

Meanings attributed to smoking by people living with HIV*

Ligia Lopes Devóglio¹ b https://orcid.org/0000-0002-8429-4346 Giovanne Bento Paulino² b https://orcid.org/0000-0002-3912-8023 Marli Teresinha Cassamassimo Duarte³ https://orcid.org/0000-0001-9582-2944 Ilda de Godoy⁴ https://orcid.org/0000-0002-8974-7332

- * Paper extracted from doctoral dissertation "Tabagismo em pessoas que vivem com HIV/aids", presented to Universidade Estadual Paulista "Júlio de Mesquita Filho", Botucatu, SP, Brazil.
- ¹ Fundação Hermínio Ometto, Araras, SP, Brazil.
- ² Universidade Estadual de Campinas, Faculdade de Enfermagem, Campinas, SP, Brazil.
- ³ Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Medicina, Botucatu, SP, Brazil.
- ⁴ Centro Universitário Claretiano, Rio Claro, SP, Brazil.

Objective: to understand the meanings of smoking in the lives of people living with the human immunodeficiency virus. Methodology: a qualitative research study that included 38 smokers living with the human immunodeficiency virus, treated at specialized outpatient clinics in the inland of São Paulo. The data were obtained through semi-structured interviews and analyzed using the methodological framework of the Collective Subject Discourse. Results: most of the respondents were male (63.1%), with a mean age of 41.8±10.4 years old; 10.5% used illicit drugs; 44.7% drank alcoholic beverages; and 63.1% did not practice physical activities. Three different central ideas emerged from the testimonies: I) It gives me pleasure, relieves stress and anxiety; it is a companion, but it causes harm, regret and hatred; II) It is associated with my routine, with drinking, drugs, coffee and friends; and III) My relationship with smoking after discovering the human immunodeficiency virus. Conclusion: tobacco use was related to emotional and behavioral conditions and to the human immunodeficiency virus infection. Recognizing the meanings of smoking may favor tobacco prevention and control strategies in this population group.

Descriptors: Smoking; HIV; Acquired Immunodeficiency Syndrome; Qualitative Research

How to cite this article

Devóglio LL, Paulino GB, Duarte MTC, Godoy I. Meanings attributed to smoking by people living with HIV.	SMAD, Rev
Eletrônica Saúde Mental Álcool Drog. 2023 JulSept.;19(3):7-16 [cited]. Available from:	ļ
https://doi.org/10.11606/issn.1806-6976.smad.2023.187514	JRL

Significados atribuídos ao tabagismo por pessoas que vivem com HIV

Objetivo: compreender os significados do tabagismo na vida de pessoas que vivem com o vírus da imunodeficiência humana. **Metodologia:** pesquisa de cunho qualitativo que incluiu 38 pessoas tabagistas que vivem com o vírus da imunodeficiência humana, atendidas em serviço de ambulatórios especializados do interior paulista. Os dados foram obtidos por entrevista semiestruturada e analisadas empregando o referencial metodológico do Discurso do Sujeito Coletivo. **Resultados:** a maioria dos entrevistados era do sexo masculino (63,1%), com idade média de 41,8±10,4 anos; 10,5% faziam uso de drogas ilícitas e 44,7% de bebida alcoólica e 63,1% não praticavam atividades físicas. Dos discursos emergiram três ideias centrais distintas: I) Me dá prazer, alivia o estresse e a ansiedade, é um companheiro, mas causa prejuízos, arrependimento e ódio; II) Está associado com minha rotina, com a bebida, as drogas, o café e os amigos e III) Minha relação com o cigarro após a descoberta do vírus da imunodeficiência humana. **Conclusão:** o uso do tabaco relacionou-se com condições emocionais, comportamentais e com a infecção pelo vírus da imunodeficiência humana. O reconhecimento dos significados do tabagismo poderá favorecer estratégias de prevenção e controle do tabagismo nesse grupo populacional.

Descritores: Tabagismo; HIV; Síndrome de Imunodeficiência Adquirida; Pesquisa Qualitativa.

Significados que le atribuyen las personas que viven con el VIH al tabaquismo

Objetivo: comprender el significado del tabaquismo en la vida de las personas que viven con el virus de la inmunodeficiencia humana. **Metodología:** investigación cualitativa que incluyó a 38 fumadores que viven con el virus de la inmunodeficiencia humana, atendidos en consultas externas especializadas del interior de São Paulo. Los datos se obtuvieron a través de entrevistas semiestructuradas y se analizaron utilizando el marco metodológico del Discurso Colectivo del Sujeto. **Resultados:** la mayoría de los encuestados era de sexo masculino (63,1%), tenía una edad media de 41,8 ± 10,4 años; el 10,5% consumía drogas ilícitas y el 44,7% alcohol y el 63,1% no practicaba actividad física. Tres ideas centrales distintas surgieron de los discursos: I) Me da placer, alivia el estrés y la ansiedad, es un compañero, pero causa daño, arrepentimiento y odio; II) Está asociado con mi rutina, con la bebida, las drogas, el café y los amigos y III) Mi relación con el cigarrillo tras el descubrimiento del virus de la inmunodeficiencia humana. **Conclusión:** el consumo de tabaco se relacionó con condiciones emocionales y conductuales y con la infección por el virus de la inmunodeficiencia humana. Reconocer los significados del tabaquismo puede favorecer las estrategias de prevención y control del tabaquismo en este grupo poblacional.

