting a healthy eating related to therapeutic adherence, it was observed that 91.66% of clients responded "totally agree", showing a significant change to healthy eating concept as an important factor in treatment.

In the statement "My plate of food should be colored", 16.66% of clients responded "totally agree" in the pre-test moment. However, in the post-test moment 83.33% of clients responded "totally agree" with the statement, that is, showing an extremely important positive change. In the statement "I should eat food with little salt", in the pre-test moment, 58.33% said they totally agree with that. In comparison, in the post-test moment, 91.66% totally agreed.

With the applicability of the concepts in the session, the statement “I should eat food high in sugar”, at the pre-test moment, 58.33% of clients totally disagreed. However, in the post-test moment, that number increased to 91.66%. With the statement “I should eat plenty vegetables and fruits”, there was a promising result: during the pre-test, 58.33% said, “totally agree”, but in the post-test, increased to 91.66%.

“I should eat pork every day” was a variable of extreme importance, since it was observed that in the pre-test moment, 66.66% of clients responded “totally disagree”. In the post-test, the number of discordant increased to 83.33% of the elderly. The variable “Drinking at least two liters of water a day is good for health”, the pre-test showed 8.33% of clients not recognizing its importance; 50% agreed with the statement and 41.66% totally agreed. In the post-test moment, this situation was opposite, 0% did not know, 8.33% agreed and 91.66% totally agreed.

The activity performed to information axis, pharmacological regimen, named “Medication Right on time”, presents the results developed in the table 5.

Table 5. Distribution of data obtained through the pre-test and post-test questionnaire of the educational session "Medication right on time".

	1ª Evaluation		2ª Evaluation	
Variables	n	%	n	%
Taking the pills on time is important for my treatment.				
Totally Disagree	0	---	0	---
Disagree	0	---	0	---
Neither agree nor disagree	0	---	0	---
Agree	4	44,44	2	22,22
Totally agree	5	55,55	7	77,77
If I forget to take a pill, it will not interfere with my treatment.				
Totally Disagree	2	22,22	6	66,66
Disagree	6	66,66	1	11,11
Neither agree nor disagree	0	---	0	---
Agree	0	---	2	22,22
Totally agree	1	11,11	0	---
The overweight, unhealthy eating and smoking are factors that interfere with the medication action.				
Totally Disagree	0	---	0	---
Disagree	0	---	0	---
Neither agree nor disagree	0	---	0	---
Agree	6	66,66	1	11,11
Totally agree	3	33,33	8	88,88
It is indifferent to know the mechanism of action of my medication.				
Totally Disagree	2	22,22	5	55,55
Disagree	5	55,55	1	11,11
Neither agree nor disagree	0	---	0	---
Agree	2	22,22	2	22,22
Totally agree	0	---	1	11,11
The relationship established with the professional is important in my treatment process.				
Totally Disagree	0	---	0	---
Disagree	0	---	0	---
Neither agree nor disagree	0	---	0	---
Agree	5	55,55	3	33,33
Totally agree	4	44,44	6	66,66
One of the major factors leading to non-medication adherence are socioeconomic issues.				
Totally Disagree	0	---	0	---
Disagree	0	---	1	11,11
Neither agree nor disagree	0	---	0	---
Agree	5	55,55	1	11,11
Totally agree	4	44,44	7	77,77
If I cannot read or understand what is written in the boxes of medicines, I should ask for help to family, friends, neighbors or health professionals.				
Totally Disagree	0	---	0	---
Disagree	1	11,11	0	---
Neither agree nor disagree	0	---	0	---
Agree	3	33,33	3	33,33
Totally agree	5	55,55	6	66,66

The educational session for health, entitled "Medication Right on Time" was attended by nine clients. A short questionnaire with seven closed questions was previously applied (pre-test) for the topic that would be addressed, each one with five alternatives answers (totally disagree, disagree, neither agree nor disagree, agree and totally agree). These questions were again applied later (post-test) to the educational session individually.

In the pre-test moment, the statement "Take the pills on time is important for my treatment", 44.44% of clients said they agreed and 55.55% totally agreed. However, in the post-test moment, 77.77% indicated that totally agreed. In the statement, "If I forget to take a pill, it will not interfere with my treatment"" in the pre-test, 55.55% of clients said they disagreed and 22.22% totally disagreed, against 11.11% who totally agreed. After the educational session, 66.66% of clients totally disagree, 11.11% disagree and 22.22% agreed with the statement.

