

Review article

Clinical variables and reasons smokers seek treatment

Camila Barbosa dos Santos¹ Silvana Alba Scortegagna¹ Renata da Rocha Campos Franco² Lia Mara Wibelinger¹

Objective: to identify clinical variables and reasons for seeking treatment of smokers. **Methods:** retrospective documentary study, with patients assisted at the Center for Psychosocial Care Alcohol and other drugs from 2013 to 2016. **Results:** of the 211 users, 41 had nicotine dependence: women (68.3%), low level of schooling (70.7%). Early onset of smoking (82.9%), high/very high (61%), presence of psychic problems (78%) and anxiety (58,5%). In the search for treatment, 85% of the women showed health concern and 73% high cigarette costs. **Conclusion:** public intervention and prevention policies should be expanded and developed with special attention to women.

 $^{\scriptscriptstyle 1}$ Universidade de Passo Fundo, Passo Fundo, RS, Brazil.

² Institut Catholique de Toulouse, Toulouse, France.

Descriptors: Dependence of Users; Smoking; Motivation; Intervention.

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Variáveis clínicas e razões para busca de tratamento de pacientes tabagistas

Objetivo: identificar variáveis clínicas e razões para busca de tratamento de tabagistas. **Métodos:** estudo retrospectivo documental, com pacientes assistidos no Centro de Atenção Psicossocial Álcool e outras drogas de 2013 a 2016. **Resultados:** dos 211 usuários, 41 apresentaram dependência à nicotina: mulheres (68,3%), baixa escolaridade (70,7%), início precoce do tabagismo (82,9%), elevada/muito elevada (61%), presença de problemas psíquicos (78%) e ansiedade (58,5%). Na busca de tratamento, 85% das mulheres demonstraram preocupação com saúde e 73% custos elevados do cigarro. **Conclusão:** políticas públicas de intervenção e prevenção devem ser ampliadas e desenvolvidas com atenção especial às mulheres.

Descritores: Dependência de Usuários; Tabagismo; Motivação; Intervenção.

Variables clínicos y razones para búsqueda de tratamiento de pacientes tabagistas

Objetivo: identificar variables clínicas y razones para la búsqueda de tratamiento de los fumadores. **Métodos:** estudio retrospectivo documental, con pacientes asistidos en el Centro de Atención Psicosocial Alcohol y otras drogas de 2013 a 2016. **Resultados:** en los 211 usuarios, 41 presentaron adicción a la nicotina: mujeres (68,3%), baja escolaridad (70,7%). El inicio temprano del tabaquismo (82,9%), elevada / muy elevada (61%), presencia de problemas psíquicos (78%) y ansiedad (58,5%). En la búsqueda de tratamiento, el 85% de las mujeres mostraron preocupación por la salud y el 73% de los altos costos del cigarrillo. **Conclusión:** las políticas públicas de intervención y prevención deben ser ampliadas y desarrolladas con atención especial a las mujeres.

Descriptores: Dependencia de Usuários; Tabaquismo; Motivación; Intervención.

Introduction

Smoking is a chronic disease, a public health problem, both nationally and internationally, due to the high prevalence and high mortality due to tobaccorelated diseases. It is estimated that there are 1.3 billion smokers in the world aged 15 or over, making up a third of the global population. Of these, 900 million are in developing countries and 250 million are women. The annual consumption is 7 trillion and 30 billion cigarettes, corresponding to 20 billion per day; about 75,000 tons of nicotine are consumed per year, with 200 tons being consumed daily⁽¹⁻²⁾.

Compared to nonsmokers, smokers have lower quality of life, higher prevalence of psychological distress, and increased mortality⁽³⁾. The life expectancy of individuals who smoke is 25% lower than that of nonsmokers, who also live longer without health problems⁽⁴⁾. In Brazil, there are around 6 million annual deaths caused by smoking, numbers which may reach 7.5 million per year in 2020⁽¹⁾. Smoking addiction accounts for 71% of lung cancer cases, 42% of chronic respiratory diseases, 10% of cardiovascular diseases and about 10% of all deaths. In addition, it is among the leading causes of early death among the elderly, requiring medical and health care.

Smoking is associated with enormous social and economic costs resulting from increased smoking-related morbidity and mortality, including costs generated by smokers, such as use of health care resources, absence from work, loss of productivity, payment of sickness benefits, and others⁽⁵⁾. Thus, excessive consumption of tobacco causes physical, mental health, financial and relationship problems. But addicts are not always aware of these problems and when they perceive the harmful effects, they are already in the vicious circle⁽⁶⁾.

