

## Difficulties of individuals with arterial coronary disease to continue drug treatment\*

*Dificuldades de indivíduos com doença arterial coronária para seguir tratamento medicamentoso*

*Dificultades de individuos con enfermedad arterial coronaria para seguir tratamiento medicamentoso*

Glicia Gleide Gonçalves Gama<sup>1</sup>, Tássia Lacerda de Queiroz<sup>2</sup>, Armênio Costa Guimarães<sup>3</sup>, Fernanda Carneiro Mussi<sup>4</sup>

### ABSTRACT

**Objective:** To describe the difficulties encountered by individuals with arterial coronary disease in monitoring the drug treatment. **Methods:** It is a cross-sectional study involving 100 adults interviewed in a public hospital, in Salvador-BA; the results were analyzed as percentages and averages. **Results:** Men predominated, with an average age of  $58.7 \pm 10.9$  years, black skin color/ethnicity, low education and low income. Among the participants, 34% did not comply fully with the medical prescription because of economic conditions, forgetfulness and lack of guidance from health professionals. The purchase of at least one medication was made by 89%. Of the 81 individuals who had a prescription in the interview, 57 (70.4%) used five or more drugs daily; 67 (82.7%) did not know the name of all medicines, because: control was done by a family member, forgetfulness, difficulties to understand the prescription and, lack of a consulting habit. **Conclusion:** There was a low monitoring and understanding of prescribed medications. The socio-economic conditions and the unsatisfactory interdisciplinary approach seem to be the factors that explain the findings. **Descriptors:** Coronary artery disease; Medication therapy management; Nursing care

### RESUMO

**Objetivo:** Descrever as dificuldades encontradas por indivíduos com doença arterial coronária para o seguimento de tratamento medicamentoso. **Métodos:** Estudo descritivo de corte transversal que incluiu 100 adultos entrevistados em hospital público, em Salvador-BA e os resultados foram analisados em percentuais e médias. **Resultados:** Predominou homens, média de idade de  $58,7 \pm 10,9$  anos, cor/etnia negra, baixa escolaridade e renda. Dentre os participantes, 34% não cumpriam integralmente a receita médica em razão de condições econômicas deficitárias, esquecimento e falta de orientação dos profissionais da saúde. A compra de, pelo menos uma medicação, era feita por 89%. Dos 81 indivíduos com a receita na entrevista, 57 (70,4%) utilizavam cinco ou mais medicamentos diariamente e 67 (82,7%) não sabiam o nome de todas as medicações por causa do controle delas ser feito pelo familiar, esquecimento, limitações para leitura da receita e falta de hábito de consultá-la. **Conclusão:** Constatou-se baixo seguimento e entendimento das medicações prescritas. O baixo nível socioeconômico e a abordagem interdisciplinar insatisfatória parecem constituir fatores para estes achados. **Descritores:** Doença da artéria coronariana; Conduta do tratamento medicamentoso; Cuidados de Enfermagem

### RESUMEN

**Objetivo:** Describir las dificultades encontradas por individuos con enfermedad arterial coronaria para seguir el tratamiento medicamentoso. **Métodos:** Es un estudio descriptivo de corte transversal que incluyó 100 adultos entrevistados en un hospital público, en Salvador-BA; los resultados fueron analizados en porcentajes y promedios. **Resultados:** Predominaron los hombres, con un promedio de edad de  $58,7 \pm 10,9$  años, color/etnia negra, baja escolaridad y renta. Entre los participantes, 34% no cumplieron totalmente con la receta médica debido a condiciones económicas, olvido y falta de orientación de los profesionales de la salud. La compra de, por lo menos, una medicación fue hecha por 89%. De los 81 individuos que tenían receta en la entrevista, 57 (70,4%) utilizaban cinco o más medicinas diariamente y 67 (82,7%) no sabían el nombre de todas las medicinas debido a que: el control era hecho por un familiar, se olvidaban, tenían limitaciones para leer la receta y, por falta de hábito de consultarla. **Conclusión:** Se constató un bajo seguimiento y entendimiento de las medicaciones prescritas. El bajo nivel socio-económico y el abordaje interdisciplinar insatisfactorio parecen constituir los factores que explican lo encontrado. **Descritores:** Enfermedad de la arteria coronaria; Administración de Terapia de medicación; Atención de enfermería

\* Study performed in a cardiology ward of a state hospital, in Salvador - (BA), Brazil.

