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**Estigma em relação aos fumantes
entre os profissionais e estudantes
da área da saúde**

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de Porto Alegre**

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Não poderia deixar de fora minha família que são minha base de sustentação e apoio em todas as horas.

RESUMO

Introdução: A sensibilização quanto aos efeitos nocivos do tabagismo e a não estigmatização do paciente fumante são condições essenciais que permitem aos profissionais da saúde exercerem seu trabalho de forma empática e competente. Entretanto, ainda são limitadas as evidências disponíveis na literatura que examinaram a percepção dos profissionais da saúde acerca do estigma contra o tabagista. O objetivo deste estudo foi investigar o estigma em relação aos fumantes entre profissionais da saúde e estudantes da área da saúde. **Métodos:** 384 profissionais e estudantes da área da saúde oriundos respectivamente do Complexo Hospitalar da Irmandade Santa Casa de Misericórdia de Porto Alegre e da Universidade Federal de Ciências da Saúde de Porto Alegre concordaram em completar um questionário com dados sócio-demográficos e hábito tabágico, assim como uma escala de 15 itens acessando estigma e a conscientização quanto aos efeitos do fumo. Dados descritivos e análise univariada estratificando e comparando a população de acordo com sexo, atividade profissional e hábito tabágico foram realizados utilizando o software SPSS versão 22. **Resultados:** A maioria dos participantes eram mulheres (277 versus 107 homens), 62,2% eram assistentes de enfermagem, enfermeiro/as ou médico/as, e 11,7% da população declarou ser fumante ou ex-fumante. O escore médio de estigma calculado a partir de itens da escala desenvolvida foi de $25,8 \pm 4,8$ (média \pm desvio padrão; escore mais baixo possível indo de 11 ao mais alto de 44). Aproximadamente 25% dos participantes ficaram acima do percentil 75 de escore identificando estigma. Comportamento estigmatizante por profissionais da saúde em relação aos pacientes foi evidenciado por 37,5% dos participantes no estudo. Estudantes demonstraram escore de estigma significativamente mais baixo que os profissionais já formados, sendo os estudantes de medicina os com o menor escore entre as áreas de atuação da população estudada. A estratificação da população para outras co-variáveis, como tabagismo, idade e sexo, não demonstrou significância estatística entre os grupos. **Conclusão:** O escore de estigma relativamente alto e o comportamento estigmatizante reportado entre profissionais da saúde em respeito ao paciente fumante encontrados neste estudo são relevantes e podem não ser uma realidade isolada. Esses resultados enfatizam a importância de investigar a abordagem do paciente tabagista pelos profissionais de saúde.

Palavras-chave: Estigma. Tabagismo. Profissionais da saúde. Estudantes da área da saúde.

ABSTRACT

Introduction: Sensitization to the harmful effects of smoking and lack of stigma regarding patients smokers are essential conditions allowing health professionals to provide competent and empathic care. However, evidence assessing healthcare professionals' awareness regarding smoking and notably stigma is still scarce. The aim of this study is to investigate stigma towards smokers among healthcare professionals and students. **Methods:** 384 healthcare providers and health sciences' students agreed to complete a questionnaire on socio-demographic data and smoking habits, as well as a 15-item scale assessing stigma and awareness to smoking effects. Descriptive data and univariate analyses stratifying by sex, professional activity or smoking habit were performed using SPSS software version 22. **Results:** Participants were mainly females (277 women vs. 107 men), 62.2% of the participants enrolled in the study were medical doctors and students, certified nurses or nurse assistants. Globally, 11.7% of participants in the study declared to be smokers or ex-smokers. The mean stigma score calculated from the specific scale items was 25.8 ± 4.8 (mean \pm SD; lowest possible stigma score from 11 to highest stigma score possible of 44). Nearly 25% of participants were above the 75% percentile score indicating stigma. Stigmatic behavior of peers regarding patient smokers was reported by 37.5% of the participants. Medical students demonstrated a lower stigma score when compared to the general study population, while stratification by other covariables did not show statistical significance. **Conclusion:** The important stigma score and the report of stigmatic behavior among health professionals regarding the smoking patient found in this study is of relevance and might not be an isolated reality. Those results highlight the need to further investigate stigma behavior by healthcare providers in other contexts.