Although it is declining in countries such as Australia, the United States, England, New Zealand and Canada, the prevalence of smoking in adult women is still higher in developed countries with average rates of 22%. In general, among young women, prevalence is growing worldwide and one of the reasons worth considering is the school environment, an important context for understanding the influence of smoking on peer group relationships. According to extant literature, this environment is an important space for implementing effective actions in the fight against smoking, and for that, one must know the motivations, beliefs and influences associated with tobacco consumption⁽⁷⁾.

Smoking-related comorbidities should also be considered in the context of treatment. Most smokers have psychiatric disorders and particular characteristics that require differentiated attention, and the creation of specific subgroups⁽³⁾. Psychiatric comorbidities are often related to the presence of mood disorders, anxiety disorders, psychoactive substance use disorders and schizophrenia, and may compromise the effectiveness of the therapeutic intervention⁽⁸⁻⁹⁾. A cross-sectional study conducted in the Federal District related the anxiety and depression level with the motivation to quit smoking, from a sample of 1,233 smokers attended at twenty reference centers for smoking cessation. Motivation was elevated in 50% of the patients, probable anxiety in 34% and depression in 22%⁽⁹⁾.

Evidence shows a high prevalence of psychiatric disorders among the population that uses psychoactive substances. The prevalence of nicotine and alcohol dependence among those dependent on other drugs is also high⁽⁸⁾.

Common Mental Disorder (CMD) is highlighted in reference to disorders as a disease that affects the population. Characterized by the presence of different symptoms for at least seven days, the main symptoms highlighted are: irritation, anxiety, difficulty concentrating, trouble sleeping, excessive worry, especially with health, obsessions and compulsions, depressive mood and phobia. The evaluation of these symptoms allows the early diagnosis and follow-up of depressive disorders, anxiety, phobia, panic disorder and obsessive-compulsive disorder, characterized as some of the types of CMD⁽¹⁰⁾.

The literature⁽¹¹⁾ reports a positive association between smoking and mental illness, relating high rates of smoking to the severity of mental illness. It is also described that individuals with mental illness tend to start smoking at an earlier age, smoke more heavily, and are more addicted to cigarettes than the general population.

Several hypotheses explain the high rates of smoking in people with mental illnesses related to depression and anxiety. The hypothesis of self-medication postulates that individuals smoke to alleviate symptoms of daily life such as: irritation, anxiety, difficulty concentrating, trouble sleeping, excessive worry, especially with health, obsessions and compulsions, depressive mood and phobia⁽¹¹⁾. Research reports that smoking can trigger depression or anxiety, as the psychoactive effect of tobacco alters the individual's neurocircuits. Animal studies indicate that prolonged exposure to nicotine deregulates the hypothalamic-pituitary-adrenal system, resulting in hypersecretion of cortisol and changes in the activity of the neurotransmitter system whose function is to regulate the reactions to stressors, an effect that seems to normalize after nicotine withdrawal⁽¹¹⁾.

A study⁽¹²⁾ on anxiety and smoking shows that anxiety disorders have a high frequency among outpatients (75%), with the most frequent being specific phobia and generalized anxiety disorder, and approximately ¼ (one quarter) of current smokers have an important association with generalized anxiety disorder (GAD), indicating the correlation of these disorders with the use of tobacco. Regarding tobacco, another significant finding is the number of cigarettes smoked and the presence or absence of anxiety disorders. Results show that patients with these conditions tend to smoke more cigarettes, although this data is not statistically significant.

A study of 277 psychiatric patients in Brazil, treated with anxiety and depression disorders at the Ambulatory Clinic of the Institute of Psychiatry, Federal University of Rio de Janeiro, found smokers who smoke abusively⁽¹³⁾. On the other hand, a study⁽¹⁴⁾ carried out in the public units of the Federal District describes that smokers and nonsmokers did not differ in sociodemographic variables, demonstrating that smoking is a public health problem that affects all social and cultural classes at different ages and both sexes. However, anxiety, depression, time and amount of tobacco consumption reached values close to statistical significance. From a qualitative point of view, this study shows that tobacco consumption is associated with an attempt to compensate for the presence of an internal discomfort (anxiety and depression), and that the time and amount of consumption is related to dependence as well.