<sup>1</sup> Masters in Nurse Care, Assistant Professor of the Nurse Care Department at Escola Bahiana de Medicina e Saúde Pública – Salvador (BA), Brazil.

<sup>2</sup> Academic Studies at the Graduation Course of Nurse Care at Universidade Federal da Bahia. Pibic grant holder at Universidade Federal da Bahia – UFBA - Salvador (BA), Brazil.

<sup>3</sup> Doctor. Chair Professor of the Medical School at Universidade Federal da Bahia – UFBA - Salvador (BA), Brazil. Professor at Escola Baiana de Medicina e Saúde Pública - Salvador (BA), Brazil.

<sup>4</sup> Doctorate in Nurse Care. Associate Professor at Universidade Federal da Bahia – UFBA - Salvador (BA), Brazil.

Corresponding Author: Glicia Gleide Gonçalves Gama  
R. Arthur de Azevedo Machado, 591 - Apto. 401 - Costa Azul - Salvador - BA - Brazil  
CEP. 41760-000 E-mail: gliciaga@hotmaill.com

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## INTRODUCTION

Cardiovascular diseases (CVD) are considered as the greatest cause of morbidity and mortality in the world<sup>(1)</sup>. During 2003 approximately 60% of deaths occurred in the world were due to non-transmittable diseases, of which 47% were of cardiovascular etiology<sup>(2)</sup>.

The frequency of such diseases increases in a rapid rate in developing countries. According to projections of the World Health Organization, this increasing tendency tends to persist, aggravating even further the morbidity and mortality scenario in these countries<sup>(3)</sup>. Among the most important causes unleashing the phenomena are accelerated urbanization, higher birth rate, increase in the proportion of cases of obesity and arterial hypertension<sup>(4)</sup>.

Developing countries, especially in levels of greater poverty and lower schooling rates are considered as being more vulnerable to the cardiovascular risk factors. Studies performed in Brazil evidence the relation between the lower social economic levels and obesity, and between the lower schooling levels and the accumulation of these factors<sup>(4)</sup>.

A large part of the cardiovascular risk factors can be prevented or controlled by changing life styles with the purpose of reducing cardiovascular events and increasing survival rates<sup>(5)</sup>. Therefore, all individuals presenting increased cardiovascular risk should be guided towards the importance of adopting non pharmacological measures<sup>(3)</sup>.

Treatment with prescription drugs should be started in people with low or intermediate cardiovascular risk who have not reached their aims after non pharmacological treatment. In the case of high risk individuals, treatment with prescription drugs and non pharmacological measures should be started simultaneously<sup>(3)</sup>.

In Brazil, CVD represent the main cause of expenses with assistance, corresponding to 16.2% of the total expenses of the Brazilian Public Health System<sup>(4)</sup>. The two main determinant factors of the expenses are with hospitalization and chronic pharmacological administration<sup>(6)</sup>.

One can consider the adequate use of medication as a cost-effective technology. On the other hand, these can increase the cost of health attention when used inadequately and/or cause adverse reactions<sup>(7)</sup>. Furthermore, the inadequate use of medication could interfere in the control of the disease.

Even with the implementation of policies that aim towards access to medication in Brazil, such as the generics and lists of essential medications, many prescriptions list medications that are not accessible to a large portion of the population, impeding them from following the prescribed treatment<sup>(7)</sup>. Despite expenses with prescription drugs representing a large portion of public health investments, the availability free of charge of such medication does not cover the necessities of the

population. When accompanying patients, the irregularity of pharmacological treatment is verified, which can be related to the lack of financial resources for acquiring medication, when it is not available at the institution<sup>(8)</sup>?

Not following the treatment with medication is not only related to taking or not medication, but also to the conduct of the individual in relation to the administration of the treatment. In this context, emphasis should be given to the inadequate behavior in relation to the dose, hours, frequency and duration<sup>(9)</sup>.

Conceptually, the fact of not following the medication treatment should be assumed as a problem of multiple dimensions, because various factors can be involved, such as: socio-demographic characteristics (age, schooling, socio-economic level); diseases (chronicity, symptoms); beliefs, cultural and life habits, treatment (cost, undesired reactions, complex schemes); institutions (Access, attendance) and relationship with the health professionals<sup>(8)</sup>.

