

Smoking and loneliness in older adults: a population-based study in Campinas, São Paulo State, Brazil

Tabagismo e solidão em idosos: um estudo
de base populacional em Campinas,
São Paulo, Brasil

Tabaquismo y soledad en adultos mayores:
un estudio basado en población de Campinas,
estado de São Paulo, Brasil

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doi: 10.1590/0102-311X00093621

Abstract

This study aims to analyze the relationship between social isolation and loneliness with smoking in older adults. This is a cross-sectional, population-based study performed with 986 individuals aged 60 years or older. Data were collected from the Health Survey of the Municipality of Campinas (ISACamp 2014/2015), state of São Paulo, Brazil. We estimated the prevalence of smoking and smoking cessation according to independent variables and tested the associations using the chi-square test, considering a 5% significance level. Adjusted prevalence ratios were calculated using simple and multiple Poisson regression. Smoking and smoking cessation were not associated with most variables that indicate objective social isolation. "Often or always" loneliness was related to a higher prevalence of smoking (PR = 2.25; 95%CI: 1.38-3.66) whereas loneliness accompanied of self-reported emotional problems or common mental disorders was strongly associated with smoking and with lower smoking cessation (PR = 6.24; 95%CI: 1.37-28.47 and PR = 0.46; 95%CI: 0.28-0.77, respectively). These findings indicate that loneliness is a psychosocial aspect related to tobacco use which hinders smoking cessation in older adults, emphasizing the importance of emotional problems in this association.

Loneliness; Social Isolation; Smoking; Elderly; Affective Symptoms

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Introduction

Humans are social beings, and a sense of belonging is an essential human need that compels us to build and to maintain long-lasting interpersonal bonds¹. Interacting with others and with the environment is an evolutionary legacy essential to mental health. Social connection is associated with positive affect, self-esteem, and happiness, whereas social exclusion is associated with anxiety, loneliness, and depression^{1,2}.

Loneliness is a distressing negative affect due to a discrepancy between one's desired and achieved level of social connection, that could be either in quality or quantity³. On the other hand, social isolation is one's separation from individuals or groups from a lack of social contact, such as living alone and having few or no social bonds⁴. Since loneliness is a subjective perception, it could occur even without social isolation. Similarly, socially isolated individuals may not experience loneliness.

Growing evidence shows that more studies should analyze loneliness and social isolation in public health concerns. Both are associated with cardiovascular diseases^{5,6,7} and are risk factors for early mortality, similarly to well established risk factors, including inactivity, obesity, and substance abuse⁴. Loneliness is also associated with depression⁸, cognitive impairment and dementia^{9,10,11}, diabetes, and migraine¹², resulting in a higher risk of death, hospitalization, and use of emergency services in patients with heart failure¹³.

Whether loneliness affects health by health behavior or not is still uncertain^{12,14,15,16}. Evidence shows that socially excluded individuals tend to have less control of impulsivity and are more likely to engage in harmful health behaviors and unreasonable decisions¹⁷. Some studies have associated smoking with loneliness, but this association is still indefinite^{18,19}.

Smoking is the major preventable cause of death worldwide, greatly affecting public health. Tobacco use is one of the most important risk factors associated with deaths from noncommunicable diseases, including cardiovascular diseases, cancer, chronic lung diseases, and diabetes, which cause more than two thirds of deaths in developing countries²⁰. According to data from the *Risk and Protective Factors Surveillance System for Chronic Non-Communicable Diseases Through Telephone Interview* survey (Vigitel, 2018)²¹ on the 27 capitals of the Brazilian Federative Units, 9.3% of Brazilian adults smoke, mainly men (12.1%) than women (6.9%). Prevalence was higher for 55 and 64 years old adults (12.3%) than for those aged 65 years and older (6.1%). The prevalence of tobacco use possibly declines with age because of early mortality in smokers and smoking cessation from the onset of chronic diseases²².

Older adults are especially susceptible to developing tobacco-related diseases since they were more exposed to tobacco and unfiltered cigarettes during their lives. Furthermore, smoking tends to affect the health conditions of individuals in this age group, increasing mortality and healthcare costs²².

Factors associated with tobacco use in this age group must therefore be assessed to improve interventions to combat it. Considering that older adults are under a higher risk of social isolation¹⁵ and its effects, this study aims to investigate the association of social support, companionship, and loneliness with smoking and smoking cessation in older adults from Campinas, São Paulo State, Brazil, stratified by emotional problems and common mental disorders (CMDs), considering the strong association between loneliness and emotional problems¹⁴.