Descriptores: Tabaquismo; HIV; Síndrome de Inmunodeficiencia Adquirida; Investigación Cualitativa.

Introduction

In Brazil⁽¹⁻³⁾ and in several developed countries⁽⁴⁻⁶⁾ the prevalence of smoking in people living with the human immunodeficiency virus (PLHIV) has proved to be three times higher when compared to the general population, increasing their morbidity and mortality chances.

Among the factors associated with smoking in PLHIV we can mention the following: low income and schooling levels, consumption of alcohol and illicit drugs, age, marital status and signs and/or symptoms of anxiety or depression⁽¹⁻³⁾. Despite the high prevalence, a study indicates that the majority started consumption before the HIV infection⁽²⁾ and that many of them are thinking or preparing to quit smoking⁽⁷⁻⁹⁾.

In this sense, the health professionals' approach should be in the path of deconstructing the smoking behavior, often initiated and maintained due to certain situations and emotions. These feelings are characterized by the meanings and senses that "smoking" has for a person and what it represents in their life, whether it is linked to emotional factors, whether it is used as a way to relieve stress and anxiety, of social acceptance, whether it is due to ease of access or strong advertising, to maintain body weight or due to the influence exerted by family members and friends, among other and countless reasons that people may carry with them⁽¹⁰⁾.

Factors considered to trigger the desire to smoke and classified into behavioral (consuming tobacco when drinking coffee, drinking alcoholic beverages, when waking up, before going to sleep), socio-environmental (parties and social events) and emotional (anxiety, nervousness, pleasure) should also be identified, so that control of these triggers may become fundamental strategies for smoking cessation⁽¹¹⁾.

Although there is a vast production with a quantitative approach on smoking in PLHIV^(1-2,4,7,9), there is scarcity of studies with a qualitative design, which would be able to answer the concern: Which are the reasons for and meanings of smoking in these people's lives and the reasons that keep them smoking, assuming that the majority started consumption even before the HIV infection?

The current paper was proposed in response to this question, aiming to understand the meanings of smoking in the lives of PLHIV. Thus, the object of this study was the smoking habit, which is defined by the consumption of tobacco derivatives, whether industrialized cigarettes (main representatives of this group), pipes, cigars, straw cigarettes, e-cigarettes or hookah, among others⁽¹²⁾.

It is understood that the results of this research may contribute to formulating more specific and effective approach strategies, capable of promoting smoking cessation or reduction in this population.

Methodology

This is a qualitative research study with a comprehensive approach⁽¹³⁾, conducted at the "Domingos Alves Meira" Service of Specialized Outpatient Infectious Diseases (*Serviço de Ambulatórios Especializados de Infectologia*, SAEI), a reference for people living with and exposed to HIV/AIDS, Hepatitis B and C, and the human T-cell lymphotropic virus (HTLV). This service offers multidisciplinary care, it is responsible for providing assistance to 30 municipalities in the Botucatu/SP microregion and is located in the municipality of Botucatu, which is in the central region of the state of São Paulo, with an estimated population of 148,130 inhabitants⁽¹⁴⁾.

The research included 38 smokers living with HIV, undergoing monitoring at the SAEI; the sample was determined by theoretical saturation, that is, inclusion of new participants was suspended when all the information provided began to present repetitions, no longer contributing significantly to the study $^{(15)}$. The inclusion criteria for the study were as follows: being at least 18 years old, having a confirmed diagnosis of HIV/AIDS and being a self-declared smoker. Any person who smoked at least one hundred cigarettes in their lifetime and currently smoked a tobacco product daily or occasionally was considered a smoker⁽¹⁶⁾. PLHIV deprived of their freedom were excluded because of the belief that the meanings they attributed to tobacco use could be strongly associated with their institutional condition, deserving a specific study.

Data collection was carried out by the first author and in a private environment from July 2016 to March 2017, and took place through semi-structured interviews lasting a mean of 20 minutes. They were recorded, transcribed in full and coded by means of the interview number, guaranteeing the participants' anonymity.

The interviews were supported by a script previously prepared for this study, with guiding thematic axes, allowing for the inclusion of questions for a better understanding or deepening of some aspect approached by the interviewee. The guiding thematic axes were as follows: "What does smoking represent in your life? Which are your reasons for smoking? Which is the relationship between smoking and HIV?".

For the sociodemographic characterization of PLHIV, a form was used containing the following variables: gender, age, marital status, schooling, income, use of licit and illicit drugs, history of HIV/AIDS, and smoking history. In addition, the Fagerstrõm test was applied, which assesses the degree of dependence on smoking as low (0-4), moderate (5) or high (6-10)⁽¹⁷⁾, and also the motivational stage for smoking cessation⁽¹⁸⁾.

The interviews were analyzed using the Collective Subject Discourse (CSD) technique, which allows

elaborating testimonial contents with similar meanings and producing a "collectively speaking" effect⁽¹⁹⁾. This qualitative data organization technique consists of four operations⁽¹⁹⁻²⁰⁾:

- Key Expressions (KEs): they are pieces or excerpts from individual testimonies that must be highlighted by the researcher revealing the essence of the content;
- Central Ideas (CIs): they express in a synthetic way the meanings present in the KEs of each answer analyzed and in the groups of answers from different individuals, which present similar meanings;
- Anchoring (AC): it is the expression of a given theory or ideology embedded in someone's speech as if it were an assertion;
- 4. Collective Subject Discourse (CSD): it consists in joining the KEs present in the testimonies with CIs or ACs of similar or complementary meaning, assembling a panel of collective subject discourses, written in the first person singular.