A systematic literature review of longitudinal studies ⁽¹¹⁾ on the associations between smoking and depression/ anxiety describes that 6,232 abstracts were reviewed; of these, 5,514 were excluded on the basis of the title and 404 after reading the abstract. In total, 314 articles were retrieved and evaluated for eligibility and 148 met the inclusion criteria. The sample size ranged from 59 to 90,627 participants, who followed treatment from 2 months to 36 years. Of the 148 studies included, 99 (67%) recruited male and female participants, 16 (11%) were female, and 7 (5%) were male. In addition, in 101 studies (70%), participants were part of the general population, 15 (10%) were part of clinical populations and 16 (10%) of certain ethnic groups.

Women are seeking more treatment for smoking cessation, because they are more involved in health issues⁽¹⁵⁾ and believe more strongly in the fact that smoking can cause cancer⁽¹⁶⁾, and they participate more in support groups against the dependence⁽¹⁵⁾.

The literature⁽¹⁷⁾ indicates that although cigarette smoking rates are a common element in the decision of both sexes, women's smoking decision is also price sensitive, as well as to other social and cultural factors. In addition, these observations were noted in the fact that women residing in countries that are part of the Organization for Economic Co-operation and Development (OECD) are significantly more prevalent in cigarette consumption.

In turn, another study⁽¹⁸⁾ describes the predominance of men among the smoking population in all age groups. And, in the non-smoking population, women predominate, except in the 14-17 age group.

This shows that smoking expenses are strongly linked to males (63.5%) and that preventive work with adolescent girls is indispensable.

Literature⁽¹⁹⁾ also indicates a relationship between drug use and smoking cessation therapies in 154 women, at least 30 years of age, and smokers of more than 10 cigarettes/day. Compliance with study medication was assessed using Medication Event Monitoring System (MEMS) over 7 (seven) weeks of treatment. The psychological interventions were performed in weekly sessions of 60 minutes. End-of-treatment (EOT) withdrawal results, up to 12 months after treatment, revealed a significant interaction of medication and therapy. The effectiveness of drug therapy, despite being appreciated for its efficiency, became even more effective when associated with psychotherapies, demonstrating that even after 12 months of the end of the proposed treatment, abstinence still prevailed⁽¹⁹⁾.

Therefore, the success of cessation treatment is linked to bio-psycho-social monitoring⁽¹⁹⁾. Thus, there is a need to address clinical context elements such as: severity of nicotine dependence, age at onset of smoking, comorbidities, family history, motivation to cease, as well as feelings related to smoking, also highlighted in other studies⁽⁵⁾.

Further on, with reference to the factors associated with tobacco abstinence, a study⁽²⁰⁾ with 1,499 smokers, in Germany, indicated that people with higher educational levels and females had a greater number of previous attempts to quit smoking, without medical follow-up. Moreover, those keen on quitting smoking over the next six months were more likely to succeed in six months when accompanied by a health care team.

From an observational study⁽¹⁵⁾ with people who participated in the Tobacco Therapeutic Support Group (GATT) in 2009, in Vitória (ES), and were evaluated nine to twenty months after the end of treatment for the treatment effects, the female gender was predominant in 115 71.9%) patients; age group between 45 and 64 years old with 101 (63.1%) patients; mean age 49.6 (\pm 10.9) years; 81 (50.6%) participants with a complete and incomplete high school; an important aspect to add is that married women in Brazil, 79 (49.4%), have more difficulty in smoking cessation when compared to men, in addition to being more susceptible to depression and anxiety, which interferes with the quality of therapeutic engagement such as nicotine replacement therapy (NRT).

Literature⁽²¹⁾ reports that there has been growing concern about the use of tobacco by women, a fact that has motivated more attention from health institutions in an attempt to alert society and health professionals on the negative impact that tobacco use cause on women's health.

Another study mentioned $^{\scriptscriptstyle (16)}$ found no significant differences in the number of attempts to quit smoking

among smokers due to the use of psychoactive substances or depression, but a significant association was observed from the clinical point, with a higher number of hospitalizations in the last month and a higher incidence of diseases aggravated by tobacco, such as diabetes, hypertension, heart and respiratory diseases.

It is important to mention, as reported in the literature, that the low demand for smoking cessation treatments by men is one of the challenges of basic health care services. This and other highlighted issues point out the gender difference in understanding smoking cessation and the need for strategies for capturing both men and women in smoking cessation treatments has been excluded from health services in general ⁽¹⁵⁾.

