



RESEARCH

PREVALENCE OF SMOKERS AMONG STUDENTS OF AN INSTITUTION OF HIGHER EDUCATION IN THE BACKLANDS OF PARAIBA

PREVALÊNCIA DE TABAGISTAS ENTRE ESTUDANTES DE UMA INSTITUIÇÃO DE ENSINO SUPERIOR DO SERTÃO PARAIBANO
 PREVALENCIA DE FUMADORES ENTRE LOS ESTUDIANTES DE UNA INSTITUCIÓN DE EDUCACIÓN SUPERIOR EN EL DESIERTO DEL INTERIOR DE PARAÍBA

Jamelson dos Santos Pereira¹, Edineide Nunes da Silva², Muller Portinary Cavalcante Pereira³, Eliane de Sousa Leite⁴, Jamili Anbar Torquato⁵

ABSTRACT

Objective: the objective was to characterize the prevalence of smoking among students of an IES. **Method:** this is a quantitative study conducted in the city of Cajazeiras - Paraíba in an IES between February and December 2010. The sample consisted of 248 students of the courses offered by healthcare education institution studied. Data were collected through questionnaire, after the signing of the agreement by the participants. **Results:** it was observed the following percentage of smokers among the students researched courses: 5.6% nursing, physiotherapy and pharmacy 4.5% 5.6%. The rate of ex-smokers identified among students was: 19% nursing, physiotherapy and pharmacy 9.1% 17%. **Conclusion:** the rate of students of IES smokers demands the adoption of pedagogical strategies that illustrate the harm from tobacco use. **Descriptors:** Smoking, Nicotine, Higher education.

RESUMO

Objetivo: objetivou-se caracterizar a prevalência de hábitos tabágicos entre estudantes de uma IES. **Método:** trata-se de um estudo quantitativo efetuado na cidade de Cajazeiras - PB em uma IES entre fevereiro e dezembro de 2010. A amostra foi composta por 248 discentes dos cursos da área da saúde oferecidos pela instituição de ensino estudada. Os dados foram obtidos através de questionário, após a assinatura do termo de anuência pelos participantes. **Resultados:** observou-se o seguinte percentual de estudantes tabagistas entre os cursos investigados: enfermagem 5,6%, fisioterapia 4,5% e farmácia 5,6%. A taxa identificada de ex-fumantes entre os estudantes foi: enfermagem 19%, fisioterapia 9,1% e farmácia 17%. **Conclusão:** o índice de estudantes tabagistas demanda da IES a adoção de estratégias pedagógicas que ilustrem os malefícios oriundos do consumo de tabaco. **Descritores:** Tabagismo, Nicotina, Educação superior.

RESUMEN

Objetivo: el objetivo fue caracterizar la prevalencia de tabaquismo entre los estudiantes de un IES. **Método:** Se realizó un estudio cuantitativo realizado en la ciudad de Cajazeiras - Paraíba, en un IES, entre febrero y diciembre de 2010. La muestra estuvo constituida por 248 estudiantes de los cursos que ofrece la educación sanitaria institución estudiada. Los datos fueron recolectados a través de cuestionario, después de la firma del acuerdo por parte de los participantes. **Resultados:** se observó el siguiente porcentaje de fumadores entre los estudiantes investigaron cursos: 5,6% de enfermería, fisioterapia y farmacia del 4,5% al 5,6%. La tasa de ex fumadores entre los estudiantes identificados fue: 19% de enfermería, la fisioterapia y la farmacia del 9,1% al 17%. **Conclusión:** la tasa de alumnos del IES fumadores exigir la adopción de estrategias pedagógicas que ilustran el daño causado por el consumo de tabaco. **Descriptor:** Fumar, La nicotina, La educación superior.