The CSD proposes to create the speech of a collective person, as a method that allows for a qualitative representation, when presenting each opinion and different argument, in the form of a single discourse; and quantitative representativeness, when presenting a numerical expression in the discourse, which indicates how many testimonies from the total were necessary to compose each CSD and, therefore, adds statistical reliability, considering societies as collectives of individuals⁽²¹⁾.

Therefore, the study participants were represented by the initial letter S, followed by the number of the interview and, from reading and analyzing the testimonies, the Central Ideas (CIs) and the Collective Subject Discourses (CSDs) were organized, based on elements associated to smoking and built from the PLHIV smokers' testimonies.

The study was approved by the Research Ethics Committee of the Botucatu Medical School (*Faculdade de Medicina de Botucatu*, FMB/UNESP), opinion No. 1,641,878, and carried out by obtaining the informed consent form from the research participants.

Results

Characterization of the participants

The mean age of the PLHIV was 41.8 (\pm 10.4) years old; 63.2% were male; 76.3% did not have a stable relationship; 55.3% worked; their *per capita* family income was R\$ 2,508.29 (\pm 2,310.06), with up to five people depending on this income; 47.4% lived in Botucatu/SP; 50.0% attended up to eight years

of study; 10.5% used illicit drugs such as marijuana (7.8%), cocaine (2.6%) and crack (2.6%); 44.7% drank alcohol; and 63.2% did not practice any physical activity.

Considering variables related to the HIV infection, ,94.7% were using antiretroviral therapy (ART) correctly, with the majority in the asymptomatic phase of the disease, that is, 73.7% had an undetectable viral load and 86.8% had a TCD4+ lymphocyte count above 200 cells/mm³; 52.6% of the PLHIV had discovered HIV since 2010 and 52.6% became infected through sexual intercourse with a partner or ex-partner. The general characteristics of the participants are shown in Table 1.

Table 1 - Sociodemographic characteristics and variables related to the HIV infection among smokers living with HIV (n=38). Botucatu, SP, Brazil, 2016-2017

Variables	n* (%)
Male	24 (63.2)
Schooling ≤ 8 years	19 (50.0)
No partner	31 (76.3)
Works	21 (55.3)
Year when HIV was diagnosed ≥ 2010	15 (39.5)
Infection by current/ex-partner	20 (52.6)
TCD4+ > 200	33 (86.8)
Undetectable viral load	28 (73.7)
Uses ART	36 (94.7)
Does not practice physical activity	24 (63.2)
Drinks alcohol	17 (44.7)
Uses illicit drugs	4 (10.5)

*n = Number of individuals in the sample

Only three participants (7.9%) started smoking after discovering their HIV diagnosis, most of the PLHIV (76.3%) started smoking voluntarily, having curiosity (63.2%) and friends (36.8%) as the main influencing factors; 86.9% smoked every day; 84.2% have already tried to quit smoking and the maximum time without smoking was up to three months (50.0%); during this period the interviewees felt more agitated (53.1%), irritated (50.0%) and sad (31.2%), and realized that their appetite was increased (31.2%), with 75.0% not using the support of any resource to stop smoking.

At the time of inclusion in the study, 52.6% of the participants had a high or very high degree of dependence but, when assessing the motivational stage for smoking cessation, it was observed that 50.0% were in the preparation phase, that is, they expressed a desire to quit smoking in the next month. The smoking history, the Fagerstrõm test and motivational stage for smoking cessation of the PLHIV are presented in Table 2. Table 2 - Smoking history of the people living with HIV (n=38). Botucatu, SP, Brazil, 2016-2017

SMOKING HISTORY	n* (%)
Type of smoker	
Every day	33 (86.9)
Weekends	1 (2.6)
Occasional	4 (10.5)
Started smoking after HIV diagnosis	
Yes	3 (7.9)
No	35 (92.1)
Reasons to start consumption	
Own initiative	29 (76.3)
Someone offered	9 (23.7)
Smoking parents	5 (13.2)
Smoking friends	14 (36.8)
Curiosity	24 (63.2)
Already tried to stop smoking	
Yes	32 (84.2)
No	6 (15.8)
Maximum time without smoking (n=32)	
≤3 months	16 (50.0)
4-6 months	6 (18.7)
6 months-1 year	3 (9.4)
>1 year	7 (21.9)
Withdrawal symptoms	
Agitation	17 (53.1)
Irritation	16 (50.0)
Sadness	10 (31.2)
Increased appetite	10 (31.2)
Insomnia	8 (25.0)
Used some resource	
Yes	8 (25.0)
No	24 (75.0)
Dependence level	
Very low	8 (21.1)
Low	7 (18.4)
Average	3 (7.9)
High	16 (42.1)
Very high	4 (10.5)
Motivational stage	
Pre-contemplation	12 (31.6)
Contemplation	7 (18.4)
Preparation	19 (50.0)

*n = Number of individuals in the sample

Meanings attributed to the smoking habit

From reading and analyzing the participants' testimonies, three Central Ideas (CIs) and eight CSDs were organized, presented below.