In the statement "overweight, unhealthy eating and smoking are factors that interfere with the action of medication", 66.66% of clients agreed with the statement and 33.33% totally agreed. Subsequent results were significant, with 88.88% of clients said they totally agreed and only 11.11% said they agreed.

In the statement "It is indifferent to know the mechanism of action of my medications", 55.55% said they disagree, 22.22% totally disagree, while other 22.22% agreed. In a second evaluation, 55.55% of clients totally disagreed with the statement and only 22.22% agreed. As for the statement "The relationship established with the professional is important in my treatment process", 55.55% of clients agreed and 44.44% totally agreed. In post-session evaluation, it was observed that 66.66% totally agreed and 33.33% agreed. In the statement "One of the big factors leading to non-medication adherence are the socio-economic issues", 55.55% of clients said they agreed and 44.44% totally agreed. In a second evaluation, 77.77% of clients said they totally agreed.

Regarding the last statement "If I cannot read or understand what is written in the boxes of medicines, I should ask for help to family, friends, neighbors or health professionals", 55.55% of clients totally agreed, however 33.33% agreed and 11.11% disagreed. At the last evaluation, 66.66% of clients totally agreed and 33.33% only agreed.

DISCUSSION

From the objective of identifying the needs/target population problems related to treatment adherence, it was found that a significant number of elderly clients do not adhere to the treatment regimen prescribed. Thus, it was possible to recognize the relationship between socio-demographic factors and the adherence phenomenon.

The determinants factors of adherence are grouped into external, including access to medicine and characteristics; relational, including social support and relationship with health professionals; and internal factors to the patient, being psychological, beliefs about health and socio-demographic characteristics.[4,13] There is no consensus on the influence of the variables age and gender on the influence of adherence level, but the low socioeconomic level and the low level of education show a negative influence.[14]

Chronic conditions, due to its long-term, require the clients´ changes in lifestyles, adopting healthy eating habits and regular physical activity. The long duration of the disease and the high complexity of the therapeutic regimen are factors that contribute to the non-adherence process.[15]

Among the most common chronic degenerative diseases, hypertension is a major concern. It is observed that elderly hypertensive patients, aged 60 to 80 years old, regardless of gender, certain risk factors, family history or level of physical activity, have difficulty adhering to an effective medication treatment.[16]

A complex medication regimen requires elder knowledge, skills and competences in decision making, allowing them to get, administer the medicine and manage the therapeutic and side effects continuously, positively contributing to the achievement of better health results, well-being, quality of life and treatment adherence.[19] The most prevalent medication used in this study were the anti-hypertensive (93%), antacids and anti-ulcer (48%) and psychotropic (36%).

According to WHO, the inefficient management of the therapeutic regimen is closely associated with complex medication

regimens, lack of knowledge and limited skills to manage the therapeutic indications, integrating them in everyday activities. Having regard to such information, this information will meet the results obtained by applying the instrument "Evaluation of the risk of non-adherence to treatment", where the most prevalent variables in the study sample were the following diagnosis: complex treatment regimen (96%), lack of knowledge (60%) and illiteracy (40%). It is essential to note that, in the total study sample, 28% of the population has not fit in the diagnosis of non-adherence. In developed countries, non-adherence to clients with chronic disease is 50%, and this percentage increases in developing countries.[4]

The identification of nursing diagnosis is particularly essential in health care, taking into account that provides bases to carry out more specific interventions. For a diagnosis be identified correctly, the finding of clinical indicators and the selection of the defining characteristics for diagnostic characterization is essential. In this context, the scientific production is scarce, considering that this line of research is constantly developing.[17] Analyzing the nursing interventions as a contribution to increase adherence in the community,[18] it was seen evident and unique role that nurses can play in the community, under the risk of detection, promoting help in the self-treatment regimen in the elderly.

The initial evaluation carried out from the particular needs of the population under study led to the implementation of educational strategies in group. It is known[19] that group activities, when developed in environments and within healthier and democratic relations can be potentiating tools of a productive therapeutic work and training of individuals involved in the process. Therefore[8], when the client receives nursing guidelines for the development of knowledge/skills, in order to change their behavior to adhere to a particular therapy is more likely to make the decision for adherence, and it is autonomous and that the nurse-client relationship is through dialogue.