But regardless of gender and age, once aware of the dependence and the harmful effects of smoking, the smoker will be challenged to overcome three types of addiction⁽⁶⁾. The physical dependence, in which the body will be dependent on the nicotine present in tobacco, is such that the body without this substance will suffer withdrawal symptoms mainly irritability; nervousness and anxiety; agitation; sleep disturbances; depressed mood; disturbance of intellectual concentration; increased appetite or constipation. These symptoms, experienced as unpleasant, most often cause shortterm relapses. That is why nicotine replacement therapy, offered in appropriate dosage to meet the needs of each body, can minimize the symptoms of detoxification.

Then there is psychological dependence. In this case, the cigarette has psychoactive effects resulting from pleasure, relaxation, intellectual stimulation, anxiolytic and appetite suppressant. It is, therefore, where the psychologist's work can help the smoker in his reflections on pleasure, understanding of emotions and control of anxiety, among others. These aspects vary in intensity and difficulty from one smoker to another, but they are decisive for the success of the treatment.

There is also environmental and behavioral dependence, since smoking is associated with the various circumstances involving people and places. In this way, changing habits and routine can help with treatment. In fact, smoking is strongly suggested in different environments and behaviors, because it has a social role related to sharing - cigarettes and sensation. It is important for the subject to make a list of places or situations in which he likes to smoke in order to anticipate or avoid situations in which he is more sensitive to relapses.

The goal of treatment is to help people, in any context, to learn how to live without tobacco, and for this, tobacco users need to be followed for a long period and in the different phases involving consumption, among which the following stand out: prevention, sporadic use, active consumption, abusive consumption, dependence, reduction of consumption, abstinence, relapse and maintenance of smoking cessation⁽²²⁾. In the light of these empirical and theoretical assumptions, the present study sought to identify clinical variables and reasons why users seek specialized treatment in the fight against smoking. The purpose of knowing the profile of this population is, in a second moment, to expand and improve the mechanisms of prevention, intervention and therapeutic follow-up in the Brazilian public health scenario.

Method

This is a retrospective, documental, quantitative approach, based on all medical records of patients with nicotine dependence in a Psychosocial Care Center for Alcohol and Other Drugs-CAPS-AD, located in a city in the northwest of the State of Rio Grande do Sul, from the creation, in the year 2013, until 2016.

Data collection included sociodemographic variables, history of smoking, presence of clinical comorbidities and psychiatric symptoms (diagnosed by the unit physician), use of medication and reasons for seeking treatment. The degree of cigarette dependence was evaluated by the Fagerstrom scale⁽²³⁾, composed of 6 questions related to the time of smoking, from the first cigarette of the day, the number of cigarettes per day, the cigarette that satisfies the most during that time of day, and frequency of use. The higher the score of the sum of the scores of each given answer (ranging from 0 to 3 points), the higher the level of dependence.

As procedures, initially, the director responsible for the institution was contacted, who signed the Letter of Authorization for this study. Subsequently, the research was approved by the Research Ethics Committee (CEP) of the University of Passo Fundo, under Report number 58594116.7.0000.5342; and in possession of these documents, the documental analysis of the protocols was carried out. Data were categorized according to sociodemographic variables such as gender, age, marital status, schooling; and clinical variables such as history of tobacco use, presence of morbidities, motivation to seek treatment. The analysis of the results counted on the descriptive statistics and the pertinent literature. The proportions were described with the respective 95% confidence intervals estimated using the Fischer exact method.

Results

From the total of 211 users who sought the service since its installation in the year 2013 to 2016, it was verified that 41 had nicotine-related dependence. Table 1 shows the sociodemographic and clinical characteristics of the participants, as well as the reasons for seeking treatment.