Materials and methods

This is a cross-sectional, population-based study with 986 non-institutionalized individuals aged 60 years or older, living in the urban areas of the municipality of Campinas. Data were collected from the *Health Survey of the Municipality of Campinas* (ISACamp 2014/2015).

The sample was obtained by cluster sampling in two stages. In the first stage, 70 census sectors of Campinas were drawn, with a probability proportional to the number of households, by selecting 14 census sectors from each of the five health districts of the city. In the second stage, households were selected using systematic drawing.

The sample size was defined considering the maximal variability for the frequency of the studied events ($p = 0.50$), a 95% confidence interval (95%CI), 5% sampling error, and design effect equal to 2.

Therefore, a sample of 1,000 individuals was defined for the age group 10-19 years old, 1,000 for people aged 60 years or older, and 1,400 for adults 20 to 59 years old.

The mean number of residents in each household was calculated based on the 2010 Brazilian census (person/household ratio). The number of residences to be visited was thus defined by dividing the established sample size for each age group by the person/household ratio, resulting in 2,898 residences for adolescents, 950 for adults, and 3,326 for older adults, already considering the non-response rates of 27%, 22%, and 20%, respectively, based on a previous survey. All residents of the selected age group for each household were interviewed²³. This study only analyzed data from individuals aged 60 years or older.

The survey was conducted using a structured questionnaire divided into 11 thematic blocks, applied by trained and supervised interviewers with tablet computers.

The dependent variables studied were:

(i) Smoking, assessed with the question: "Do you currently smoke, or have you ever smoked (at least 100 cigarettes or 5 packs)?" We compared current smokers with former smokers and those who had never smoked;

(ii) Smoking cessation, comparing former smokers with current smokers (smokers and ex-smokers as the denominator).

The independent variables assessed were:

(i) Loneliness: assessed with the question: "How often do you feel isolated or lonely?" Answers were dichotomized into never/rarely or often/always;

(ii) Companionship and social support: living alone, living with a partner, having someone to turn to if needed;

(iii) Emotional aspects: reporting emotional problems (yes or no); CMD, assessed using the SRQ-20 (self-reporting questionnaire) tool, with scores varying from 1 to 7 points (absent) and 8 points or over (present)²⁴;

(iv) Internet use: assessed using the question: "Do you use the Internet? If not, did you quit using it or have you never used it?" We compared those who currently use the Internet to those who do not;

(v) Sex, age, and monthly per capita income in minimum wages were used for adjustments. The minimum wage value in 2015 was USD 151.68.

The analysis was performed using the statistical software Stata 15.0 (<https://www.stata.com>), which considers the necessary weights of the sampling design. Smoking prevalence was estimated according to the independent variables and the associations were tested using the chi-square test, considering 5% a significance level. The prevalence ratios (PR) adjusted for age group and income and the 95%CI were calculated using Poisson regression models, with robust variance. The association of smoking with Internet use was also adjusted for income. The PR and 95%CI of the association between smoking and loneliness were estimated in the stratified analysis by emotional problems and CMDs. A multiplicative interaction term adjusted for sex, age, loneliness, and emotional problems was included in the models to understand the possible effects of emotional problems in the association between smoking and loneliness. The ISACamp 2014/2015 project was approved by the Research Ethics Committee of the School of Medical Sciences/State University of Campinas (process n. 409.714 of September 30, 2013; CAAE 20547513.2.0000.5404).

Results

In total, 986 individuals with a mean age of 70.0 years old (95%CI: 69.3-70.8) were analyzed. Older adults had a smoking prevalence of 10.4% (95%CI: 8.5-12.7), loneliness prevalence of 13.9% (95%CI: 11.7-16.3), and smoking cessation prevalence of 69.9% (95%CI: 65.1-74.2). Women had a higher prevalence of loneliness (16.6%; 95%CI: 13.0-19.6) than men (10.2%; 95%CI: 7.4-14.0) (data not shown).

Table 1 shows the associations of social support, companionship, and emotional problems with loneliness in older adults. Loneliness was associated with living alone (PR = 2.33; 95%CI: 1.51-3.62), not living with a partner (PR = 2.11; 95%CI: 1.30-3.43), and not having someone to turn to if needed (PR = 5.34; 95%CI: 3.89-7.34). Loneliness was more than twice as prevalent in those who reported emotional problems and almost four times more frequent in those with CMDs (PR = 2.31; 95%CI:

Table 1

Loneliness according to companion at home, social support, and emotional problems. ISACamp 2014/2015, Campinas, São Paulo State, Brazil.