Health Education is a recommended strategy to provide patients with chronic disease relevant information that will make them understand and experience the process as autonomous as possible. It is a significantly strategy used by professional to help clients with Hypertension and Diabetes Mellitus in the reflection of their behavior, lifestyle and health behaviors. Group work enables participants to exchange experiences and knowledge derived from living with similar problems to their own adherence process. In this context, the group activities - as educational strategy on health - seem to be facilitating factors of the regimen.[15]

Researchers have focused their attention on the importance of the health professional role, since the established interaction between client/professional can significantly affect the behavior of self-care. An interaction based on the individual that aims to promote a positive, showing interest and consideration, is a factor associated with increasing adherence.[13]

CONCLUSION

The evaluation showed the importance of the main health needs found by applying the assessment instrument of non-adherence, together with nursing consultations and the need to initiate educational activities through group education sessions. It is also noted that eating habits and physical activity (also being treatment regimen) are clearly less valued by clients in the recommendations of health professionals, which leads directly to deteriorating quality of life. This effect should be a point of reflection for the nurses to promote a more equitable and quality care.

The use of group strategies, such as the conversation round, workshops organization and questioning of the concepts are essential since they allow for reflection, sharing experiences from the clients. The trans-theoretical model of behavior change also has shown that, taking into account the various phases through which one passes a process of change, for the adoption of certain therapeutic scheme, it is important to inform and raise awareness, in the first and/or second phase, showing the effectiveness of group activities. According to the IMB model, and lived experience, it can be seen that the information is a central concept, however the positive relationship between it and the motivation is the main requirement. Consequently, a well-informed and motivated person is more likely to adhere to the treatment regimen.

This study allowed the development of skills/competencies under one of the key areas of nursing care - health education. Nurses have a key role in informing the people and on the adherence treatment, they are responsible for providing information about what to expect of the disease, treatment or interventions, correcting unsuited interpretations and giving the necessary explanations to clarify doubts.

REFERENCES

1. Ministério da Saúde. Portugal. Direcção-Geral de Saúde. Programa Nacional para a Saúde das Pessoas Idosas. Ministério da Saúde [Internet]. 2004 June [cited 2013 May 16]; 13: [22 screens]. Available from: http://www.min-saude.pt/NR/rdonlyres/1C6DFF0E-9E74-4DED-94A9-F7EA0B3760AA/0/i006346.pdf

2. Galvão C. O idoso polimedicado – estratégias para melhorar a prescrição. Rev Port Clin Geral [Internet]. 2006 Nov/Dec [cited 2013 June 1];22(6):[06 screens]. Available from: http://www.rpmgf.pt/ojs/index.php?journal=rpmgf&page=article&op=view&path%5B%5D=6078&path%5B%5D=5862

3. Dias AM, Cunha M, Santos AMM, Neves APG, Pinto AFC, Silva ASA, *et al*. Adesão ao Regime Terapêutico na Doença Crónica: Revisão da Literatura. Escola Superior de Saúde do Instituto Politécnico de Viseu: Millenium [Internet]. 2011 [cited 2013 May 15];40:[19 screens]. Available from: http://www.ipv.pt/millenium/Millenium40/14.pdf

4. Machado MMP. Adesão ao Regime Terapêutico - Representações das pessoas com IRC sobre o contributo dos enfermeiros. Universidade do Minho. Instituto de Educação e Psicologia [Internet]. 2009 Mar [cited 2013 May 16]. [161 screens]. Available from: http://repositorium.sdum.uminho.pt/bitstream/1822/9372/1/Tese%20de%20Mestrado%20-%20Ades%C3%A3o%20ao%20Regime%20Terap%C3%AAutico%20-%20Representa%C3%A7%C3%B5es%20das%20pessoas%20com%20IRC%20sobre%20o%20cont.pdf

5. Meleis AI; Dean MBS. Theoretical Nursing: Development and Progress. 5nd ed. Pennsylvania: University of Pennsylvania, 2011.

6. INSTITUTO NACIONAL DE ESTATÍSTICA. Estimativas de população residente, Portugal, NUTS II, NUTS III e municípios. Statistics Portugal [Internet]. [cited 2013 May 9]. Available from: http://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_main

7. Feijão AR, Lopes MVO, Galvão MTG. Importância do Sistema Apoio- Educação do Modelo de Orem na adesão- estudo reflexivo. Online Brazilian Journal of Nursing [Internet]. 2009 Aug [cited 2013 May 13];8(2):[9 screens]. Available from: http://bases.bireme.br/cgibin/wxislind.exe/iah/online/?IsisScript=iah/iah.xis&src=google&base=LILACS&lang=p&nextAction=lnk&exprSearch=587412&indexSearch=ID