Self-medication is also an important obstacle to the adequate therapeutic drug treatment. The familiarity of the layman with the medications, prior positive experiences and the difficult access to health services are factors that contribute towards such a problem. Consequences of this practice involve the possibility of aggravating health problems, delaying the search for adequate medical treatment, interactions between medications, risks of adverse reactions and toxicity<sup>(10)</sup>.

The prevention and control of CVD is a permanent challenge for all professionals of the health team, implying in reaching therapeutic goals. In this context, the nurse, as a part of the health team, exercises a fundamental role in the identification of barriers which could lead to the non fulfillment or unsatisfactory fulfillment of the pharmacological treatment, offering the information and conditions necessary for understanding the therapeutic rationality of the prescription and the most adequate form of using the medication<sup>(11)</sup>.

In the preventive cardiology ward of a state hospital located in Salvador/BA it was observed during daily experience in nurse care consultation, that various individuals with medical diagnosis of coronary artery disease (CAD) presented factors involving the lack of adherence to medical treatment due to economic, social and cultural reasons. This verification brought about the following question: What are the difficulties individuals with CAD face for following the treatment with medication? It is understood that the answer to this question would contribute towards the interdisciplinary intervention linked to the coronary ward of a public hospital, with the purpose of a better control of the disease.

## OBJECTIVE

Describe the difficulties found by individuals with

coronary artery disease to follow treatments with medication.

## METHODS

This is a descriptive, cross sectional study, performed in a cardiology ward of a state hospital in Salvador, BA, and reference of the Brazilian Public Health System for cardiologic assistance.

For the calculation of the size of the sample ( $n$ ), the parameter used was the estimated prevalence for acute myocardial infarction (AMI) of 99/100.000 adults in Salvador /BA<sup>(12)</sup>. The following parameters were also considered in the calculation of the sample:

$$n = \frac{NP(1-P)}{(N-1)D + P(1-P)} \cdot \text{where, } D = \frac{B^2}{Z_{\alpha/2}} \text{ and}$$

$$P\left(\left|\hat{P} - P\right| \leq B\right) = 1 - \alpha$$

$N$  - total number of the population assumed during the data collection period = 1.000;  $P$  - proportion within the studied population = 0.099;  $n$  - size of the sample;  $\alpha$  - level of significance;  $(1 - \alpha)$  100% - degree of reliability;  $B$  - maximum desired estimated error;  $Z_{\alpha/2} = 1.96$ ;  $1 - \alpha = 0.95$ ,  $B = 0.04$  ou 4%.

According to the calculation, the size of the sample would be of 99, but it was composed of 100 individuals, assisted at the ward, with inclusion criteria: adults, as of 18 years, males and females, conscious, aware of time and space, registered at the ward, with a medical diagnosis of AMI (CID - I21.9), unstable angina (CID - I20.0) and/or submitted to surgical myocardial revascularization, percutaneous transluminal angioplasty, with or without *stent*.

An instrument was prepared with two parts: Part I was composed of socio-demographic information, such as: sex, age, self-declared color/ethnics, civil status, schooling, employment situation, number of dependants and family income; personal background of arterial hypertension, diabetes mellitus, overweight/obesity, dyslipidaemia, myocardial infarction, angina and menopause. Part II covered semi-structured issues about difficulties in following treatment with medication, such as: in relation to medications prescribed by the doctor: [1] are you able to take the medication [2] are you not able to take the medication. If not, what are the reasons?

Interviews were carried out during the period from March to July 2008. After the confirmation of the medical diagnosis of CVD on the medical records of individuals that had been through or would be going through medical consultation, these were approached, received in a private room and after their agreement to participate of the study

and signature on the Term of Free and Clarified Consent, the interview was started.

The Project was approved by the Research Ethics Committee of the Health Department of the State of Bahia, in February 2008 regarding the ethical principles of Resolution 196/96, of the National Health Council<sup>(13)</sup>.

The information recorded and codified in the forms constituted a data bank of the statistical program SPSS 13.0 for Windows. The results were analyzed in percentages and averages presented in the form of tables.