Characteristics	n	Loneliness (%)	PR (95%CI) *
Companionship and social support			
Living alone			
No	812	11.4	1.00
Yes	160	27.7	2.33 (1.51-3.62)
Living with a partner			
Yes	509	9.0	1.00
No	463	20.1	2.11 (1.30-3.43)
Having someone to turn to if needed			
Yes	921	11.5	1.00
No	45	58.3	5.34 (3.89-7.34)
Emotional aspects			
Self-reported emotional problems			
No	649	9.3	1.00
Yes	318	22.7	2.31 (1.59-3.56)
Common mental disorders			
No	801	9.5	1.00
Yes	141	38.0	3.77 (2.72-5.22)
Income (minimum wages)			
< 1	277	16.0	1.00
1-3	546	14.6	0.94 (0.64-1.39)
3 or more	148	8.2	0.54 (0.26-1.10)
Internet use			
Yes	182	7.0	1.00
No	781	16.0	2.19 (1.17-4.09)

95%CI: 95% confidence interval; PR: prevalence ratio.

* Adjustments for sex and age.

1.59-3.56 and PR = 3.77; 95%CI: 2.72-5.22, respectively). Not using the Internet was also associated with loneliness (PR = 2.19; 95%CI: 1.17-4.09).

In the analysis adjusted for sex and age, among the social support variables, only marital status was associated with smoking (PR = 1.51; 95%CI: 1.03-2.22). Individuals who were often or always lonely had a higher prevalence of smoking than those who were never or rarely lonely (PR = 2.25; 95%CI: 1.38-3.66). Not living with a partner was associated with a lower prevalence of smoking cessation, on the limit of statistical significance (PR = 0.86; 95%CI: 0.73-1.00) (Table 2).

Table 3 shows the analysis of the association between smoking and loneliness stratified by the presence of CMDs and self-reported emotional problems. We found no statistical association between loneliness and smoking in older adults who reported no emotional problems or CMDs. On the other hand, smoking prevalence was three times higher in lonely individuals with emotional problems than in those who were not lonely, but also had emotional problems (PR = 3.78; 95%CI: 1.93-7.38) and more than five times higher in those with CMDs (PR = 5.42; 95%CI: 1.89-15.5). We found a significant interaction between the presence of CMDs or self-reported emotional problems and loneliness in the association with smoking (CMDs or emotional problems report vs. loneliness = 6.24; 95%CI: 1.37-28.47).

Table 2

Prevalence and prevalence ratio of smoking and smoking cessation according to companionship at home, social support, emotional problems, and loneliness. ISACamp 2014/2015, Campinas, São Paulo State, Brazil.

Characteristics	n total	Smokers			n (smokers/ former smokers)	Smoking cessation		
		Prevalence (%)	p-value	Adjusted PR (95%CI) *		Prevalence (%)	p-value	Adjusted PR (95%CI) *
Total	986	10.4			322	69.9		
Companionship and social support								
Living alone			0.2616				0.7878	
No	826	10.9		1.00	282	69.6		1.00
Yes	160	7.7		0.88 (0.49-1.59)	40	71.9		1.06 (0.84-1.33)
Living with a partner			0.7178				0.0447	
Yes	516	10.1		1.00	197	74.1		1.00
No	470	10.9		1.51 (1.03-2.22)	125	62.8		0.86 (0.73-1.00)
Having someone to turn to if needed			0.1625				0.3537	
Yes	927	10.0		1.00	299	70.7		1.00
No	48	18.0		1.50 (0.69-3.24)	21	59.5		0.91 (0.60-1.37)
Internet use			0.4788				0.8910	
Yes	182	11.9		1.00	73	68.7		1.00
No	794	10.1		1.05 (0.66-1.66)	245	69.7		0.94 (0.77-1.39)
Emotional aspects								
Self-reported emotional problems			0.6904				0.7152	
No	656	10.7		1.00	217	70.4		1.00
Yes	323	9.8		0.88 (0.58-1.32)	102	68.5		1.01 (0.87-1.17)
Common mental disorders			0.2367				0.1255	
No	803	10.0		1.00	264	71.5		1.00
Yes	141	13.4		1.35 (0.86-2.12)	45	58.9		0.87 (0.66-1.14)
Perceived loneliness								
Frequency of feeling isolated or lonely			0.0050				0.059	
Never or rarely	833	9.1		1.00	265	72.7		1.00
Often or always	139	19.1		2.25 (1.38-3.66)	55	56.8		0.83 (0.62-1.10)

95%CI: 95% confidence interval; PR: prevalence ratio.