¹Nurse Faculty of Juazeiro. ATS Vocational Teacher Center. jamelsonenf@gmail.com. ²Master in Health Sciences by University Southern Cross / UNICSUL. Lecturer Faculty of Santa Maria / WSF and the Federal University of Campina Grande / UFCG. edineidens@hotmail.com. ³Nurse graduated from St. Mary School. Nurse Regional Hospital Cajazeiras / PB. muller_portinary@hotmail.com. ⁴Master in Health Sciences at Southern Cross University / UNICSUL. Servant Administrative Technician at the Federal University of Campina Grande / UFCG. elianeleitesousa@yahoo.com.br. ⁵PhD in Pathology by USP. Professor of the Graduate Program in Health Sciences of the University Cruzeiro do Sul / UNICSUL. jamilianbar@yahoo.com.

INTRODUCTION

Contemporaneously, the habit of smoking is considered a risk factor for the development of numerous pathological processes of order respiratory, cardiovascular and neoplastic. The high consumption of illicit drugs has caused detriment economic, social and health system, considering that this practice is associated with the occurrence of deaths in productive age, granting early retirements and lofty financial burden to health services.¹

For a comprehensive understanding on the subject, it is estimated that smoking accounts for 4.9 million deaths annually worldwide, with 40 to 45% are cancer: 90 to 95% of lung cancer, 75% occur by COPD, 20% for vascular disease and cardiovascular disease by 35%. About 20% of the world population smokes and 80% of smokers are in developing countries.²

According to the Ministry of Health, smoking accounts for 45% of deaths from acute myocardial infarction (AMI), 85% for Chronic Obstructive Pulmonary Disease (COPD), 25% of deaths from cerebrovascular disease and 30% of deaths from cancer. He favors the onset and worsening of chronic degenerative diseases such as hypertension and diabetes mellitus.³

Cigarette smoke has about 4,000 substances, most of these, harmful to human health, and nicotine dependence component related to physical and chemical individuals. After being inhaled or aspirated, the nicotine reaches, in fractions of seconds through the bloodstream, the mesolimbic dopaminergic and serotonergic, which connects the cerebral cholinergic nicotinic receptors which promote the reactions pharmacodynamic drug.⁴

Once sensitized by nicotine, nicotinic cholinergic receptors trigger the release of neurotransmitters, particularly dopamine, which

R. pesq.: cuid. fundam. online 2013. abr./jun. 5(2):3856-63

promotes rewarding and pleasurable psychoactive effects when user.⁵ However, excessive dopaminergic produces a sensitization of nicotinic receptors resistance which requires an individual increasingly higher doses of nicotine to maintain the initial pleasant effects.

The chronic consumption of tobacco provides the individual discrete psychoactive effects and physical dependence, characterized by irritability, anxiety, restlessness, reduced work productivity and disability mechanisms endocrine, neurological and cardiovascular diseases. The act of smoking is influenced by the pharmacological action of the drug and the reward mechanism to make contact with her, as well as by environmental factors, family and social.⁶

Socioeconomic, demographic, psychological, social and cultural rights have favored the indiscriminate consumption of tobacco by young people from different social classes. It is considered that facilitated access to higher education enables individuals to the assimilation of knowledge consistent adoption of a healthy lifestyle.

Scientific studies show that family ties, social and affective have contributed to the increasingly early onset of tobacco use among youth. The premature use of psychoactive substances affects the proper psychological development, psychological and intellectual of the juvenile.

Young people seeking access to higher education in order to receive professional training can you provide a financial and social stability, however, sometimes be noted that this educational reality is linked to early behaviors harmful to health.⁷

The scientific literature shows that excessive consumption of tobacco is linked to loss of personal, economic, educational and social: automobile accidents, violence, risky sexual

Pereira JS, Silva EN, Pereira MPC *et al.*

Prevalence of smokers among...

behavior, low academic performance, stress and commitment in the individual capacity to assimilate knowledge.⁸

The development of smoking by students belonging to healthcare appears as a paradox. It is a conflict of ideas and information, because as future professionals possessed the role of acting as promoters of health practices befitting a proper lifestyle.

The effectiveness of this research allowed the deepening of scientific knowledge about the harms of researchers that tobacco use is the health of human beings.

The high consumption of tobacco in the news and its implications on the health-man's disease necessitate scientific studies capable of producing descriptive data on the actual percentage of smoking among the population, and it is therefore relevant to this investigation.

Given these propositions, it asks: What is the rate of student smokers belonging to the backlands of Paraiba an HEI? In what period of life the students started smoking?