Central Idea I: It gives me pleasure, relieves stress and anxiety; it is a companion, but it causes harm, regret and hatred

This central idea is related to the characteristics and chemical composition of tobacco.

CSD1: I like cigarettes. A pleasurable sensation! Why do I smoke? And because I like it! It's just that I really like to smoke my cigarette sometimes. It's more for the pleasure of smoking. I smoke because it gives me pleasure, I feel better smoking. (S5; S15; S17; S27; S32; S35)

According to the PLHIV testimonies, smoking relieves stress and anxiety, some of them reported smoking more under these conditions, as a way to relax and calm down when experiencing situations of nervousness, sadness, anxiety:

CSD2: I smoke more when I'm stressed. But just like this, it relaxes me, it calms me down especially in moments of more stress, of more tension. You know that problems aren't solved, but lighting a cigarette and taking a drag, the problems remain, but that calms you down, relaxes you and it seems like it's done. You're forced to smoke to face the problem. I feel better. I get nervous, then I smoke one cigarette after another. I think that if I smoke I'll be able to solve it and calm down. It's a shelter from things. It gets better, anxiety improves! I feel calmer. It's like a consolation for me. So when I'm really irritated, I release a little all the adrenaline in the cigarette. My escape valve are cigarettes, it's the way I have to relax, it's my moment to relax. I think I let go of everything on cigarettes: despair, depression. (S2; S8; S10; S13; S21; S22; S24; S28; S31; S33; S38)

In addition to this pleasurable sensation, some PVHIV, mostly women, reported considering tobacco as a partner, as a friend, and as a way to have fun and kill time, issues that are closely linked to gender issues.

CSD3: I think it's about me being alone, right?! Then when the children come up, I smoke less. Then they disappear, I smoke more... As a companion. I just wanted to have some company. To get distracted. Like a friend here by my side. I don't drink any alcohol anymore, so for me, cigarettes complete me, I don't know. To kill time. It distracts me a little, I feel better, it distracts my head. It's a partner that I have, in the sense that I don't have many friends, I'm reserved, when I feel bad, it's the only partner I have. (S2; S14; S17; S25; S27; S35)

Despite the positive feelings regarding smoking, the pleasurable sensation, of it being seen as a companion, many testimonies were associated with harms and sensations of anger and regret after smoking, denoting antagonistic feelings:

CSD4: Although I like smoking, I don't enjoy the smell. I feel that this is it, each cigarette, each drag is a step backwards. It gets better, then I regret it. I hate it after I smoke, you know?! Anger! Yeah, pleasure and hate. A total harm to health, not for the wallet, it's more for health. It's worthless! I hate it because I depend on it. So, it's a love-hate relationship. If I could go back

in time I wouldn't have put it in my mouth. It doesn't bring any benefit. I regret it a lot, because it's a drug. I feel good when I smoke, but my body doesn't. So it's kind of complicated. (S4; S8; S11; S23; S34; S35; S37; S38)

Central Idea II: It is associated with my routine, with drinking, drugs, coffee and friends

Smoking was also associated with the daily routine of PLHIV and the desire to smoke, with some habits or customs:

CSD5: I get up in the morning and the first thing I think about is a cigarette. Like after a meal, instead of brushing my teeth, I smoke a cigarette, that's the habit. I get up at seven o'clock, then I make my coffee and already light the first cigarette. The day doesn't start if I don't have coffee and cigarettes. Today it's almost part of my diet. I miss it like I miss lunch, dinner, sleep. And cigarettes are like that, it's a habit of having them in your hand all the time. I needed something to put in my mouth. To be blowing smoke. It's a habit! I don't feel like it, but the time I get home, when I eat, then I feel like it, automatically, I finish eating and I want to smoke. (S1; S2; S5; S14; S20; S35)

Consumption of alcoholic beverages (as a legal drug), illicit drugs and living with smoking friends were pointed out by the participants as a motivating factor for smoking:

CSD6: Because of the drugs, then I end up smoking more. It's time to relax, to be able to chat with friends, right?! Drinking and smoking. There are friends, the weekend, there's drinking. Sometimes they're nearby smoking and then they offer you a drink or a cigarette and then you end up taking it. Due to living with people who smoke every day. On impulse to see others smoking. Sometimes, when I'm drinking a beer, it's for sure. Drinking the beer makes you want to smoke the cigarette. It makes me want to smoke when I'm drinking, I tend to smoke more when I drink. If I'm drinking when nobody is smoking, I smoke less too. (S3; S4; S6; S18; S19; S21; S28; S30)

Central Idea III: My relationship with smoking after discovering HIV

Two perspectives were identified when exploring the relationship between smoking and discovery of the HIV/ AIDS diagnosis: some people reported that they became more discouraged, nervous and worried and therefore started to smoke or increase tobacco consumption and others reported that, with discovery of HIV/aids, they started to adopt healthier habits and to be more concerned about their health, thus reducing tobacco consumption. However, most PLHIV did not report changes in their consumption pattern after discovering their HIV infection.