* Adjustments for sex and age. Association with Internet use was also adjusted for income.

Table 4 shows the analysis of the association between smoking cessation and loneliness, stratified by the presence of CMDs and self-reported emotional problems. Smoking cessation had no significant association with loneliness in older adults with no emotional problems or CMDs. On the other hand, smoking cessation was 31% lower for those with emotional problems (PR = 0.69; 95%CI: 0.48-1.00) and 56% lower for those with CMDs (PR = 0.44; 95%CI: 0.20-0.96). We found a significant interaction between the presence of CMDs or self-reported emotional problems and loneliness in the association with smoking cessation.

Table 3

Prevalence ratio of the association between smoking (smokers in relation to the total population) and loneliness stratified by the presence or absence of self-reported emotional problems and common mental disorders (CMDs). ISACamp 2014/2015, Campinas, São Paulo State, Brazil.

Mental health problems and loneliness	PR (95%CI) *
Self-reported emotional problems	
No	1.59 (0.71-3.59)
Yes	3.78 (1.93-7.38)
CMDs	
No	1.75 (0.88-3.48)
Yes	5.42 (1.89-15.5)
CMDs or self-reported emotional problems	
No	0.74 (0.21-2.68)
Yes	4.46 (2.38-8.34)
Interaction	
Presence of CMDs or self-reported emotional problems vs. loneliness	6.24 (1.37-28.47)

95%CI: 95% confidence interval; PR: prevalence ratio.

* Adjustments for sex and age.

Table 4

Prevalence ratio of the association between smoking cessation (former smokers in relation to smokers) and loneliness stratified by the presence or absence of self-reported emotional problems and common mental disorders (CMDs). ISACamp 2014/2015, Campinas, São Paulo State, Brazil.

Mental health problems and loneliness	PR (95%CI) *
Self-reported emotional problems	
No	0.94 (0.64-1.38)
Yes	0.69 (0.48-1.00)
CMDs	
No	0.94 (0.68-1.31)
Yes	0.44 (0.20-0.96)
CMDs or self-reported emotional problems	
No	1.21 (0.90-1.61)
Yes	0.56 (0.37-0.86)
Interaction	
Presence of CMDs or self-reported emotional problems vs. loneliness	0.46 (0.28-0.77)

95%CI: 95% confidence interval; PR: prevalence ratio.

* Adjustments for sex and age.

Discussion

We found a loneliness prevalence of 13.9% in the older population of Campinas. Among older adults, 10.4% currently smoke and among individuals who smoked at some point, 69.9% quit smoking. Social support variables were not associated with smoking or smoking cessation in this age group, except for marital status. Smoking was not independently associated with emotional problems and CMDs, but was strongly associated with often or always feeling lonely. In the stratified analysis, loneliness was associated with smoking only for self-reported emotional problems or CMDs. We also found that lonely individuals who had emotional problems or CMDs had a lower prevalence of smoking

cessation. These findings indicate that emotional problems have a moderator role in the association of loneliness with smoking and smoking cessation.

Smoking prevalence among the older adults of Campinas (10.4%) corresponds to 14,672 smokers, in absolute numbers. This percentage can be compared to the prevalence found by Vigitel 2018²¹ for the group of the 27 Brazilian capitals (12.3% between 55 and 64 years old and 6.1% for 65 years and older) and to a meta-analysis that estimated a 13% global prevalence of smoking in older adults in 2010²⁵. In 2002, smoking prevalence was 12.2% for older adults in regions of the state of São Paulo²². Results possibly differ because of the age group and period studied, considering that the prevalence of tobacco use has decreased in Brazil over the last decade²¹.

In São Paulo, smoking prevalence was high even among those who had chronic diseases, including 8.7% of smokers among those with high blood pressure, 20.9% among those with previous history of stroke, 16.2% among those who reported emotional problems, and 17.8% among those with chronic lung diseases²². These findings emphasize that public policies are essential to encourage smoking cessation in older adults.

Although emotional problems and CMDs were strongly associated with loneliness but not with smoking, they modified the association between loneliness and tobacco use. Loneliness and self-reported emotional problems or CMDs had a synergistic effect in the association with smoking. Martínez-Vispo et al.²⁶ also found a moderator role of depressive symptoms in the relation between loneliness and smoking. Several studies have established an association between loneliness and depressive symptoms^{14,16,27,28}. On the other hand, evidence on the association of emotional problems and CMDs with smoking is still divergent^{29,30}.