This study aimed to analyze the percentage of smokers among graduate students in the health area of a backcountry IES Paraiba.

METHODOLOGY

It presents itself as a quantitative study of exploratory-descriptive. The descriptive details of the stops frequently occurring phenomena, their relationship, their nature and properties, elements necessary for human understanding of their social, political, economic and cultural.⁹

The study was conducted in the city of Cajazeiras, located in the backlands of Paraiba - Brazil, precisely at a Higher Education Institution (HEI) that offer undergraduate degrees in health (Nursing, Pharmacy and Physiotherapy).

R. pesq.: cuid. fundam. online 2013. abr./jun. 5(2):3856-63

The IES develops outreach and research university that drive the scientific, political and cultural region. The research took place over the course of sixteen months, beginning in February 2010 and ending in June 2011.

The research was represented by students enrolled in undergraduate health care offered by IES in the Nursing corresponded by 533 academics, Physiotherapy and Pharmacy for 441 students with 264 students, with a total population of 1238 individuals.

We applied a non-probability sampling intentional and calculated a percentage of 20% of the total students in each course selected as the sample for the study. Thus was obtained the following sample: a) 107 nursing students b) Physical Therapy 88 students c) Pharmacy 53 students. Finally, 248 students participated in the survey.

It was adopted as a tool for data collection using a structured questionnaire that satisfied the desires and goals. The findings collected were processed, analyzed, and interpreted through tables presented in the light of the scientific literature the theme.

The field phase was initiated after obtaining assent No.: 585082010 of the Research Ethics Committee of the Faculty Santa Maria-FSM. The criteria required for participation was subject to signing the consent form, as once down to 196 \ 96 SISNEP-CNS governing research with human subjects in Brazil.

RESULTS AND DISCUSSION

After closing the sample, the data was compiled, processed and analyzed critically in the light of theoretical allusive to the topic at hand. To ensure a consistent and accurate understanding of the findings, data analysis was performed in two separate stages: initially, were exposed

Pereira JS, Silva EN, Pereira MPC *et al.*

Prevalence of smokers among...

sociodemographic characteristics of the subjects and then specific information search.

1-CHARACTERIZATION OF THE INDIVIDUALS:

Table 1 - Socio-demographic data of the study participants, Cajazeiras / Paraiba, 2010.

VARIABLES	N	%
Age		
18 to 20	102	41
21 to 23	72	29
24 to 26	38	15,4
27 to 29	16	6,5
> 29		
Gender		
Male	20	8,1
Female	89	35,9
	159	64,1
TOTAL	248	100

Source: script of the structured questionnaire Cajazeiras / Paraiba, 2010

It was found that most students have an age between 18 and 20, corresponds to 41% of the total sample. Thus, one realizes that most university is configured as young.

Regarding gender, the majority of subjects corresponds to women. Since its genesis, health practices are developed, mostly by women. The numerical predominance of women on human resources for health persists today.

2-SPECIFIC FINDINGS OF THE STUDY:

Table 2 - Prevalence of smoking among students, Cajazeiras / Paraiba, 2010.

VARIABLES	N	%
Nursing		
Yes	06	5,6
No	101	94,4
Total	107	100
Physiotherapy		
Yes	04	4,5
No	84	95,5
Total	88	100
Pharmacy		
Yes	03	5,6
No	50	94,4
Total	53	100

Source: script structured questionnaire Cajazeiras / Paraiba, 2010.

It can be observed that smoking does not stand as practice exercised among most students interviewed. However, among individuals adept at this behavior, there was a closeness between the percentages of tobacco users to courses elucidated: Nursing (5.6%), physiotherapy (4.5%) and Drugstore (5.6%).

Table 3 - Frequency of ex-smokers per course / Paraiba -2010.

VARIABLES	N	%
Nursing		
Yes	16	15
No	91	85
Total	107	100
Physiotherapy		
Yes	08	9,1
No	80	90,9
Total	88	100
Pharmacy		
Yes	09	17
No	44	83
Total	53	100

Source: script structured questionnaire Cajazeiras / Paraiba, 2010.

