

## Evaluation of HIV/AIDS Patients' Knowledge on Antiretroviral Drugs

Regina Flávia de Castro Almeida and Anya Pimentel Gomes Fernandes Vieira  
 Master's Program in Public Health – University of Fortaleza (UNIFOR); Fortaleza, CE, Brazil

**Lack of information on antiretroviral drugs or the misunderstanding of available information can facilitate incorrect use of such drugs. This can result in non-adherence to the prescribed regimen, leading to a great possibility of a therapeutic failure. The aim of this study was to know which information HIV/AIDS patients, who receive their medicines at the pharmacy of a reference hospital in the northeast Brazil, have on the drugs they use, the source of this information and whether there is a need for additional information. A total of 195 HIV/AIDS patients, who were using either zidovudina + lamivudina 300+150mg (AZT+3TC), efavirenz 600mg (EFZ) or lopinavir/ritonavir 133.33/33mg (LPV/r), were interviewed. The mean age was 41 years (SD = 9.55) and 70.8% were males. Of the total, 55.4% didn't know the effect of the drug in the organism; 35.9% were unaware of the necessity of taking antiretroviral drugs for the rest of their lives; only 14.4% knew how to proceed when a dosage was missed; 22.1% said they could die and the same number of individuals believed in aggravation of the disease in case of treatment interruption. The majority, 68.2%, considered it very necessary to receive drug information. The results show that there is an apparent lack of general information among users of antiretroviral drugs, and at the same time a need for it. It is necessary that all professionals involved in the health care of the patients agree that an efficient supply of information on prescribed drugs is an ethical component of the treatment that favors and fosters its adherence.**

**Key-Words: HIV/AIDS, drug information, antiretroviral, adherence, non-adherence.**

According to the National Program for STD and AIDS, since the identification of the first case of AIDS in 1980 until June 2006, around 433,000 cases of the disease have been identified in Brazil and currently it is estimated that 590,000 people live with HIV or AIDS in the country [1].

In the search for improvement in healthcare and therefore in quality of life for people living with HIV/AIDS, Brazil has adopted the policy of free and universal access to antiretroviral therapy (ART), and today approximately 170,000 people are benefited with the drugs that the Brazilian program to combat AIDS provides through the public health system. These patients are concentrated in large urban centers such as the city of Fortaleza, 5th largest city in the country and 10th in number of cases of AIDS in Brazil [1].

In Fortaleza there are 10 (ten) Drug Dispenser Units (UDM) for the care of HIV-positive patients. In June 2006, the number of patients receiving antiretroviral drugs in these units was 2,787; 2,709 adults (97%) and 78 children (3%). The unit that concentrates the largest number of patients is the São José Hospital of Infectious Diseases (HSJ), making it the largest reference center for this disease in the state. At the time of this study, the number of patients receiving antiretroviral drugs at HSJ was 2,272; 2,202 adults and 70 children, representing approximately 81.5% of HIV-positive patients in drug treatment in the State of Ceará [2].

Remission of the infection caused by HIV can be obtained for a long period through a combination of antiretroviral drugs, but the success of the treatment of HIV infection depends,

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Address for correspondence: Dr. Regina Flávia de Castro Almeida. Av. Monsenhor Tabosa, 1165. Fortaleza, Ceará, Brazil. Zip code: 60165-011. Phone: +55-85-9984-6767. Fax: +55-85-3219-1666. E-mail: reginaflavia@gmail.com.

fundamentally, on good adherence of the patient, without which there is great possibility of therapeutic failure. The patient needs to follow the ART correctly, taking at least 95% of prescribed doses in the recommended schedule [3-5]. The failure of therapy leads to continuous viral replication in the presence of antiretroviral drugs, which results in successive change of combinations, reducing future treatment options [6,7]. However, despite the serious implications of non-adherence and the consequent good prognosis of an effective therapy, available studies on the subject show that the rate of adherence to antiretroviral drugs varies between 40 and 80% [8-10].