## RESULTS

### Socio-demographic characteristics and clinics for CAD and cardiovascular risk factors

The information on Table 1 portrays a predominance of the male gender (56.0%) and origin from Salvador (72.0%). The average age among the participants was of 58.7 years  $\pm$  10.9 years (58.5 among men and 58.9 among women), predominance for people of the age range <60 years (54.0%). Most of the individuals were of color/ethnics black (self declared colors black and brown) (84.0%), living with partners (52.0%), low schooling levels (34.0% illiterate and 53.0% primary education), not working due to retirement or unemployment (68.0%), receiving wages of two minimum wages per months (82.0%), and with one to three dependents (56.0%). Half of these had their first attendance at the study location in 2007 (50.0%); 40.0% in 2008 and 10.0% in 2006.

With reference to the means of acquiring the medication, only 11 participants received medication prescribed at the health center free of charge or through donations. Most of the interviewed individuals (89.0%) bought at least one of the prescribed medications. To facilitate the purchase of medications, 79.8% of the individuals use generics, reducing costs.

The characterization of the CAD demonstrated that most individuals had already suffered AMI (82.0%), followed by those presenting unstable angina (18.0%). Out of the 82 individuals having suffered infarction, 80 (85.4%) suffered it once, 9 (11.0%) had suffered it twice and 3 (3.6%) had had three infarctions.

Independently of the type of coronary event, 68.0% of the sample had had the medical diagnosis in less than one year.

It was evidenced that 10.0% of the participants were registered in the location of the study in 2006 and 90.0% in the years 2007 and 2008. Of these, 90.0%, 64 individuals (71.1%) suffered the last coronary event less than one year previously, demonstrating that there seems to be a coincidence between the period of the occurrence of the event and the attendance at the cardiology prevention ward.

Among the cardiovascular risk factors, mentioned by the individuals (Table 2), emphasis is given to arterial

hypertension (94.0%), dyslipidaemia (83.0%) and menopause 73.0% in women. Only 4.0% of individuals still maintain smoking habits, nevertheless, 59.0% mention being ex-smokers. It was also observed that 35.0% mentioned diabetes, 48.0% overweight and 76.0% of the individuals denied the practice of physical exercises and only 19.0% exercise regularly over three times a week for more than 30 minutes.

**Table 1** – Distribution of patients of one cardiology ward, according to socio-demographic information. Salvador – Bahia, 2008.

Variables	n (100) %
Gender	
Masculine	56
Feminine	44
AGE	
< 50 years	22
50 – 60 years	32
≥ 60 years	46
Color/ethnics self-declared	
White	16
Black	21
Brown	63
Civil Status	
Companion ( married or partner)	52
Without companion (single, widow or divorced)	48
Schooling	
Illiterate <sup>1</sup>	34
Primary education	53
Secondary education	8
College	5
Employment	
Employed	32
Unemployed	68
Family income (in minimum wages <sup>2</sup> )	
≤ 1 minimum wage	35
1-2 minimum wages	47
≥ 3 minimum wages	18
Number of dependents	
1-3 people	56
4-6 people	39
> 6 people	5
Location of residence	
Salvador	72
Metropolitan region <sup>3</sup>	5
Other locations in Bahia	23
Year of 1 <sup>st</sup> attendance at location of study	
2006	10
2007	50
2008	40
Acquisition of medication	
Only purchases <sup>4</sup>	40
Purchases <sup>4</sup> and receives <sup>5</sup>	49
Only receives <sup>5</sup>	11

<sup>1</sup>Does not know how to read and write, can only sign name; <sup>2</sup> Minimum wage in 2008: R\$ 415,00; <sup>3</sup> Metropolitan Region includes the cities: Camaçari • Candéias • Dias d'Ávila • Itaparica • Lauro de Freitas • Madre de Deus • Mata de São João • São Francisco do Conde • São Sebastião do Passé • Simões Filho • Vera Cruz; Out of the 89 individuals buying medication, , 71 used Generics, <sup>5</sup>Refers to those received at health centers, free samples and donations.

**Table 2** – Distribution of patients of a cardiology ward, according to references of cardiovascular risk factors. Salvador – Bahia, 2008.