Although discrete proves the prevalence of smoking among college students (Table 2), there was an increase in percentage of students who consider themselves as ex-smokers, particularly in nursing and pharmacy with 15 and 17% respectively, so it is inferred that this segment of the tobacco sample used at some time in life.

Table 4: age range of onset of smoking among students, Cajazeiras / Paraiba, 2010.

VARIABLES	N	%
Age		
14 to 16	148,8	60
17 to 19	62	25
20 to 22	12,4	5
23 to 25	12,4	5
26 to 28	12,4	5
Total	248	100

Source: script structured questionnaire Cajazeiras / Paraiba, 2010.

It was observed that the majority of academic initiated tobacco during adolescence and / or youth. This phenomenon confirms that today, individuals start smoking in the increasingly early age.

Table 5: elements that favored tobacco consumption among college students, Cajazeiras / Paraiba, 2010.

VARIABLES	N	%
ELEMENTS		
Friends	124	50
Media	62	25
Curiosity	37,2	15
Others	24,8	10
Total	248	100

Source: script structured questionnaire Cajazeiras / Paraiba, 2010.

The data show that the largest portion of the subject believes that the bonds of friendship (50%) and current media (25%) were shaped as the factors that contributed to the onset and development of their smoking habits.

A study conducted in the state of Minas Gerais¹⁰, revealed that the percentage of nursing students adherents tobacco consumption is 6.7%. Other research has shown that smokers rate of students belonging to a course in pharmacy, the state of Espirito Santo, corresponding to 31.2%. While in the state of Paraná, the index of physical therapy students have a IES¹² that this behavior was 14.9%.

It is disturbing that students have health lifestyle habits related to tobacco use, with a view that will act professionally, as promoters of health practices that elevate the quality of life of individuals. Thus, the power and persuasiveness of professionals suffer a serious commitment and disbelief, considering that in the belief of society, representatives of the health sector are models of behavior and attitudes to be followed.¹³

R. pesq.: cuid. fundam. online 2013. abr./jun. 5(2):3856-63

It is observed that most smokers have a desire to abandon this practice harmful to human health. However, this change in lifestyle permeates through a health care could involve the participation of the individual family assisted with the appropriate treatment.¹⁴

It is considered that the nicotine dependence is a physiological disorder complex and difficult to adjust. Before the adoption of methods and strategies aimed at correcting assists this disorder, one must identify and overcome the barriers involved in this personal and psychological therapeutic process.

The personal motivation to end the addiction is one of the key factors in the fight against smoking and is interrelated with a range of variables hereditary, psychological, physiological and environmental factors. Thus, it is essential that the role of health professionals leverage the individual's motivation and insert the family, friends and other beings of their social life in this change process.¹⁵

It is considered that the current means of communication have favored the use of tobacco among the juvenile population. The early use of psychoactive substances affects the proper psychological development, mental, motor and cognitive development of children and adolescents.¹⁶

Tobacco consumption has a negative impact on the development of intellectual abilities and psychic teenager and contributes to the persistence of this behavior into adulthood. For, during adolescence the individual assimilates knowledge and practices that constituted their individuality and determine the lifestyle to be adopted.¹⁷

Higher education in the health field should employ strategies and educational activities that allow the student to assimilate knowledge about the social sciences, humanities, exact and specificity to human health. It is

Pereira JS, Silva EN, Pereira MPC *et al.*

Prevalence of smokers among...

imperative that the prime cause for the development of teaching skills and abilities of the students, necessary for a professional work ethic, scientific, coherent and able to satisfy the desires of society.¹⁹

In this sense, the existence of smoking habits among college students in the area of health demands a profound reflection on the pedagogical practices adopted and the social commitment of the educational institution with the formation of competent health professionals.¹⁸

It is essential to develop antismoking actions with students of health, given that knowledge on the subject will allow you to develop an assistance capable of contributing to the change in lifestyle of today's society and raise the quality of life.²⁰

Cigarette smoking produces a series of injuries that compromise the respiratory capacity of the smoker. Cigarette smoke initiates an inflammatory process in the lung tissue and facilitates the development of mutagenic-carcinogenic changes in the respiratory tract. While some smoke components are irritating to the structures of the upper airway and can produce irreversible cell damage.²¹