8. Teixeira LNDAO, Neri AL. Envelhecimento bem-sucedido uma meta no curso da vida. Psicol. USP [Internet] 2008 Jan/Mar [cited 2013 May 20];19(1):[14 screens]. Available from: http://www.scielo.br/pdf/pusp/v19n1/v19n1a10.pdf

9. Santos SCS, Barlem ELD, Silva BT, Cestari ME. Promoção da saúde da pessoa idosa: compromisso da enfermagem gerontogeriátrica. Acta Paul Enferm [Internet]. 2008 [cited 2013 May 15];21(4):[4 screens]. Available from: http://www.scielo.br/pdf/ape/v21n4/a18v21n4.pdf

10. Baggio MA, Erdman AL. Teoria fundamentada nos dados ou Grounded Theory e o uso na investigação em Enfermagem no Brasil. Revista de Enfermagem Referência [Internet]. 2011 Mar [cited 2013 May 14];3(3):[9 screens]. Available from: http://www.esenfc.pt/rr/index.php?module=rr&target=publicationDetails&&id_artigo=2227&pesquisa=

11. Sousa VD, Driessnack M, Mendes IAC. Revisão dos desenhos de pesquisa relevantes para enfermagem. Parte 1: desenhos de pesquisa quantitativa. Rev. Latino-am Enfermagem [Internet]. 2007 May/June [cited 2013 Apr 5];15(3):[6 screens]. Available from: http://www.scielo.br/pdf/rlae/v15n3/pt_v15n3a22.pdf

12. Ferreira OGL, Maciel SC, Costa SMG, Silva AO, Moreira MASP. Envelhecimento ativo e sua relação com a independência funcional. Texto Contexto Enferm [Internet]. 2012 July/Sept [cited 2013 May 14];21(3):[5 screens]. Available from:

http://www.scielo.br/pdf/tce/v21n3/v21n3a04.pdf

13. Mantovani MF, Mendes F, Ulbrich E, Bandeira J, Fusuma F, Gaio D. As representações dos usuários sobre a doença crónica e a prática educativa. Rev Gaúcha Enferm [Internet]. 2011 Dec [cited 2013 May 19];32(4):[6 screens]. Available from: http://rdpc.uevora.pt/handle/10174/3453

14. World Health Organization. Adherence to long-term therapies: evidence for action. Geneva: Switzerland; 2003.

15. Mendes LC, Sousa VEC, Lopes MVO. Acurácia das características definidoras do diagnóstico controle familiar ineficaz do regime terapêutico. Acta Paul Enfermagem [Internet]. 2011 [cited 2013 May 11];24(2):[5 screens]. Available from: http://bases.bireme.br/cgibin/wxislind.exe/iah/online/?IsisScript=iah/iah.xis&src=google&base=LILACS&langp&nextAction=lnk&exprSearch=585924&indexSearch=D

16. Grifhits R, Johnson M, Piper M, Langdon R. A nursing interventions for quality use of medicines by elderly community clients. Int J Nurs Practice [Internet]. 2004 Aug [cited 2013 May 17];10(4):[10 screens]. Available from: http://www.ncbi.nlm.nih.gov/pubmed/15265227

17. Munari DB, Luchese R, Medeiros M. Reflexões sobre o uso de atividades grupais na atenção a portadores de doenças crónicas. Cienc Cuid Saude [Internet]. 2009 [cited 2013 May 14]; 8 (suplem): [6 screens]. Available from: http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/9742

18. Kantún-Marín MA, Rubia JM, Gómez-Meza MV, Salazar-González BC. Validación del indice de satisfacción con la vida en la tercera edad. Aquichan [Internet]. 2013 Aug [cited 2013 Oct 10];13(2):[10 screens]. Available: http://eprints.uanl.mx/3658/1/Validaci%C3%B3n.pdf.

19. Saraiva RJ, Rosas AMTF, Valente GSC, Cardoso MMVN, Santos CRGC, Lindolpho MC. A Integração entre graduandos e pós-graduandos no ensino da consulta de enfermagem ao idoso. J Nurs UFPE on line [internet]. 2011 Mar/Apr [cited 2013 Mar 20];5(2): 151-57. Available from: http://www.ufpe.br/revistaenfermagem/index.php/revista/article/view/1191/pdf_416

Submission: 2014/01/06
Accepted: 2015/01/24
Publishing: 2015/02/15

Corresponding Address

Geilsa Soraia Cavalcanti Valente
Escola de Enfermagem Aurora de A Costa/UFF
Rua Dr. Celestino, 74
Bairro Centro
CEP 24020-091 – Niterói (RJ), Brazil