In this study, smoking was not associated with most social isolation variables, but was significantly associated with loneliness. In a meta-analysis, Dyal & Valente³¹ reported an association between loneliness and tobacco use in half of the analyzed studies. On the other hand, in a longitudinal study with adults aged 52 years and older, Kobayashi & Steptoe¹⁵ found an association between social isolation and smoking, but not between loneliness and smoking. Choi & DiNitto³² also observed an association between social isolation and tobacco use.

Tobacco addiction is a multifactorial phenomenon which cannot be explained exclusively by the effects of nicotine, considered a weak reinforcer³³. Besides the pharmacological role of the chemical elements on the cigarettes and the positive reinforcement of the smoking “ritual”, psychosocial aspects are also crucial in the development of dependence. Smoking could be means of socializing with unknown people or group affiliations, especially for young individuals. Cigarettes could even become a “friend” in situations of loneliness and briefly reduce anxiety^{33,34}. On the other hand, smoking is bidirectionally related with depressive symptoms and has a causal relationship with depression, possibly because of nicotine receptors in the brain, causing a dysfunction in neurotransmitters such as dopamine and serotonin³⁵.

In our study, loneliness was not independently associated with smoking cessation. Not living with a partner was associated with a less prevalent smoking cessation, on the limit of statistical significance. In the stratified analysis, lonely individuals with mental health problems had a lower prevalence of smoking cessation. Other studies have reported loneliness as a negative predictor of successful smoking cessation, associated with a lower self-efficacy in quitting smoking^{15,36}. Smoking cessation has potential benefits in morbimortality and quality of life for older adults, including decreased risk of cardiac deaths and mortality from tobacco-related cancer and chronic obstructive pulmonary disease (COPD), decreased risk of coronary events, reduced rate of lung function decline, enhanced tolerance to physical activity, and improved respiratory symptoms^{37,38}. Nevertheless, smoking cessation is still challenging, which is why understanding the dependence process is essential to develop strategies for successful interventions seeking abstinence.

According to data from the Brazilian National Cancer Institute (INCA) & Oswaldo Cruz Foundation (Fiocruz)³⁹ and from Vigitel 2018²¹, smoking prevalence in the adult population decreased favorably over the years, from 34.5% in 1989, when the National Program for Tobacco Control coordinated by INCA was created, to 15.7% in 2006, and gradually declining until reaching 9.3% in 2018. For people aged between 55 and 64 years, the frequency remained substantial, decreasing from 15.4% in 2006 to 12.3% in 2018.

The decline in the smoking prevalence in Brazil comes from the governmental efforts in the last decades for tobacco control, which include the ban on smoking in closed places destined for collective use, prohibition of sale for people aged under 18 years, advertising banners, packages regulation, exposure of warnings in the packages and in means of communication and, more recently, the implementation of smoking cessation treatment in the public healthcare system. Most smokers started using tobacco during childhood and adolescence. As a result, older adults have been more exposed to tobacco over the years, reinforcing the dependence process³⁹. Besides, over the last decades, smoking has changed from a symbol of health and social status to a sign of addiction and disease, with a sharp decline in its social acceptance. This transformation in the social image of smoking and the ban on smoking in closed public places could isolate older adults who smoke.

Because of the cross-sectional design of this and most studies regarding the analyzed association, we could not determine a causal relationship between loneliness and smoking, which would be likely bidirectional. A recent Mendelian randomization study found weak evidence that loneliness encouraged starting tobacco use and a high load of tobacco smoking or hindered cessation, and strong evidence that tobacco use increased the risk of loneliness⁴⁰. Loneliness can lead to smoking from the need to belong, in some situations, or because of the resulting temporary relief of depressive symptoms. According to this and other studies, loneliness also seems to inhibit smoking cessation^{15,36}. In turn, smoking and its associated social problems could lead to loneliness. Recent evidence showed a genetic association between loneliness and depressive symptoms. Therefore, since smoking increases depression risk, it could also increase chances of loneliness^{35,41}. Subsequent studies must better explore these causal effects.

This study has limitations. The cross-sectional design could not establish a causal relationship between the variables. Our study is also subject to survival bias, considering that older adults who had been exposed to a higher load of tobacco use were also at a higher risk of early death, which can underestimate the magnitude of the findings.