Sociodemographic variables	n*	%⁺	95% CI≛
Sex			
Female	28	68.3	51.9 - 81.2%
Male	13	31.7	18.1 – 48.1%
Married	22	53.7	37.4 - 69.3%
Elementary School Incomplete	29	70.7	54.5 - 83.9%
Paid activity	26	63.4	46.9 - 77.9
Clinical variables on smoking	n*	%↑	
Onset of Smoking habit in years of age			
10 – 14 years	14	34.1	20.0 - 50.6
15 – 18 years	20	48.8	32.9 - 64.9
19 – 36 years	7	17.1	7.6 - 32.1
Degree of dependences			
Low	7	17.1	7.6 - 32.1
Medium	8	19.5	8.8 - 34.9
High	12	29.3	16.1 - 45.5%
Very High	13	31.7	18.1 – 48.1
They tried to stop smoking 1 to 3 times	21	51.2	35.1 - 67.1
They stayed 1 time without smoking for at least 1 day	17	41.5	26.3 - 57.9
Smoke from 11 to 20 cigarettes per day	15	36.6	22.1 –53.1
Morbidities			
Current clinical disease	32	78.0	63.4 - 89.4
Current anxious symptoms	24	58.5	0.42 - 0.74
Current depressive symptoms	8	19.5	8.8 - 34.9
Reasons for seeking treatment [∥]			
Concerns about health	35	85.4	70.8 - 94.4
Financial matters	30	73.2	57.1 - 85.8
Family Pressure	20	48.8	57.1 - 85.8
Smoking is antisocial	10	24.4	12.4 - 40.3

Table 1 – Description of sociodemographic and clinical variables of the participants and reasons to start treatment (n = 41). Cruz Alta, RS, Brazil, 2016

*n: absolute frequency; †%: relative frequency; ‡95% CI - 95% confidence interval; §Reviewed by Fagerstrom Scale; "The patient could give more than one reason

Table 1 shows that of the 41 patients with nicotine dependence, the majority were women (68.3%), with low educational level (70.7%); Onset of smoking between 15-18 years (48.8%) and 10 and 14 years (34.1%), with high and very high levels of nicotine addiction (61%), high rates of comorbidities (78%) and presence of anxiety symptoms (58.5%). Health concerns (85.4%) and high costs to maintain smoking (73.2%) were the main motivations for seeking treatment.

Discussion

Regarding the data obtained in this study, gender is addressed in several findings^(11,16,19,21) which analyzed this theme, and reached similar results indicating that women smoke more compared to men. One research⁽¹⁶⁾ reports that in the quest for care for smoking cessation, women are also predominant, indicating that this is due in part to the fact that women seek more frequent medical care and believe more in the fact that smoking causes illness.

Another investigation⁽²⁰⁾ mentions that the majority of participants and smokers were female, with a higher level of education, intention to quit smoking: selfefficacy of smoking cessation were positively dependent on nicotine and the presence of a smoking partner were negatively associated with abstinence from smoking. In the same study⁽²⁰⁾, compared to evaluation only, medical advice was less effective for people with no intention of quitting smoking and for the unemployed.

In the present study, a higher prevalence of the female gender was observed and the average age at the

beginning of treatment was 45, for smokers who sought treatment for smoking cessation at CAPS, being similar to other studies⁽¹⁶⁾.

When considering sex, one survey⁽¹⁰⁾ reveals that among individuals who abuse alcohol and other drugs, there was a higher prevalence of association of CMD with women, indicating that they had higher rates for CMD, especially mood disorders. The reasons why women start and keep smoking vary according to their age, psychological, socioeconomic, demographic and cultural factors, as well as tobacco advertising. The earlier the initiation and the longer the consumption, the more difficult is the cessation⁽²¹⁾.

Evidence reinforces the perception that taxation is indeed a fundamental tool in controlling cigarette consumption, especially in the specific case of women, who listed higher prices⁽¹⁷⁾, as a reason for cessation. The same can be observed in this study, where 73% of the participants indicated financial issues among the reasons for quitting smoking.

Another study⁽¹⁸⁾ also concludes that the amount spent on tobacco causes significant impacts on the domestic budget, and these values could be directed to meet other family needs. In addition, knowing the different strategies for monitoring, preventing and combating smoking will give a profile of its population and may make the strategy more effective, corroborating with the present study.

It is possible that the proportion found in the sample for the sex variable, that is, more than twice as many women as the number of men - is similar to the population of patients who sought treatment for smoking cessation in public health units, and this distribution is compatible with other findings⁽²¹⁾.

When considering individuals with anxiety disorders, a study⁽¹²⁾ found that the majority were female, between 26 and 45 years old, high school graduates, married and employed, in line with the findings of the present study.

Literature⁽¹⁵⁾ describes that there is a statistical difference between the groups in the referred variables: marital status, previous attempts to quit smoking, number of cigarettes smoked per day, drug use and mood disorder. In addition, the group of abstinent patients were predominantly composed of married couples with a history of more attempts to quit smoking, with less cigarette/day smoked, and had less anxiety/ mood swings.