The lack of information about drugs in usage is pointed as one of the most significant reasons why individuals do not adequately follow their treatment [11]. However, the vast literature that deals with non-adherence to antiretroviral treatment is very limited in respect to studies that monitor the quantity and quality of information that is given to the patient about the medication he/she is prescribed, and even more limited in respect to studies that relate information to higher or lower adherence to drug treatment.

It is believed that a greater understanding of the drugs prescribed facilitates the dialogue between patients and health professionals, fosters a more active participation of the user in the care of his/her health, and thus impacts positively on adherence to treatment with consequent possibility of more success in the results. Little is known about the level of knowledge of HIV/AIDS patients in relation to the medication they use, especially in the northeast of Brazil, which may influence their adherence to treatment. The aim of this study is to describe what information HIV/AIDS patients who receive their antiretroviral drugs at the pharmacy of a reference hospital have on the drugs they are using, where this information comes from, and whether there is the need for further and more detailed information.

## Material and Methods

### Type of Study

Cross-sectional study with quantitative approach and descriptive characteristics from a survey with a group of HIV-positive patients in use of antiretroviral drugs.

### Description of the Location of the Study

The São José Hospital of Infectious Diseases (HSJ), located in the city of Fortaleza, capital of the state of Ceara in northeastern Brazil was chosen for being a reference in the state for tertiary level of health care with the greater number of consultations and hospitalizations due to AIDS in this state. The study was evaluated and approved by the São José Hospital Ethics Committee.

### Population

The study included individuals of both sexes, HIV-positive (symptomatic and asymptomatic), residents in the state of Ceará, aged above 18 years, in use of at least one of the antiretroviral drugs of choice for initial therapy and receiving these medicines regularly as an outpatient in HSJ. Those drugs are: zidovudine + lamivudine 300 + 150mg (AZT+3TC), efavirenz 600mg (EFZ) and lopinavir / ritonavir 133.33/33mg (LPV/r) [13]. The monthly bulletin for evaluation and use of drugs/AIDS from the HSJ referring to the month of June 2006 indicates that 1,510 patients received AZT+3TC, 930 received EFZ and 449 received LPV/r [2].

All patients receiving medication for the first time, patients evidently unable to express themselves with clarity and lucidity, and those who did not have minimum autonomy to make decisions in respect to their treatment were excluded from the study.

### Size and Selection of Sample

Assuming a tolerable sampling error of 7% in the studied population and using the formula below, a sample of 187 individuals was calculated.

$$N_0 = 1/E_0^2$$

$$n = N \cdot n_0 / n_0 + N$$

N = population size (2,272); E<sub>0</sub> = tolerable sampling error (7% = 0.07); n<sub>0</sub> = first approximation of sample size (204); n = sample size (187).

### Data Collection

A structured questionnaire was used to verify the knowledge of patients on the antiretroviral drugs they use, what are their more common questions, and what other information would be of interest for them.

The questionnaire was divided into three parts. The first part, with demographic data to identify the interviewee through the initials of the name, sex, age and education. The second part, with data on the drugs in usage and questions about the knowledge of information related to the drug itself, such as action, duration of treatment, prescribed dosage, proper conduct when missing doses, storage, adverse reactions, interactions with food and other drugs and consequences of

treatment interruption. The third part, with about sources of information available and the importance or not of receiving information about medicines.

The selected patients received clarification on the study, and those who consented in participating were asked to sign the Term of Free and Informed Consent (TFIC).

The descriptive statistical analysis of collected data was performed using the program SPSS 15.0 for Windows (Statistical Package for the Social Sciences Inc, Chicago, IL, USA).

## Results

Data analysis for the identification of 195 people interviewed showed an average age of 41 years (SD = 9.55), varying in a range between 21 and 71 years, and predominantly male (70.8%). Regarding educational level, 106 participants (54.3%) had not completed high school, and, of these, 60 (30.8%) did not even finish elementary school and 10 (5.1%) were illiterate. The average time of use of antiretroviral drugs in general was 5.3 years (SD = 4.0) and average time of use of the drugs under study (AZT+3TC, EFZ or LPV/r) was 3,2 years (SD = 2.4), while the majority (75.3%) used AZT+3TC, with or without EFZ, LPV/r or some other antiretroviral (Table 1).