CSD7: Ah, I smoke because I found out that I had the disease, I got discouraged and started to smoke more every day. Because when you find out that you're HIV positive, then you think that you have nothing to live for anymore, you have no taste for life

anymore. So whatever comes is profit. I'm going to die anyway. So, as I'm going to die due to the disease, or due to cancer, then it's all the same. After I became aware of it, I started smoking a lot, a lot. Smoke a lot more. I reached a point, a time when with the butt of a cigarette I was lighting another. My fingernails were turning yellow from smoking so much. And then, I didn't care if it was a national cigarette or if it was the worst, those from Paraguay. What mattered was smoking! I got more worried. The more worried the more I smoked. At first I think I was smoking more. Not so much now, but at first I was nervous, I couldn't accept it. I don't know, but I smoke more, I was angry, you know ?! It increases, because if you keep thinking about the problem you have, then if you want to smoke, if you stop, then you already think about the cigarette, so smoking calms the mind! I wasn't smoking before I found out about the diagnosis. I think I started to get sadder, more isolated, you know, and I really started to smoke more. (S3; S8; S10; S15; S17; S21; S22: S24: S28)

CSD8: After I found out, I drink and smoke less. It was even reduced, I don't know if it was the body, or something in my head, when I realized, it had already decreased much more. I didn't smoke for six months [when he discovered the disease], I don't know if it was because I was weak, that thing and I didn't feel like it. I smoked less after I discovered the disease. I tried to take better care of my health, to have healthier habits. I even stopped, I took good care of my health first, which wasn't very good and then when I recovered a little, I came back. The disease restricted me a lot, so as not to worsen HIV, so as not to end up causing other complications that could result from HIV, I reduced smoking a lot. (S4; S6; S12; S16; S18; S27; S33)

Discussion

The current research allowed identifying the meanings attributed by PVHIV to the smoking habit: on the one hand, these substances give pleasure and relieve stress and anxiety; they are considered companions but, on the other hand, they are acknowledged as causing harm and their consumption is related to feelings of regret and hatred.

Another meaning refers to elements incorporated into the routine, which are triggered by drinking, illicit drugs, coffee and friends who also use them. The current study also allowed understanding that most PLHIV did not change their relationship with tobacco and related substances; however, one group increased consumption due to feelings experienced by the diagnosis and another, on the contrary, reduced it, as they began to worry about having healthier lifestyle habits.

The duality between the pleasure found in smoking and awareness of the consequences of the habit is constantly present in the PVHIV's discourse. The very characteristics and chemical composition of tobacco (nicotine) are responsible for causing and maintaining the addictive effects, provoking a feeling of gratification or pleasure among smokers⁽²²⁾.

It is known that the relief sensation, that the cigarette is soothing when a person has to deal with situations and feelings of stress, nervousness, depression and anxiety, is not exclusive to PLHIV; other studies show that women in general⁽²³⁾, pregnant women⁽²⁴⁾ and even adolescents⁽²⁵⁾ keep smoking and are not motivated to stop due to psychoemotional issues.

Although the smoking habit is seen as selfmedication for issues that should be tackled in other ways⁽²³⁾, in the current study it was seen as a form of shelter, consolation, an escape valve for various mood disorders, as smoking is one of the ways to deal with PLHIV problems.

Nicotine induces pleasure and reduces stress and anxiety, but it is a substance that generates addiction, rendering the smoker tolerant to its effects, that is, over time, the pleasurable sensation becomes more fleeting and less intense and the individual needs to increase consumption more and more to reach the sensations that were previously provoked by smaller amounts of the substance and, thus, to be relieved of the manifestations caused by nicotine withdrawal, especially negative mood⁽²⁶⁻²⁷⁾. In the current study, 52.6% of the PLHIV presented a high or very high degree of nicotine dependence; this can explain the fact that they smoke much more when they are nervous, anxious or sad.

The psychological dependence on smoking is evident: smokers need to "light up a cigarette" to relieve negative feelings such as fear, sadness, anxiety or worries, as an escape from the problems and, as a result, tobacco starts to fill a space in the life of these people, representing a partner, a friend, in moments of solitude⁽²⁶⁾. It was possible to observe this among the participants, despite their health risk perception .

A previous study carried out with women had already identified cigarettes as a companion, associated with anguish relief, as a compensation for loneliness in life and its dichotomous relationship: while it gives pleasure and it is seen as a friend (love), it also causes various harms, as it can lead to death, and is seen as an enemy (hatred), evidencing gender-related problems⁽²⁷⁾.

In the same sense, another study also presented the same contradictory meaning of the smoking habit: it is good for giving pleasure and a sensation of calm, but it is bad in several aspects for different social groups⁽²⁸⁾. For higher education students, for example, there is a constant relationship of blame, as it is a group that is more aware of the harms that the smoking habit causes to health⁽²⁹⁾.

Another finding of the current study is the influence that certain habits exert on maintaining tobacco consumption, such as routine, coffee, use of licit and illicit drugs and living with smokers. In addition, when thinking about cessation strategies, this is a topic that is often discussed, working towards changing these "habits" or avoiding them as a process to reduce and/or quit smoking⁽¹¹⁾.

These associations of smoking with everyday situations are called conditioning. As they have smoked for so long, smokers incorporate tobacco into different habits and become conditioned to smoke after drinking coffee, after some meals, when drinking alcohol, driving, talking on the phone, using the computer, that is, in countless situations; they oftentimes do it in an induced way, without being aware that they are smoking⁽²⁶⁾.

Another form of conditioning are gestures, such as holding a cigarette or putting it in the mouth, associated with a pleasurable sensation⁽³⁰⁾. This corroborates our study, in which PLHIV revealed that smoking is a habit of having a cigarette in their hand all the time and having something to put in their mouth.