Personal antecedents of cardiovascular risk factors	n %
Arterial hypertension	
Yes	94
No	6
Diabetes Mellitus Type 2	
Yes	35
No	63
Don't know	2
Alteration of fat in the blood	
Yes	83
No	9
Don't know	8
Overweight	
Yes	48
No	51
Don't know	1
Smoking habit	
Yes	4
No	37
Ex-smoker	59
Sedentary	
Physical exercise < 3x p/ week	5
Physical exercise 3-5x p/week minimum 30'	16
Physical exercise >5x p/ week minimum. 30'	3
No physical exercise	76
Menopause (n=44 <sup>1</sup> )	
Yes	32
No	10
Don't know	1
Hysterectomy	1

<sup>1</sup>56 participants were of the male gender

### Impediments for following treatment with medication

(Dis) Agreement between the name of the prescribed medication and those remembered by the participants

At the moment of the interview it was verified that 81.0% of the participants had the medical prescription and 19.0% had forgotten the prescription at home. These 81 individuals were questioned as to the name of the medication they were using and, later, compared their answer to the names of the medication on the prescription. It was verified that only 14 participants (17.3%) gave the correct names. One possible reason was verified for the fact of the names of the medications not being remembered at the moment of the interview. It was demonstrated that out of the 81 individuals presenting medical prescriptions, 57 (70.4%) were using five or more different medications daily.

The 67 individuals that could not inform correctly the name of all the medications on the medical prescription, offered 120 reasons, with emphasis to situations such as that the control of the medication is performed by a family member (35.0%), forgetfulness

(26.6%), limitations regarding to reading the prescription (14.2%), lack of habit of consulting the prescription (11.7%) and not having received guidance from the health team (6.7%) (Table 3).

**Table 3** – Distribution of patients in a cardiology ward, according to reasons causing difficulty in the correct information of the prescribed medication. Salvador – Bahia, 2008.

Difficulty in informing the prescribed medication	n (67)	%
Control performed by a family member	42	35.0
Forgetfulness	32	26.6
Doesn't know how to read the prescription	17	14.2
Does not have the habit of consulting the prescription	14	11.7
Was not guided	8	6.7
Only uses the medication by consulting the prescription	5	4.2
Does not understand the doctor's handwriting	1	0.8
Identifies the medication through size and color	1	0.8
Total*	120	100

\* more than one response per participant

(Non) fulfillment of the medical prescription

Most of the participants (66.0%) informed that they were taking all the prescribed medications. It should be noted that out of the 14 participants (17.3%) who were able to inform the name of the medication on the medical prescription, only one (7.1%) was not totally fulfilling the prescription due to forgetfulness.

Out of the 34.0% that were not totally fulfilling the medical prescription, most were of ages  $\geq 60$  years (53.0%), illiterate (53.0%), no occupation (61.7%) and monthly income of  $\leq$  one minimum wage (56.0%).

**Table 4** – Distribution of the patients in a cardiology ward, according to the reasons mentioned for not totally fulfilling the medical prescriptions. Salvador – Bahia, 2008.

Reasons given	n (34)	%
Deficient economic conditions	14	41.2
Forgetfulness	9	26.4
Lack of guidance from the health professionals	4	11.8
Not valuing the treatment	3	8.8
Adverse effects of the medication	2	5.9
Member of the family forgets	2	5.9

According to the information in Table 4, among the reasons mentioned for not fulfilling the medical prescription, deficient economic conditions prevailed for 14 (41.2%), of which 10 (71.4%) had monthly income less or equal to one minimum wage and the remainder (28.6%) of one to two minimum wages. Of the 14 (41.2%) participants who informed that they did not follow the medical prescriptions for deficient socio-economic reasons, 12 (85.7%) bought at least some medication (three bought all the medications and nine received free of charge part of the medication and the other part was bought) and two (14.3%) depended exclusively of medications offered by the health center, not always having availability of all the medications prescribed.

Other reasons for not fulfilling the medical prescriptions included forgetfulness of taking the medicine

at the correct hours (26.4%) and lack of guidance offered by the health professionals (11.8%).

It should be observed that of the 34 individuals that were not totally fulfilling the medical prescriptions, 14 (41.2%) had the control of the medication performed by a member of the family.

## DISCUSSION

The study was carried out in a group of men and women, considered of high cardiovascular risk, since they had previously suffered CAD, in other words, 18.0% had medical diagnosis of unstable angina, and 82.0%, of MIA.