The answers to questions that directly assessed the patient's knowledge on the drug under study show that 55.4% did not know the mode of action of the drug in fighting viruses, and 35.9% did not know that they would have to take antiretroviral drugs for life.

Only one of the interviewees could not answer the question related to the dose and frequency. It is noteworthy that in this case, considering that there may be variations in the dosages prescribed for the same medicine, there is no right or wrong answer and only the fact that the patient knew or did not know the dosage prescribed by your doctor was evaluated. As for the intake with or without food, among users of LPV/r, 69% knew that taking this drug with food is the correct way. Also, 51.7% of users of AZT+3 TC and 40.2% of users from EFZ said this to be the right behavior, but for those drugs that

**Table 1.** Characteristics of the patients.

	Patients (n=195)	%
Age	41*	
Male/Female	138/57	
Schooling		
- illiterate	10	5.1
- elementary school	27	13.8
- high school	62	31.8
- college	21	10.3
Use of antiretrovirals (years)	5.3**	
Use of AZT + 3TC or EFZ or LPV/r (years)	3.2***	

\* SD = 9.5; interval: 21-71 years; \*\* SD = 4.0; \*\*\* SD = 2.4; SD = standard deviation.

**Table 2.** General knowledge of antiretroviral drugs.

Questions/Answers	(N = 195)	
	n*	%
<b>Mechanism of action</b>		
Inhibits viral replication	39	20
Other	48	24.6
Not Known	108	55.4
<b>Duration of treatment</b>		
Lifetime	84	43.1
Other	41	21
Not Known	70	35.9
<b>Procedure when missing a dose</b>		
Take the missed dose no matter what time	59	30.3
Take the missed dose if it is not near the time of the next dose	28	14.4
Take only the next dose	70	35.9
Other	26	13.3
Not Known	12	6.2
<b>Adverse effects</b>		
Dizziness	57	29.2
Nausea	48	24.6
Nightmares	44	22.6
Insomnia	42	21.5
Diarrhea	37	19
Vomiting	35	17.9
Headaches	15	7.7
Tiredness	15	7.7
Lack of appetite	12	6.2
<b>Drug interactions</b>		
Not Known	149	76.4
<b>What happens if treatment is interrupted</b>		
Lower body defenses	18	9.2
Emergence of other diseases	36	18.5
Increase of viral load	39	20
Worsening of disease	43	22.1
Death	43	22.1
Not Known	10	5.1
Viral resistance	6	3.1
Other occurrences	73	37.6

(\*) n refers to the number of patients that gave the respective answer.

is not an essential conduct. Regarding the interaction with other antiretroviral drugs, 149 individuals, corresponding to 76.4%, did not know if there were any drugs that should not be taken along with the antiretroviral drugs in use.

In regard to the proper conduct in case of missing a dose, only 14.4% gave a complete and correct answer saying that one should take the medicine as soon as remembered only if it was not too close to the time of the next dose, while 30.3% responded that one must take when remembered no matter what time, and 35.9% said it is correct to wait for the next dose.

As for how to store the medicines, the rate of success was high among users of the drugs studied, since 96.6% and 97.2%

of users of EFZ and AZT+3TC, respectively, said they keep it at room temperature and 97.6% of those taking LPV/r keep it in the refrigerator.

Among the adverse reactions that may be present because of these drugs, the most remembered by the interviewees were: insomnia (21.5%), nightmares (22.6%), nausea (24.6%) and dizziness (29.2%).

When asked what happens if the treatment is interrupted and the patient stops taking the medicines, 22.1% responded that the person dies and the same percentage said that the disease will worsen.

Tables 2 and 3 show, in summary, the responses of the patients interviewed to the questions directly related to

**Table 3.** Specific knowledge of AZT+3TC, EFZ e LPV/r (Concordance between the information on specific ARV drugs and the responses of patients).