Similarly to what was found, a study on adults' social representations of the smoking habit also pointed out that smoking accompanies other habits, such as drinking coffee and alcoholic beverages⁽³¹⁾. Triggers associated with nicotine withdrawal are difficult factors in the process of reducing or quitting smoking⁽³²⁾.

Considering that, in PLHIV smokers, consumption of alcohol and illicit drugs is higher^(1-2,7,33), in the current study almost half of the participants (44.7%) used to smoke concomitantly with drinking alcoholic beverages. A study highlighted that smoking cessation strategies are required to address consumption of alcohol and illicit drugs, in order to improve the quality of life of PLHIV⁽³⁴⁾.

Some participants increased tobacco consumption with the HIV infection diagnosis, considering it to be a serious disease that could lead them to death. When researching the quality of life of PVHIV, a study observed that the aspects related to health concerns were associated with the year since the HIV diagnosis: people with a recent diagnosis did not accept the disease, felt more discouraged with life and, consequently, reduced their health care. Consequently, the fact of not using illicit drugs was positively associated with health concerns and correct medication use was responsible for deconstructing this idea of death at the time of HIV discovery, as medication adherence provides an increase in life prospects, allowing for the construction of a more humane idea of life again⁽³⁵⁾.

Quality of life and medication adherence were impaired and inadequate in PLHIV in their first year of treatment, which can be explained by the fact that these people were going through a process of adaptation to a new reality, a new life condition⁽³⁶⁾. The relationship between the meaning of smoking and the time since the diagnosis was not the object of this research, and can be studied in future surveys.

Using HIV medication involves acquiring healthy habits and avoiding the use of alcohol, tobacco and illicit drugs, as it increases the chance of health problems in PLHIV⁽³⁶⁾.

Another study with a qualitative approach also evidenced that, over time, most of its participants started to take better care of themselves; after the diagnosis, they incorporated changes in habits and daily activities, capable of providing physical well-being. There was a transition from negative to positive meanings in relation to HIV: the PLHIV reported feeling well; for them, the disease represented personal growth and emotional improvement⁽³⁷⁾. In this sense, part of the PLHIV participating in the current research indicated a reduction in smoking after the HIV diagnosis, concerned with maintaining healthier lifestyle habits; and many of them (50%) reported that they were in the preparation phase, that is, they wanted to quit smoking in the next month.

Among the strategies of the National Tobacco Control Program in Brazil we find educational, communication and health care actions⁽¹⁰⁾. In this way, it is necessary for health professionals to talk with PLHIV in order to elucidate the consequences that can be generated by the sum between smoking and living with HIV and to offer a support network that assists in the problems related to the origin and maintenance of this use, so that the person feels more secure and supported in coping with it.

In addition to that, structured treatment with behavioral approaches based on PLHIV as protagonists of the therapeutic process and based on the knowledge they built about the smoking habit could increase the cessation rate, as many of them continue to smoke due to feelings of concern, sadness and nervousness, also caused by the absence of a solid and empathetic support network.

Finally, encouraging healthy habits combined with psychosocial interventions can be a strategy for to prevent and control the smoking habit, given that most PVHIV did not practice any physical activity and used alcohol and illicit drugs.

Some of the limitations of this study include the fact that it did not deepen on the relationship between the meanings attributed by people living with HIV and the time since diagnosis of the infection and adherence to the drug treatment. However, it offers contributions that may favor approach strategies by the multiprofessional team, with a view to reducing harms and/or to smoking cessation.

Conclusion

In this study, tobacco use was related to behavioral conditions, inherent to people's everyday actions and relationships, as well as to their own condition of HIV

infected individuals, which contributed or not to their continued consumption of tobacco.

In addition to these, other meanings pointed out by the participants in this study were similar to those already presented in previous surveys with different population groups: smoking has an important and contradictory meaning in emotional conditions; in other words, at the same time that it is used as a way to relieve anxiety, nervousness and sadness, as it producing a pleasurable, it also causes anger and regret.

Recognizing the meanings of smoking may favor the planning of care strategies aimed at reducing or stopping consumption, between health services and PLHIV.

Acknowledgments

We would like to thank the entire team at the Botucatu Infectology SAE Service for having assisted in the search and contact with the patients during the data collection period, and Carolina Aparecido, a former Nursing student at the Botucatu Medical School - UNESP, who participated in the interviews and their transcripts in 2016.

References

1. Batista JDL, Albuquerque MFPM, Ximenes RAA, Miranda-Filho DB, Melo HRL, Maruza M, et al. Prevalence and socioeconomic factors associated with smoking in people living with HIV by sex, in Recife, Brazil. Rev Bras Epidemiol. 2013;16(2):432-4. https://doi.org/10.1590/S1415-790X2013000200018

2. Torres TS, Luz PM, Pedrosa MD, Velasque LS, Grinsztejn E, Santos VGV, et al. Factors Associated with Tobacco Smoking and Cessation among HIV-Infected Individuals under Care in Rio de Janeiro, Brazil. PloS One. 2014;9(12):1-15. https://doi.org/10.1371/journal. pone.0115900