Nevertheless, our research has the strength of being a population-based study, with a representative sample of an older urban population. Furthermore, to our knowledge, no other population-based Brazilian studies have reported on loneliness in older adults and few have analyzed the role of emotional problems in the association between smoking and loneliness.

Our study reinforces the association between loneliness and smoking in older adults with mental health disorders and emphasizes that these factors can likely impair smoking cessation. These findings allow better understanding the psychosocial aspects associated with cigarette dependence and smoking cessation in older adults, which helps develop strategies for successful interventions seeking improved social connection and mental health approaches.

Contributors

T. C. S. Ribeiro contributed to the study conception, data interpretation, and writing. M. B. A. Barros contributed to the study conception, methodology, data analysis, and review. M. G. Lima contributed to the study conception, methodology, data analysis and interpretation, and review. All authors approved the final version of the paper.

Additional informations

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Acknowledgments

The authors are grateful for the São Paulo State Research Foundation (FAPESP) for funding the fieldwork for ISACamp 2014/2015 and this research; and for the Health Department of the Municipality of Campinas and the Department of Health Surveillance of the Brazilian Ministry of Health for funding the execution of the survey. The Brazilian National Research Council (CNPq) granted the productivity scholarship to M. B. A. Barros (grant n. 309073/2015-4).

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Resumo

O estudo busca analisar a relação entre isolamento social, solidão e tabagismo entre idosos. Trata-se de um estudo transversal de base populacional que incluiu 986 indivíduos com 60 anos ou mais. Os dados foram obtidos do Inquérito de Saúde de Município de Campinas (ISACamp 2014/2015), São Paulo, Brasil. Foram estimadas as taxas de prevalência do tabagismo e da cessação do tabagismo de acordo com as variáveis independentes e testadas as associações através do teste de qui-quadrado, considerando nível de significância de 5%. Foram calculadas as razões de prevalência ajustadas com o uso de regressão de Poisson simples e múltipla. O tabagismo e a cessação do tabagismo não mostraram associação com a maioria das variáveis que indicam isolamento social objetivo, enquanto o relato da solidão muitas vezes ou sempre esteve relacionado a uma maior prevalência de tabagismo (RP = 2,25; IC95%: 1,38-3,66). A solidão, acompanhada pelo autorrelato de problemas emocionais ou a presença de transtornos mentais comuns, esteve fortemente associada com o tabagismo e com menor prevalência de cessação do tabagismo (RP = 6,24; IC95%: 1,37-28,47 e RP = 0,46; IC95%: 0,28-0,77, respectivamente). Os achados sustentam o papel da solidão enquanto aspecto psicossocial relacionado ao uso de tabaco e ao impedimento da cessação do tabagismo em idosos e destacam a importância de problemas emocionais nessa associação.

Solidão; Isolamento Social; Fumar; Idoso; Sintomas Afetivos

Resumen

El objetivo de este estudio fue analizar la relación entre el aislamiento social y la soledad con el hábito de fumar en adultos mayores. Se trata de un estudio transversal basado en población, realizado con 986 individuos con 60 años o mayores. Los datos se recogieron de la Encuesta de Salud de la Ciudad de Campinas (ISACamp 2014/2015), estado de São Paulo, Brasil. Estimamos la prevalencia del hábito de fumar y dejar de fumar según variables independientes y probamos las asociaciones usando el test chi-cuadrado, considerando un nivel de significancia de un 5%. Se calcularon las ratios de prevalencia usando una regresión simple y múltiple de Poisson. Fumar y dejar de fumar no estuvieron asociadas con la mayor parte de variables que indican aislamiento social objetivo, mientras que informar soledad a menudo o siempre estuvo relacionado con una más alta prevalencia de tabaquismo (RP = 2,25; IC95%: 1,38-3,66). Soledad acompañada de problemas emocionales auto-informados o la presencia de desórdenes mentales comunes estuvo fuertemente asociado con el tabaquismo y con una menor prevalencia de dejar de fumar (RP = 6,24; IC95%: 1,37-28,47 y RP = 0,46; IC95%: 0,28-0,77, respectivamente). Estos resultados apoyan el papel de la soledad como un aspecto psicossocial relacionado con el consumo de tabaco y el impedimento de dejar de fumar en adultos mayores, además de subrayar la importancia de problemas emocionales en esta asociación.

Soledad; Aislamiento Social; Fumar; Anciano; Síntomas Afectivos

Submitted on 11/Apr/2021

Final version resubmitted on 28/Sep/2021

Approved on 15/Oct/2021