Substances present in cigarette may also reduce the ability of airway clearance due to toxic effects produced in the appearance of lashes and hyperplasia of mucus secreting cells. These changes may lead to the accumulation of mucus and the emergence of an environment conducive to microbial growth and development of infections.²²

Done with the chronicity of tobacco promotes harmful effects on the cardiovascular system. Nicotine, a potent vasoconstrictor, initiates a mechanism of tissue hypoxia which gradually causes death of cells present in blood vessels by anoxia. Another harmful effect of nicotine relates to decreased oxygen supply

offered to the peripheral tissues of the human being.²³

CONCLUSION

The IES investigated has a low percentage of students smoking among courses healthcare (nursing, physiotherapy and pharmacy) selected by the survey, based on a comparison between the data of this study with similar scientific investigations.

However, it is necessary that the educational institution develop educational activities that encourage change in the lifestyle of college students who have a behavior linked to smoking. Considering that, as future health professionals, develop a care owed able to promote changes in lifestyle of the population served.

It was found that students began smoking during adolescence and / or youth. The scientific literature shows that, in recent decades, individuals have started smoking habits at ages increasingly premature.

It is considered that the current media, environmental factors, psychological, social and family have contributed to the increasing percentage of children and adolescents who become smokers. Smoking prevents the proper development of neural and cognitive juvenile public.

That occurs scientific analysis can reveal the percentage of students in the area of health smokers belonging to other higher education institutions Paraiba.

REFERENCES

1. Ministério da Saúde (BR). Secretaria Nacional de Assistência à Saúde. Instituto Nacional de Câncer. Coordenação Nacional de Controle do Tabagismo e Prevenção Primária do

Pereira JS, Silva EN, Pereira MPC *et al.*

Prevalence of smokers among...

Câncer. Abordagem e tratamento do fumante
Consenso 2001. Rio de Janeiro (RJ); 2001.

2. Guidon GE, Boisclair D. Past, current and future trends in tobacco use [HNP Discussion Paper. Economics of Tobacco Control Paper n. 6]. Washington, D.C.: The World Bank; 2003.

3. Ministério da Saúde (BR). Instituto Nacional de Câncer. Tabagismo: um grave problema de saúde pública. Rio de Janeiro (RJ); 2007.

4. Chatkin JM. The influence of genetics on nicotine dependence and the role of pharmacogenetics in treating the smoking habit. J Bras Pneumol. 2006; Nov/Dec; [citado 24 agost 2010]; 32(6): 573-9. Disponível em http://www.scielo.br/scielo.php?pid=s1806-37132006000600016&script=sci_arttext&tlng=en

5. Benowitz NL. Nicotine addiction. N Engl J Med. 2010; 362(24): 2295-303.

6. Anderson P. Global use of alcohol, drugs and tobacco. Drug Alcohol Rev. 2006; November; 25(6): 489-502.

7. Peuker AC, Fogaça J, Bizarro L. Expectativas e beber problemático entre universitários. Psic.: Teor. e Pesq. [online]. 2006; [citado 24 agost 2010]; 22(2): 193-200. Disponível em http://www.scielo.br/scielo.php?pid=S0102-37722006000200009&script=sci_abstract&tlng=pt

8. Silva LVER, Malbergier A, Stempluk VA, Andrade AG. Fatores associados ao consumo de álcool e drogas entre estudantes universitários. Rev. Saúde Pública [online]. 2006; [citado 25 agost 2010]; 40(2): 208-218. Disponível em http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S0034-89102006000200014

9. Cervo AL, Bervian PA, Silva R. Metodologia científica. 6ª ed. São Paulo: Editora Pearson Prentice Hall; 2007.

10. Santos KP, Rodrigues A, Reinaldo MAS. Relação entre a formação acadêmica dos R. pesq.: cuid. fundam. online 2013. abr./jun. 5(2):3856-63

estudantes de enfermagem e sua percepção quanto ao tabagismo. Revista Eletrônica de Enfermagem [serial on line] 2007; [citado 25 agost 2010]; 9(2): 432-442. Disponível em: <http://www.fen.ufg.br/revista/v9/n2/v9n2a11.htm>