3. Teixeira LSL, Ceccato MGB, Carvalho WS, Costa JO, Bonolo PF, Mendes JC, et al. Prevalence of smoking and associated factors in people living with HIV undergoing treatment. Rev Saúde Pública. 2020;54(108):1-13. https://doi.org/10.11606/s1518-8787.2020054001828 4. Browning KK, Wewers ME, Ferketich A, Diaz P. Tobacco use and cessation in HIV-infected individuals. Clin Chest Med. 2013;34(2):181-90. https://doi.org/10.1016/j. ccm.2013.01.005

5. Cioe PA. Smoking cessation interventions in HIVinfected adults in North America: a literature review. J Addict Behav Ther Rehabil. 2014;2(3):1-10. https:// doi.org/10.4172/2324-9005.1000112

6. Cesar EC, Crespo MG, Fiorentino F, González FJC, Martínez EBH. VIH y tabaco. Prev Tab [Internet]. 2019 [cited 2021 May 15];21(2):59-64. Available from: https://issuu.com/separ/docs/2019._prev_tab_ 21-2?fr=sM2JIZTE2NjczNg 7. Nahvi S, Cooperman NA. Review: The need for smoking cessation among HIV-positive smokers. AIDS Educ Prev. 2009;21(3):14-27. https://doi.org/10.1521/ aeap.2009.21.3_supp.14

8. Pacek LR, Holloway DA, Cropsey LK, Meade SC, Sweitzer MM, Davis MJ, et al. Experiences With Smoking Cessation Attempts and Prior Use of Cessation Aids in Smokers With HIV: findings from a focus group study conducted in Durham, North Carolina. Aids Educ Prevention. 2021;33(2):158-68. https://doi. org/10.1521/aeap.2021.33.2.158

9. Waweru P, Anderson R, Steel H, Venter WDF, Murdoch D, Feldman C, et al. The prevalence of smoking and the knowledge of smoking hazards and smoking cessation strategies among HIV positive patients in Johannesburg, South Africa. S Afr Med J. 2013;103(11):858-60. https://doi.org/10.7196/SAMJ.7388

10. Ministério da Saúde (BR), Instituto Nacional de Câncer José Alencar Gomes da Silva. Programa Nacional de Controle do Tabagismo: Tratamento do tabagismo [Internet]. 2021 [cited 2021 Jun 20]. Available from: https://www.inca.gov.br/ programa-nacional-de-controle-do-tabagismo/ tratamento

11. Cruz E. Motivação e Prevenção da Recaída. In: Fernandes FLA, Castellano MVCO, Romaldini JGB. Doença pulmonar obstrutiva crônica e tabagismo. São Paulo: Editora Atheneu; 2015. p.309-20.

12. Ministério da Saúde (BR). Cadernos de atenção básica, nº 40. Estratégia para o cuidado da pessoa com doença crônica: o cuidado da pessoa tabagista [Internet]. 2015 [cited 2021 May 15]. Available from: http://189.28.128.100/dab/docs/portaldab/publicacoes/ caderno_40.pdf

 Minayo MCS. O Desafio do Conhecimento — Pesquisa. Qualitativa em Saúde. 14 ed. São Paulo: Hucitec/Rio de Janeiro: ABRASCO; 2014.

14. Instituto Brasileiro de Geografia e Estatística (BR). Censos demográficos: cidades. [Homepage] Brasília: IBGE; 2020 [cited 2021 May 15]. Available from: https://cidades.ibge.gov.br/

15. Fontanella BJB, Ricas J, Turato ER. Saturation sampling in qualitative health research: theoretical contributions. Cad Saúde Pública. 2008;24(1):17-27. https://doi.org/10.1590/S0102-311X2008000100003

16. Ministério da Saúde (BR), Secretaria de Atenção à Saúde. Portaria nº 761, de 21 de junho de 2016. Valida as orientações técnicas do tratamento do tabagismo constantes no Protocolo Clínico e Diretrizes Terapêuticas - Dependência à Nicotina [Internet]. Diário Oficial da União, 22 jun. 2016 [cited 2021 May 15]. Available from: https://bvsms.saude.gov.br/bvs/saudelegis/sas/2016/

prt0761_21_06_2016.html 17. Heatherton TF, Kozlowski TL, Frecker, CR,

Fagerström K. The Fagerstrõm Test for Nicotine

Dependence: A revision of the Fagerstrõm Tolerance Questionnaire. Br J Addict. 1991;86(9):1119-27. https://doi.org/10.1111/j.1360-0443.1991.tb01879.x 18. Diclemente CC, Prochaska JO. Self-change and therapy change of smoking behavior: a comparison of processes of change in cessation and maintenance. Addict Behav. 1982;7(2):133-42. https://doi.

org/10.1016/0306-4603(82)90038-7 19. Lefevre F, Lefevre AMC, Marques MCC. Discourse of the collective subject, complexity and self-organization.

Ciênc Saúde Coletiva. 2009;14(4):1193-204. https:// doi.org/10.1590/S1413-81232009000400025

20. Lefevre F, Lefevre AMC. Pesquisa de representação social: um enfoque qualiquantitativo. Brasília: Líber Livro; 2012. p.71-86.