When evaluating⁽²⁴⁾ attitudes, knowledge and beliefs about smoking, with a sample of 556 medical students, a high level of agreement is reported with effective measures of smoking control recommended by the World Health Organization. Regarding methods of smoking cessation, most students know more about nicotine replacement therapy than about non-nicotine therapies (93% vs. 53%) and only 31% reported that Considering the objective of this study, to identify clinical variables and reasons for which smokers seek treatment, besides the predominance of females (68.2%), the results obtained reveal the preponderance of low schooling, which corroborates findings from previous studies^(3,14-15).

A report⁽¹⁴⁾ in the literature identified that the duration of tobacco use in the life of the respondents reached a total of 60 years, and despite the history of smoking cessation attempts prior to participation in treatment, no participant presented less than 14 years of tobacco use. Only 17 patients (27%) stated that it was the first time they had attempted to change this behavior.

Regarding the morbidities presented by the patients participating in the present study, there is a prevalence of current clinical illness and current anxiety symptoms, as has also been observed in several studies^(2,5,8-11,14-15).

Among heart diseases, acute myocardial infarction (AMI) is reported in literature⁽³⁾ as prevalent among smokers and is also responsible for a poor quality of life in this subgroup. In addition, sudden cessation of smoking may expose patients with AMI to high levels of psychological stress, and this information is imperative for continuous and investigative evaluation related to the management of nicotine withdrawal after AMI due to the potential negative impact of the psychological stress on the physical results in these patients⁽³⁾.

In an intervention⁽¹⁴⁾ with a sample of 63 people who had participated in a group for the treatment of smoking for at least six and a maximum of 12 months, in a public health unit of the Federal District, whose inclusion criteria were: to be over 18 years old, to have at least the third grade of elementary school and to attend three or more meetings of the intervention group, health concerns were identified (85%) among the reasons given by the participants to stop smoking and seek treatment, corroborating several findings^(2-5,12-13,16,19).

Based on prospective data, from a sample with the elderly⁽⁴⁾, characteristics of smokers by race and sex were examined, leading to the conclusion that the smoking cessation behavior in this population is better explained by higher levels of distress and health problems, regardless of race or gender. These findings may have important implications for the treatment of smoking cessation programs among the elderly. Older smokers with higher levels of psychological distress and health problems may be more motivated to stop smoking than those with fewer problems. These difficulties should be addressed in the context of the smoking cessation protocol. In addition, the same study⁽⁴⁾ identified a subgroup of elderly smokers

who report reasonably good health, lower levels of suffering, and less propensity to quit smoking.

Damage to one's own health and/or prevention is among the main reasons that led study participants⁽¹⁴⁾ to seek professional help aiming for a change in smoking behavior. These findings are in agreement with the results of the present study, in which 85% of the sample indicated health concerns among the reasons for seeking treatment.

Literature⁽⁵⁾ also reports that about 50% of psychiatric patients smoke, in contrast to 25% of the general population, and that 50% of the general population can quit smoking, while only 15% of psychiatric patients do, agreeing with the data from this study.

When investigating the prospective association between smoking and depression, a study⁽¹⁰⁾ reports that women smoke more and that anxiety is not consistent in terms of the most strongly supported association link.

It is also pointed out in the literature⁽¹⁶⁾ that the mean age for smokers and nonsmokers is 45 and 44 years, respectively, with women predominating in both groups. Smokers more often had work and home disabilities, presence of other smokers at home, hospitalizations, depressive disorder, use of sedatives, and history of mental disorder in the family.

As to the influence of smoking parents in the development of their children's smoking habits, literature⁽⁷⁾ identifies the predominance of verbalizations of boys in the category of bad influence, both for non-smokers and adolescents. The girls indicated the highest frequency in the category "does not like" for non-smoking adolescents, and for smokers in the "bad influence" category. Smoking parents are concerned about the negative influence they pose to their children, who often consider them behavioral role models and references to be followed, and the health effects of family members who passively receive the smoke.