Questions	ARV	N*	n**	%
Dose / Frequency	AZT+3TC	147		
	1 tablet 2 x/day		143	97.3
	EFZ	107		
	1 tablet 1 x/day		104	97.2
Ingestion with food	LPV/r	42		
	3 tablet 2 x/day		38	90.5
	AZT+3TC	147		
	Yes/no matter		88	59.9
	Not Known		32	21.8
	EFZ	107		
Storage	Yes/no matter		53	49.5
	Not Known		26	24.3
	LPV/r	42		
	Yes		29	69
	Not Known		7	16.7
	AZT+3TC	147		
Storage	Room temperature		142	96.6
	EFZ	107		
	Room temperature		104	53.3
	LPV/r	42		
	Refrigerator		41	97.6

(\*) N refers to the number of patients using the drug. (\*\*) n refers to the number of patients that gave the respective answer.

**Table 4.** Information about antiretroviral drugs.

Questions/Answers	(N = 195)	
	n*	%
<b>Receiving information</b>		
Received at least once	83	42.6
Always receive	54	27.7
Never received	58	29.7
<b>Source of information</b>		
Doctor	156	70.8
Social assistant	22	11.3
Psychologist	6	3
Others	9	4.61
None	30	15.4
<b>Necessity of receiving information</b>		
Necessary / very necessary	194	99.5
Not very necessary	1	0.5
<b>Which detailed information would like to have</b>		
Mode of action	110	56.4
Time of treatment	115	59
Drug interaction	89	45.6
Food interaction	82	42.1
Alcohol interaction	69	35.4
Procedure when missing a dose	83	42.6
Consequences of treatment interruption	91	46.7
How to store the medicines	75	38.5
<b>Interest for information</b>		
No interest - don't want to know	24	12.3
No interest - already knows everything	6	3.1

(\*) n refers to the number of patients that gave the respective answer.

antiretroviral drugs in general and those specific to the antiretroviral drugs chosen for this study.

In the third part of the questionnaire, with questions about information itself (Table 4), when asked about the importance of receiving information on medicines, 68.2% of HIV/AIDS patients considered it very necessary to receive them and only 0.5% felt little need. Of the 195 patients interviewed, 42.6% reported having already received some information on medicines, 27.7% always received information and 29.7% never received information. Seventy-two patients (36.9%) said they never received any kind of information material.

For 110 patients (56.4%), it was the doctor, in the beginning, who gave them all the information; 45 patients (23.1%) obtained information through magazines; 38 (19.5%) on television; while 78 (40%) claim to have no other source of information than the doctor.

As it is shown in Table 3, when asked what other detailed information they wanted on the drugs they were using, the greatest curiosity of the interviewees were in relation to the duration of the treatment (59%), followed by the mode of action of the drug in the body (56.4%), which adverse reactions may occur (50.3%), and what can happen if they stop the treatment (46.7%). Of the 195 patients interviewed, 30 claimed not to have any interest in receiving more information and of those, 6 (3.1%) said they already knew everything, while 24 (12.3%) did not want to know anything.

## Discussion

Despite substantial evidence that antiretroviral therapy is potentially effective in reducing viral load and the postponement of the onset of opportunistic diseases, recent data indicates that approximately half of patients receiving this medication fail to follow the prescription [10-12]. Studies show that providing information to patients about their disease and their treatment has long been considered a key component in the ethical and effective multidisciplinary approach needed to facilitate the adherence to any treatment, especially the most complex and long term ones, such as AIDS [12,13].

The fundamental purpose of this study was to determine the level of information that people with HIV and AIDS, treated at a hospital of reference in the city Fortaleza in northeast of Brazil, has on the antiretroviral drugs they are using. This was made possible through the responses of patients to questions that were part of the structured questionnaire prepared specifically for this study and previously tested. We sought to achieve the desired number in the shortest possible time in an attempt to avoid biases related to selection of the sample and interference of the researchers.