It is known that the risk of cardiovascular disease duplicates after the age of 55<sup>(4)</sup>, corroborating with the findings in this study in which the average age for men was of 58.5 years and for women (44.0% of the sample) of 58.9 years.

The group also presented homogeneous socio-economic characteristics depending on attendance by the Brazilian Public Health System, originating basically from the city of Salvador and Metropolitan Region, self-declared primarily of black color/ethnics and living in social inequality evidenced by low schooling and family income, as well as professional inactivity due to retirement or unemployment. These findings confirmed the descriptions in national<sup>(4,15)</sup> and international<sup>(16)</sup> literature which bring these socio-economic characteristics as potential factors of cardiovascular disease risks.

The presence of various cardiovascular risk factors was referred to by the participants of the study and it is known that these factors tend to occur more frequently in populations with less access to economic and cultural resources<sup>(17)</sup>. The high cardiovascular risk of the participants of this study and the presence of the mentioned risk factors alone demand the necessity of adherence to the treatment with medication, with the aim of controlling the disease.

In this study, out of the 14 (17.3%) participants that were able to inform the name of the medication on the prescription, 13 were complying fully with the prescription. Therefore, the correct identification of the name of the medication seems to be an element which contributes towards the correct fulfillment of the medication therapy.

The 67 individuals who informed incorrectly the name of the medications on the prescription, justified, predominantly, due to the fact that the control of the medication was carried out by a family member (35.0%). These individuals which had the control of the medication performed by members of the family, were of ages above or equal to 60 years, and the difficulties that can be related to the population in question, such as lack of memory, deficient cognition, decrease in manual dexterity and visual acuity, generating dependency, should be considered. Among the alterations generating some form of dependence, emphasis is given those related to becoming ill and, on these occasions, the family is the main source of care

due to the culturally defined responsibility or due to affective attachment<sup>(18)</sup>, where it becomes indispensable that these members become the object of educative actions related to the therapeutic process of their relative.

Other reasons pointed out for the incorrect information of the name of the prescribed medications were forgetfulness (26,4%) and personal limitations in relation to reading the prescriptions (14.2%), which reasons alone express the dependence on third parties for the correct use of the medication. Nevertheless, it should be noted that those who mentioned forgetfulness as one of the reasons, only two had the control of medication performed by a family member.

It is also important to observe that 11.8% informed that they were not aware of the names of the prescribed medications due to lack of guidance by the health team. It is not admissible that patients are sent home with a hand written prescription without any clarification about the purpose, usage, care and effects of the medication. It should also be verified whether they had any difficulties in understanding the therapeutic guidance due to inadequate professional approach to their comprehensive capacity. It is important to observe that 34.0% of the participants were illiterate, and 53.0% had only incomplete primary education, which can make the comprehension process difficult in relation to the disease, related risk factors and necessary care<sup>(19)</sup>. In this sense, health professionals need to be attentive to social and economic issues, implementing and evaluation the care which can in fact contribute towards self care and improved adhesion to the therapeutic regimen.

It is assumed that the lack of identification of the name of the prescribed medication could implicate in the lack of knowledge in relation to the dose, collateral effects and necessary care for using the medication. It is also possible that the identification of the medication is not made only using the name, but by other means, such as the color, size, shape or other forms, which cannot be identified in this study, and could also be considered as a possible research bias.

Out of the 34.0% that did not totally follow the medical prescription, most had ages  $\geq 60$  years (53.0%), were illiterate (53.0%), had monthly income of  $\leq$  one minimum wage (56.0%) and did not have any occupation (61.7%), revealing deficient social and economic conditions. In the account of these participants, the main hindrance encountered for following the treatment with medication was the low affordability (41.2%).

In a national study about prescriptions and adherence to statins with 207 individuals with CAD and hypercholesterolemia, it was verified that 85 individuals (41.0%) made regular use of the medication, and the remainder 122 (59.0%) did not use the medication or were using it in an irregular manner. The irregular use of the medication was evidenced for 54 (26.0%) participants, and the factors involved in the finding encompassed the

price of the medication for 36 individuals (67.0%), failure in guidance for 17 (31.0%), and collateral effects were observed only in one participant (2.0%). Therefore, the cost of the medication was one of the main factors to be considered in the process of medication therapy fulfillment, similar to the findings in this study<sup>(20)</sup>.