The relationship between anxiety symptoms, depression, degree of motivation and cessation of smoking is highlighted in the literature $^{(9)}$, because it interferes in the success of the treatment. The results of this study demonstrated that motivation was high in 50% of the patients, probable anxiety in 34% and 22% presented probable depression. The motivation to stop smoking was related to gender, cohabitation with smokers and attempts to quit smoking. Abstinence was 59% in the fourth treatment session and was significantly related to age (patients less than 30 years old) and smoking (consumption less than 30 packyears). Abstinence after six months was 27% and was significantly related to a lower degree of dependence, lower levels of anxiety and depression, and cohabitation with smokers. High motivation significantly influenced cessation in the fourth session and after six months.

As a conclusion, the level of anxiety and depression did not interfere in the motivation of the patients for the treatment of smoking, but significantly interfered in the maintenance of abstinence after six months of treatment.

A frequency of 75% was reported in the literature⁽¹²⁾ regarding anxiety disorders, with specific phobia and generalized anxiety disorder (GAD) being more frequent with 26.2% each. Smokers accounted for 21.43% of the sample, and most of them obtained a slight score for the degree of dependence, indicating the association between having GAD and being a smoker, and the chance of patients with GAD smoking is 5.2 times in relation to those who do not have this anxiety disorder.

Finally, smoking and psychiatric comorbidities are complex human problems that need to be addressed by different streams of scientific thought. The different forms of perception of reality and other qualitative findings⁽⁸⁾ should be added to the quantitative information, since they are essential in the clinical evaluation and the appropriate treatment, and can also reduce the high rates of morbidity and mortality associated with smoking in the patients with psychiatric disorders. Thus, the results in the treatment of these patients can be maximized.

Conclusion

Given the clinical characteristics of tobacco dependents evidenced in this research, the results of this study lead to reflection on the need to implement policies for the prevention and cessation of smoking in women, as well as training measures for the health professionals involved in CAPS- AD and education of the population, from schoolchildren. Other issues to be considered concern the peculiarities of women in relation to tobacco use and their vulnerabilities regarding the risks of exposure, especially during the school, gestational and breastfeeding periods, which should receive a priority approach.

It is important to point out that the results indicate a considerable prevalence of smoking among interviewees and that the vast majority of people are anxious to quit smoking, but few can do without specialized professional assistance, which demonstrates the need to offer formal support for the success of this search, as well as introduction of preventive educational actions.

Therefore, for smoking cessation and successful treatment of the ailment, initial assessment as well as conducting an appropriate intervention program that should be chosen as treatment aid s essential, providing programs for prevention and treatment of relapse. Therapeutic accompaniment is fundamental,

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guiding the patient throughout the process of smoking cessation.

Referências

1. World Health Organization. Global status report on non communicable diseases 2010. Geneva: World Health Organization; 2011.

2. Wünsch V Filho, Mirra AP, López RVM, Antunes, LF. Tobacco smoking and cancer in Brazil: evidence and prospects. Rev Bras Epidemiol. 2010;13(2):175-87. doi: http://dx.doi.org/10.1590/ S1415-790X2010000200001.

3. Moreira-Santos TM, Godoy I, Godoy I. Psychological distress related to smoking cessation in patients with acute myocardial infarction. J Bras Pneumol. 2016;42(1):61-7. doi: http://dx.doi.org/10.1590/ S1806-37562016000000101.

4. Sachs-Ericsson N, Schmidt NB, Zvolensky MJ, Mitchel M, Collins N, Blazer DG. Smoking cessation behavior in older adults by race and gender: The role of health problems and psychological distress. Nicotine Tob Res. 2009;11(4):433-43. doi: http://dx.doi. org/10.1093/ntr/ntp002.

5. Nunes SOV, Castro MRP, Castro MSA. Tabagismo, comorbidades e danos à saúde. In: Nunes SOV, Castro MR, organizadores. Tabagismo: abordagem, prevenção e tratamento. Londrina: EDUEL. 2010. p. 224.

6. Cungi C. Faire face aux dépendances: alcool, tabac, drogues, jeux, internet. Paris: Retz; 2000.

7. Oliveira CM, Gorayeb R. Diferenças de gênero e fatores motivacionais para início do tabagismo em adolescentes. Saúde Transform Soc. 2012; 3(1):49-54.

8. Calheiros PRV, Oliveira MDS, Andretta I. Comorbidades psiquiátricas no tabagismo. Aletheia. 2006;(23):65-74.

9. Lima MS. Estudo da correlação entre o grau de depressão e ansiedade e a motivação para a cessação do tabagismo [Dissertação]. Brasília: Universidade de Brasília; 2012. 75p. Disponível em: http://repositorio. unb.br/ handle/10482/10554.