The average age of respondents - 41 years - was a little above the average found in other studies involving patients with HIV/AIDS [8,9,14]. Most of the 195 respondents were male (70.8%), which matches the results found in other studies [8,9,14,15] and the last Epidemiological Bulletin of the Ministry of Health [16].

The epidemic of AIDS in Brazil began in the layers of the higher socioeconomic level, which was shown by the level of schooling, until between 1989 and 1996 when there was a reversal of the incidence of AIDS by level of schooling, with the rates increasing progressively in individuals of little instruction to overcome those found for individuals with more schooling. The gradual reversal was due, according to studies, to the fact that the less favored on the educational point of view, having more difficulty in receiving and assimilating the educational messages, start sexual life early, have more casual partners and makes less frequent use of condoms, making them more susceptible to sexually transmitted diseases [17]. In this study, although only 5% of people interviewed stated they were illiterate, more than half had not completed high school and only 13.4% had attained higher education. These results, besides being in line with those found in other studies involving individuals with HIV and AIDS [9,14,18,19], show that this trend started in the 90s is still the same today. Furthermore, studies show that, although not a determining factor, the low level of education can affect adherence to treatment by influencing the understanding of the importance and understanding of the explanations given by health professionals, encouraging the misuse of the drug, especially when related to a complex treatment such as antiretroviral [9,18,19].

The patients interviewed were using antiretroviral drugs, on average, for more than five years, and as for the drugs chosen as a reference for the study in question for being the most used ones, the average was around three years. Taking into account that the patient has several consultations with the doctor during the treatment and visit the pharmacy every month to receive their medicines, it was to be expected that he had a reasonable knowledge of all information considered relevant to a better understanding of their disease and the treatment. However, in the course of this work it was not what was observed.

When asked how the drug acts in the body, more than half of respondents did not know and only 20% answered correctly saying that it inhibits viral replication, although the term most commonly used by them was "growth of the virus," showing a degree of accuracy lower than that found in a study conducted in Belo Horizonte, Brazil [14]. Knowing the correct mechanism of action of the drug with certainty will avoid patients coming to conclusions such as "it (the drug) cures" or "it (the drug) kills the worm," which are a false idea of healing, or make them believe in explanations that are very different from the truth, such as "(the drug) is moving inside the blood," "(the drug) is fighting a type of cell" or "(the drug) is a barrier of protection," which are examples of responses observed in this study.

Similarly, only 43.1% of respondents knew that they would have to take medicines for the rest of their lives, which means that more than half did not know or mistakenly knew how long they would be taking their medicines. Answers as "more or less for 20 years" or "until I am cured" give the illusion that

there is healing, which, at least so far, does not correspond to reality. For some respondents, only God or the doctor could set this time. The clarification of those basic issues early in the treatment prevents not only the belief in the unreal but also in absurds, such as “until the appearance of sequels” or “for an unspecified period of time for being it a pre-existing condition.”

It should be noted that, although there is evidence of an association between adherence and positive and negative expectations for the patient, the belief in the efficacy of treatment has a strong positive effect [20]. Therefore, it is believed that if the information is passed on in a balanced manner, not alarmist, honestly assessing the pros and cons of treatment, it is preferable that the patient knows the true prognosis than have false beliefs [21].

Almost all the respondents (mean = 95%) answered correctly and safely to the issues of dose and frequency, showing an index slightly higher than those found in previous studies [14,22]. This information is relevant, whereas the correct observance of these items is critical for treatment success. However, showing agreement with other previous studies [14,23], the same security was not observed in respect to the recommendation on intake of the drug with or without food. Among the users of LPV/r, 69% knew that it is advisable to take it along with food, showing more knowledge than the users of AZT+3TC and EFZ, since variation in answering “yes”, “it doesn’t matter” and “no” indicates uncertainty about the correct procedure. This result is not surprising, if it is taken into account that the document of recommendations for antiretroviral therapy from the Ministry of Health [24] recommends the intake of LPV/r with food and makes no major restrictions to AZT+3TC and EFZ, therefore it is assumed that health professionals also give more emphasis to the procedure with LPV/r when advising their patients.