It is a fact that the lack of access to medication has been representing a relevant hindrance in the fulfillment of medical prescriptions. In Brazil, the offer of medication free of charge does not attend to the necessities of the population<sup>(11)</sup> and it is estimated that 64.5 million people do not have financial conditions permitting the acquisition of medication<sup>(21)</sup>. In the study, only 11% of the participants' alleged receiving medication from the health centers or by means of donations, dispensing with the necessity of buying them and most of the interviewed parties (89%) had to buy at least one of the medications prescribed. Further, around 80.0% used generic medication, in order to reduce costs. It is necessary that health professionals consider the process of acquiring medication, making it easier by prescribing medications that are available in the public health network or which are economically more accessible.

Another interesting finding was the fact that 14 (41.2%) of the 32 participants that were not fully complying with the medical prescription had the control of the medication performed by a family member. Of these, 9 (64.3%) did not fulfill the medical prescriptions due to deficient economic conditions. It is understood that the control of the medication by a family member may not guarantee in all cases the adhesion to the therapeutics in cases of economic impracticability, for the acquisition of medications, or lack of preparation of these individuals.

It was also verified that most of the people in the studied group were exposed to polypharmacotherapy, with average prescriptions of five or more medications. Despite the participants not having mentioned the quantity of medication as a hindrance to following the treatment, it is known that the greater number of prescribed medications and the complexity of the therapeutic scheme could be connected to the inadequate fulfillment of the treatment, even when the medications are supplied free of charge<sup>(11)</sup>. Individuals mentioning not fully complying with the prescriptions, due to forgetfulness, were using over four medications on average (average 4.8). Also, spin-off from polypharmacotherapy, evidenced in the elderly population, without the due guidance, favor the occurrence of undesired synergism and antagonisms, non fulfillment of the clinically essential medication prescriptions, and surplus spending with the superfluous ones<sup>(22)</sup>.

Based on the panorama presented, it is observed that health education guided towards the individual and family can be used as an important resource in the process of understanding, fulfilling and adapting to treatment with medication. Both the patients and their family members need

to be duly instructed as to the adequate accompaniment and assistance in relation to the treatment of these individuals.

Following the medication treatment and health education are inseparable issues. Health education has the objective of a greater engagement of the individual with self care, adhering to the therapeutic and preventive scheme, using accessible language, in order to attain the best life quality possible<sup>(4,23)</sup>.

The necessity of comprehending issues related to the individual, being psychosocial, economic, cultural or spiritual, and means of insertion, are of substantial relevance to the process of approach, clarification, prescription, conduction and accompaniment of the therapeutic regimen. Nurses should consider certain attitudes when approaching the individual, such as language, amount of time granted for the consultation, reception, and respect towards verbalizations and questioning by the individuals and motivation to follow the medication treatment. It is not sufficient to follow the standards recommended on how to be healthier and avoid diseases, but to perform health education in a process that stimulates dialogue, queries, reflection, questioning and shared actions<sup>(11)</sup>.

Health education strategies, developed in an articulate manner and in an interdisciplinary perspective, can permit a greater commitment of the individual in relation to the therapeutic scheme, increasing the degree of knowledge and

responsibility on the individual's own disease and treatment. Therefore, it is necessary to be aware of all the aspects that could be involved in the inefficient fulfillment of medication treatment to identify the adequate approach to the problem, with the objective of changing the behavior of the individual in relation to the health control and promotion measures, making the individual the agent of his own care.

## CONCLUSION

Several aspects have influence the fulfillment of treatment with medications, jeopardizing it and rendering it a challenge for the multidisciplinary team. In this study, the low level of fulfillment and comprehension of the medical prescriptions was evidenced. The low socio-economic level of the sample and unsatisfactory interdisciplinary approach seem to establish the most important factors related to these findings.

Studies such as this one should be considered as sources of guidance for the planning of interventions and new approaches by health professionals, with the aim of improving commitment and comprehension of the therapeutic rationality of the prescription. It is known that it is indispensable to arrive at the cultural level of the individual and establish clear communication and a relationship of trust to guarantee effective care.

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