10. Lucchese R, Silva PCD, Denardi TC, Felipe RL, Vera I, Castro PA et al. Common mental disorder among alcohol and drug abusers: a cross-sectional study. Texto Contexto - Enferm. 2017;26(1):e4480015. doi: http://dx.doi.org/10.1590/0104-07072017004480015.

11. Fluharty M, Taylor AE, Grabski M, Munafò MR. The Association of Cigarette Smoking with Depression and Anxiety: A systematic review. Nicotine Tob Res. 2017;19(1):3-13. doi: http://dx.doi.org/10.1093/ntr/ ntw140.

12. Munaretti CL, Terra MB. Transtornos de ansiedade: um estudo de prevalência e comorbidade com tabagismo em um ambulatório de psiquiatria. J Bras Psiquiatr. 2007;56(2):108-15. doi: http://dx.doi.org/10.1590/ S0047-20852007000200006.

13. Lopes FL, Nascimento I, Zin WA, Valença AM, Mezzasalma MA, Figueira I et al. Smoking and psychiatric disorders: a comorbidity survey. Braz J Med Biol Res. 2002;35(8):961-7. doi: http://dx.doi.org/10.1590/ S0100-879X2002000800013.

14. Martins KC, Seidl EMF. Mudança do comportamento de fumar em participantes de grupos de tabagismo. Psic Teor e Pesq. 2011;27(1):55-64. doi: http://dx.doi. org/10.1590/S0102-37722011000100008.

15. Sattler AC, Cade NV. Prevalência da abstinência ao tabaco de pacientes tratados em unidades de saúde e fatores relacionados. Ciênc Saúde Coletiva. 2013;18(1):253-64. doi: http://dx.doi.org/10.1590/ S1413-81232013000100026.

16. Castro MRP, Matsuo T, Nunes SOV. Clinical characteristics and quality of life of smokers at a referral center for smoking cessation. J Bras Pneumol. 2010;36(1):67-74. doi: http://dx.doi.org/10.1590/ S1806-37132010000100012.

17. Paes NL. Fatores econômicos e diferenças de gênero na prevalência do tabagismo em adultos. Ciên Saúde Coletiva. 2016;21(1):53-61. doi: http://dx.doi. org/10.1590/1413-81232015211.00162015.

18. Bazotti A, Finokiet M, Conti IL, França MTA, Vaquil PD. Tabagismo e pobreza no Brasil: uma análise do perfil da população tabagista a partir da POF 2008-2009. Ciênc Saúde Coletiva. 2016;21(1):45-52. doi: http:// dx.doi.org/10.1590/1413-81232015211.16802014

19. Schmitz JM, Stotts AL, Mooney ME, Delaune KA, Moeller FG. Bupropion and cognitive-behavioral therapy for smoking cessation in women. Nicotine Tob Res. 2007;9(6):699-709. doi: : http://dx.doi. org/10.1080/14622200701365335.

20. Haug S, Meyer C, Ulbricht S, Schorr G, Rüge J, Rumpf HJ et al. Predictors and moderators of outcome in different brief interventions for smoking cessation in general medical practice. Patient Educ Couns. 2009;78(1):57-64. doi: http://dx.doi.org/10.1016/j. pec.2009.07.005.

21. Lombardi EMS, Prado GF, Santos UP, Fernandes FLA. Women and smoking: Risks, impacts, and challenges. J Bras Pneumol. 2011;37(1):118-28. doi: http://dx.doi. org/10.1590/S1806-37132011000100017.

22. Daver J, Biermé R. Bénéfices À court et à longs termes de la consomation de tabac. Ann Cardiol Angeiol (Paris). 2001;50(4):224-8.

23. Fagerström KO. Measuring degree of physical dependency to tobacco smoking with reference to individualization of treatment. Addictive Behav. 1978; 3(3-4):235-41. doi: https://doi. org/10.1016/0306-4603(78)90024-2.

24. Martins SR, Paceli RB, Bussacos MA, Fernandes FLA, Prado GF, Lombardi EMS et al. Effective tobacco control measures: agreement among medical students. J Bras Pneumol. 2017;43(3):202-7. doi: http://dx.doi. org/10.1590/S1806-3756201500000316.

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Corresponding Author: Camila Barbosa dos Santos E-mail: camilabarbosa.psico@hotmail.com phttps://orcid.org/0000-0002-0429-9578