The high percentage (76.4%) of people interviewed who did not know if there is any drug that should not be used along with antiretrovirals is worrying, because it is known that some types of drugs, both legal or illegal (e.g. simvastatin, ergotamine, cisapride, heroin, methamphetamine, among others), may modify the effect of certain antiretroviral drugs when used concurrently, making them less effective or increasing its effects, leading to dangerous reactions in the body or the failure of the treatment against AIDS [1]. Being selfmedication a common practice in our culture, it becomes an essential role of health professionals, especially drugs prescribers and pharmacists, to guide the patients against inadequate use of medicines, including herbal, in an attempt to minimize negative interference in the treatment.

Regarding the correct procedure when missing a dose, only 28 (14.4%) of 195 persons interviewed showed more knowledge by saying that in case of forgetting to take a dose one should only take the missed dose if it was not near the time of the next dose. The other reviews are divided mainly between taking as soon as remembered and simply waiting for the next time. One of the respondents referred to the fact

that the doctor said “it is important to take, no matter what time.” More worrying were the comments of some who said that when they forget to take one dose, they double the next dose, increasing the likelihood of the emergence of side effects without positively affecting the therapeutic outcome. It was also mentioned by some interviewees that their doctors told them not to worry much if they “occasionally” missed a dose. The question is how to define “occasionally” as the term has a subjective, personal connotation, and therefore variable. Some patients reported the habit of stopping the medicine intake during the weekend or on holidays so they could drink alcohol, to “cleanse the blood,” or even to “take a break from medicine,” a practice already mentioned in other studies involving patients of HIV/AIDS [25].

The main cause of virus resistance to antiretrovirals is the interruption in treatment and although there are no studies determining the level of non-compliance that is associated with an increased risk of resistance, it has been suggested that the minimal failure is sufficient to lead to therapeutic failure [26,27], preventing the product to make the necessary effect, impairing the treatment and, consequently, the clinical improvement.

The question on the form of storage of medicines had a degree of accuracy of the responses quite high. Of the 42 patients using LPV/r, 97.6% correctly stated they kept the drug in the refrigerator and only 1 (one) patient did not follow this guideline. Among the users of AZT+3TC and EFZ, the vast majority (96.6%) said they store the drug at room temperature, although it has been observed by interviewers that for many users it was considered room temperature to be any place that was not the refrigerator (eg closets, drawers, bags inside the drawer of the wardrobe, bathroom cabinets etc.). Considering the guidelines of the manufacturers of AZT+3TC and EFZ, room temperature is temperature below 30°C. So, it is disturbing the assumption that many patients are storing their medicines in places more humid or under higher temperatures than recommended, either to ensure secrecy, or for lack of more precise guidance.

In this study, the patients are asked what adverse reactions the drugs they were using could cause and, in general, little knowledge was shown about the subject. Dizziness (29.2%), nausea (24.6%) and nightmares (21.6%) were the most mentioned, followed by insomnia (21.5%), diarrhea (19%) and vomiting (17.9%). A variety of adverse reactions mentioned, and not all of them related to drugs, shows a tendency of respondents to relate to the drug any symptoms they may have experienced, a fact already observed in previous studies [25].

It is known that there are many side effects affecting the different systems of the body that can be observed as a consequence of treatment with antiretroviral drugs, some of them quite severe, and in some cases, fatal. The more complex the treatment, i.e. the greater the number of drugs combined in the scheme to combat HIV, either antiretrovirals drugs or not, the greater the toxicity and occurrence of side effects [19,28].

Existing studies on adherence to ART are unanimous in saying that adverse reactions are significantly associated with poor adherence, with many considering that the most important cause related to the treatment [15,27,29,30,31]. There are researches that identify gastrointestinal problems, mainly nausea and diarrhea, as the major cause (44%) of discontinuation of ART [32].