11. Portugal FB, Souza RS, Buaiz V, Siqueira MM. Uso de drogas por estudantes de Farmácia da Universidade Federal do Espírito Santo. J. bras. psiquiatr. [online]. 2008; [citado 26 agost 2010]; 57(2): 127-132. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0047-20852008000200008

12. Chiapetti N, Serbena CA. Uso de álcool, tabaco e drogas por estudantes da área de saúde de uma Universidade de Curitiba. Psicol. Reflex. Crit. [online]. 2007; [citado 26 agost 2010]; 20(2): 303-313. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-79722007000200017

13. World Health Organization. The role of health professionals in tobacco control. Geneva: WHO; 2005.

14. Peixoto SV, Firmo JOA, Costa MFL. Fatores associados ao índice de cessação do hábito de fumar em duas diferentes populações adultas (Projetos Bambuí e Belo Horizonte). Cad. Saúde Pública [online]. 2007; [citado 26 agost 2010]; 23(6): 1319-1328. Disponível em: http://www.scielo.br/scielo.php?pid=S0102-311X2007000600007&script=sci_abstract&tlng=pt

15. Ministério da Saúde (BR). Instituto Nacional de Câncer. Inquérito domiciliar sobre comportamentos de risco e morbidade referida de doenças e agravos não transmissíveis: Brasil, 15 capitais e Distrito Federal, 2002-2003. Rio de Janeiro (RJ); 2004.

16. Ferreira MMSRS, Torgal MCLFPR. Tobacco and Alcohol Consumption among Adolescents. Rev. Latino-Am. Enfermagem [online]. 2010; [citado 26 agost 2010]; 18(2): 255-261. Disponível em:

Pereira JS, Silva EN, Pereira MPC *et al.*

Prevalence of smokers among...

- http://www.scielo.br/scielo.php?pid=S0104-11692010000200017&script=sci_arttext&tlng=pt
17. Newman K, Harrison L, Dashiff C, Davies S. Relações entre modelos de pais e comportamentos de risco na saúde do adolescente: uma revisão integrativa da literatura. *Rev. Latino-Am. Enfermagem* [online]. 2008; [citado 26 agost 2010]; 16(1): 142-50. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-11692008000100022&lng=en&nrm=iso&tlng=pt
18. Pinto DS, Ribeiro SA. Variáveis relacionadas à iniciação do tabagismo entre estudantes do ensino médio de escola pública e particular na cidade de Belém - PA. *J. bras. pneumol.* [online]. 2007; [citado 26 agost 2010]; 33(5): 558-564. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1806-37132007000500011
19. Silva AO *et al.* Tabaco e saúde no olhar de estudantes universitários. *Rev. bras. enferm.* [online]. 2008; [citado 27 agost 2010]; 61(4): 423-427. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672008000400004&lng=en&nrm=iso&tlng=pt
20. Silva LVER, Malbergier A, Stempliuk VA, Andrade AG. Fatores associados ao consumo de álcool e drogas entre estudantes universitários. *Rev. Saúde Pública* [online]. 2006; [citado 27 agost 2010]; 40(2): 280-288. Disponível em: http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S0034-89102006000200014
21. Weir HK *et al.* Annual report to the nation on the status of cancer, 1975-2000, featuring the uses of surveillance data for cancer prevention and control. *J Natl Cancer Inst.* 2003; 95(17): 1276-99.
22. Behr J, Nowak D. Tobacco smoke and respiratory disease. *Eur Respir Mon.* 2002; 17(7): 161-179.

23. Araujo AJ *et al.* Diretrizes para Cessação do Tabagismo. *J. bras. pneumol.* [online]. 2004; [citado 29 agost 2010]; 30(2): S1-S76. Disponível em: http://www.scielo.br/scielo.php?pid=S1806-37132004000800002&script=sci_arttext

Received on: 16/09/2012

Required for review: No

Approved on: 27/02/2013

Published on: 01/04/2013