21. Lefevre F, Lefevre AMC. O sujeito coletivo que fala. Interface. 2006;10(20):517-24. https://doi. org/10.1590/S1414-32832006000200017

 Araújo AJ. Manual de Condutas e Prática em Tabagismo. Medicina baseada em evidências científicas e tabagismo. São Paulo: Editora AC Farmacêutica; 2012.
Borges MTT, Barbosa RHS. Gender signs on female smoking: a sociological approach to women's cigarette smoking. Ciênc Saúde Coletiva. 2009;14(4):1129-39. https://doi.org/10.1590/S1413-81232009000400019

24. Fontanella BJB, Secco KND. Pregnancy and smoking: representations and experiences of patients of Family Health Units. J Bras Psiquiatr. 2012;61(3):168-75. https://doi.org/10.1590/S0047-20852012000300008

25. Sanchés-Hernández CM, Pillon SC. Smoking Among College Students: Characterization of Use in the Students' Perspective. Rev. Latino-Am. Enfermagem. 2011;19:730-7. https://doi.org/10.1590/ S0104-11692011000700010

26. Meirelles RHS. Smoking and COPD – addiction and disease – real fact. Rev Pulmão RJ [Internet]. 2009 [cited May 15 2021];1(1):13-9 Available from: http://www. sopterj.com.br/publicacoes-revista-pulmao-rj/revista-pulmao-rj-2009-volume-18-atualizacoes-tematicas/

27. Lombardi EMS, Prado FG, Santos PU, Fernandes ALF. Women and smoking: risks, impacts, and challenges. J Bras Pneumol. 2011;37(1):118-28. https://doi. org/10.1590/S1806-37132011000100017

28. Dázio EMR, Zago MMF, Fava SMCL. Use of alcohol and other drugs among male university students and its meanings. Rev Esc Enferm USP. 2016;50(05):785-91. https://doi.org/10.1590/s0080-623420160000600011

29. Panaino EF, Soares CB, Campos CMS. Context of the beginning of tobacco use in different social groups. Rev. Latino-Am. Enfermagem. 2014;22(3):379-85. https://doi.org/10.1590/0104-1169.3205.2427

30. Souza TA, Mattos FF. The social representation of smoking among adults and its implications for health: study conducted in a rural community in the state of Minas Gerais. Arq Odontol [Internet]. 2012 [cited

2021 May 15];48(3):159-65. Available from: http:// revodonto.bvsalud.org/scielo.php?script=sci_arttext&pi d=S1516-09392012000300006

31. Necho M, Belete A, Getachew Y. The prevalence and factors associated with alcohol use disorder among people living with HIV/AIDS in Africa: a systematic review and meta-analysis. Subst Abuse Treat Prev Pol. 2020;15(1):1-15. https://doi.org/10.1186/ s13011-020-00301-6

32. Pereira MO, Assis BCS, Gomes NMR, Alves AR, Reinaldo AMS, Beinner MA. Motivation and difficulties to reduce or quit smoking. Rev Bras Enferm. 2020;73(1):1-7. https://doi.org/10.1590/0034-7167-2018-0188

33. Santos VF, Galvão MTG, Cunha GH, Lima ICV, Gir E. Alcohol effect on HIV-positive individuals: treatment and quality of life. Acta Paul Enferm. 2017;30(1):94-100. https://doi.org/10.1590/1982-0194201700014

34. Teixeira LSL, Ceccato MGB, Carvalho WS, Costa JO, Bonolo PF, Mendes JC, et al. Prevalence of smoking and associated factors in people living with HIV undergoing treatment. Rev Saúde Pública. 2020;54:108. https:// doi.org/10.11606/s1518-8787.2020054001828

35. Freitas MIF, Bonolo PF, Miranda WD, Guimarães MDC. Interactions and the antiretroviral therapy adherence among people living with HIV/aids. Rev Min Enferm. 2017;21:e-1001. https://doi.org/10.5935/1415-2762.20170011

36. Hipolito RL, Oliveira CD, Gomes TMA, Costa LT. Social representations of quality of life in HIV/AIDS: the role of time since diagnosis. Rev Enferm UERJ. 2014;22(6): 753-9. https://doi.org/10.12957/reuerj.2014.12840

37. Lemieux AM, Nakajima M, Saif-Ali R, Al-Habori M, Dokam A, Al'Abasi M. Anger, anxiety, and depressive affect as predictors of stress-induced cortisol production in khat and tobacco users. Addict Behav. 2018;82: 195-201. https://doi.org/10.1016/j.addbeh.2018.02.033

Authors' contribution

Study concept and design: Ligia Lopes Devóglio, Ilda de Godoy. Obtaining data: Ligia Lopes Devóglio. Data analysis and interpretation: Ligia Lopes Devóglio, Marli Teresinha Cassamassimo Duarte, Ilda de Godoy. Drafting the manuscript: Ligia Lopes Devóglio, Giovanne Bento Paulino, Marli Teresinha Cassamassimo Duarte, Ilda de Godoy. Critical review of the manuscript as to its relevant intellectual content: Ligia Lopes Devóglio, Giovanne Bento Paulino, Marli Teresinha Cassamassimo Duarte, Ilda de Godoy.

All authors approved the final version of the text.

Conflict of interest: the authors have declared that there is no conflict of interest.

Received: Jun 20th 2021 Accepted: Feb 4th 2022

Copyright © 2023 SMAD, Rev. Eletrônica Saúde Mental Álcool Drog. This is an Open Access article distributed under the terms of the Creative Commons CC BY.

This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licenses offered. Recommended for maximum dissemination and use of licensed materials.

Corresponding Author: Ligia Lopes Devóglio E-mail: ligiadevoglio@gmail.com b https://orcid.org/0000-0002-8429-4346