Therefore, it is essential that health professionals dealing with patients with HIV/AIDS are aware of the adverse reactions that may arise with antiretroviral drugs, adversely affecting the quality of their lives, and therefore influencing non-adherence to treatment [28]. Knowing this, health professionals can inform and advise the patient about these reactions, with caution to avoid that, by self-suggestion, the information becomes prophecies, as well as creates appropriate and effective strategies to control them.

Regarding the question about what may occur if the person stops taking the medication, while the same number of patients believe that death (22%) or worsening of disease (22%) is what happens, the possibility that the virus becomes resistant to drugs was mentioned by only 6 (3.1%) patients, which is a cause of concern as it shows poor knowledge of HIV/AIDS patients on viral resistance, and as a consequence, on the importance of this issue on the adherence to treatment. Even more significant is the quality of the information some interviewees have, indicating that, somehow, they had access to information, but it was not well understood, making them believe, for example, that if one stops the treatment “the CD4 count will decrease, viral load will decrease and it will lower the defenses” or “the body humanity (immunity) weakens” or “the microbes multiply and I will have to take (the drug) again”. It is believed that information alone, when passed correctly and constantly, is able to promote adherence to treatment [33], and, for that reason, health care professionals in direct contact with patients, need to, besides providing information, make sure that the information was understood and accepted, and this can be done during the conversation over the consultations.

This study found that the large percentage (99.5%) of patients who consider it necessary or even very necessary, to receive information on antiretroviral drugs shows the interest of patients for their treatment. It was observed that, among the 195 people interviewed, 110 (70.8%) received information from the doctor at the beginning of treatment, although 28 of these people (14.4%) have said that the doctor only advised about dosage and frequency. These results differ from another previous study, where a greater proportion of patients received guidance through the pharmacist [14]. Among other possible sources of information, magazines (23.1%) and television (19.5%) were the most mentioned, which is in agreement with other studies [25]. However, although the electronic media (internet, television) and groups and associations are gaining space as influential informers, health professionals still seem to be the largest, most secure and reliable source of information on medicines to patients.

Showing results consistent with others found in the literature [34], this study showed that the interest of patients is greater in the following aspects of medical treatment: length of time of treatment, mode of action, adverse reactions and discontinuation of the drugs. However, you may notice that the interest or the need for information on the drug is highly variable among its users, as well as variable is the preference for certain subjects. This study also shows that 24 (12.3%) among 195 patients interviewed did not want to receive any information and, in this case, provided that they do not come to be harmed by that choice, their wishes must be met [35]. The health care professional involved in the care of these people should exploit these preferences and provide the information or not, always considering that the quantity and complexity of such information should be tailored to the needs and capacity of understanding of each patient.

### Conclusions and Final Considerations

The lack of knowledge about antiretroviral drugs among patients with HIV/AIDS is evident according to this study. The analysis of responses from users of antiretroviral drugs interviewed for this study shows that, despite being sure about the number of pills and frequency with which they must take them, they lack more knowledge about other aspects of drug therapy. It appears that such basic information was provided, according to most, only by the doctor at the time of prescription, when it is known that giving patients adequate information about the medicines that are prescribed, on the behavior to be adopted between the diagnosis and treatment, and on the conduct that provide a better quality of life is a task not only of doctors and pharmacists, but also for all health professionals involved in the care of the patient.

Those who believe in the necessity and benefit of the medication are more likely to follow the treatment properly, so the quantity and quality of information have the potential to influence the ability of individuals to judge and participate in decisions concerning their treatment. The doctor, being the one who decides which product the patient will use, is the one who initiate the transmission of necessary information. The pharmacist at the time of dispensing, should continue the flow of information initiated by the physician during the consultation, ensuring that the guidance given was well understood by the patient. It is their responsibility to work together, along with the entire team of health professionals, to overcome failures of communication and obstacles, especially those imposed by shortages of public services, most notably the lack of time, so that the patient, feeling secure and confident, will more cordially accept what is informed and proposed, keeping better expectations regarding treatment.

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