Keywords: Stigma, Smoking. Healthcare providers. Health science students.

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1 REVISÃO DA LITERATURA

O tabagismo é um dos problemas mais relevantes para a saúde pública na atualidade. Na fumaça do cigarro estão presentes cerca de 250 toxinas, entre as quais o cianeto, usado em armas químicas, o arsênico, um raticida tóxico, e o chumbo. A importância do tabagismo como problema de saúde pública é reconhecida, tendo em vista esta ser uma das principais causas de mortes prematuras evitáveis e incapacitação física para o trabalho. A Organização Mundial da Saúde (OMS) estima que, se o consumo mundial de tabaco se mantiver, o número de fumantes passará, entre os anos 2000 e 2030, de 1,2 bilhão para 1,6 bilhão e o número de mortes anuais atribuíveis ao tabagismo aumentará de 4,9 para 10 milhões, sendo que 70% ocorrerão nos países menos desenvolvidos. Quanto à morbidade, dentre as enfermidades reconhecidamente relacionadas ao hábito de fumar estão as doenças cardiovasculares (doença coronariana, hipertensão arterial sistêmica, acidente vascular cerebral) e pulmonares (bronquite crônica, enfisema e câncer). No Brasil a Doença Pulmonar Obstrutiva Crônica (DPOC) apresenta uma prevalência de aproximadamente 15,8% na população tabagista acima de 40 anos e estima-se um aumento destes números até 2020. (NÃO TEM REFERENCIA?)

Ainda há relativamente poucos estudos sobre a prevalência do tabagismo no Brasil^{1,2}, mas uma pesquisa nacional de 2008³ demonstrou ser este ainda muito prevalente. No mesmo ano de 2008 no Rio Grande do Sul, 20,7% da população maior de 15 anos era fumante regular. As ações de saúde com vistas à prevenção e aconselhamento para o controle do tabagismo são, neste contexto, de suma importância e na maioria das vezes são lideradas pelos profissionais da saúde. Para tal, é fundamental que estes profissionais tenham consciência dos efeitos nocivos do fumo, assim como sejam capazes de orientar seus pacientes sem os estigmatizar, provendo um atendimento competente e empático^{4,5}.

O potencial estigma desenvolvido pelos profissionais de saúde com relação aos pacientes fumantes ativos de longa data e que permanecem refratários às ações de prevenção ou recidivam o tabagismo após terem cessado de fumar é um aspecto não pouco relevante e pode influenciar o tratamento dos mesmos. Estes pacientes podem eventualmente suscitar sentimentos de frustração nos profissionais de saúde que poderiam estimar serem infrutíferos os esforços e recursos dispendidos com estes pacientes. Em inquérito nacional realizado por de Assis Viegas et al.⁶, por

exemplo, foi evidenciado que a maioria dos pneumologistas brasileiros aborda a questão do tabagismo com seu paciente, mas somente 14,7 % destes declararam tratar o tabagismo, sendo que 43,5% destes profissionais justificaram não o fazerem por julgarem o tratamento ineficiente e alarmantes 9% alegaram não se interessarem pelo assunto.

Estes dados parecem conflitantes considerando-se a existência de muitos relatos e campanhas sobre a sensibilização da população em geral e dos profissionais de saúde em particular quanto aos efeitos nefastos do tabagismo^{7,8,9}. No entanto, estudos sobre a percepção dos profissionais de saúde quanto ao paciente fumante ou que explorem mais a fundo a relação entre os profissionais da saúde e esses pacientes são ainda insuficientes¹⁰. Observações de comentários verbalizados por alguns profissionais da saúde denotando preconceito não somente quanto ao fumo, mas também quanto ao paciente fumante, embora anedóticas, também cabem a esse contexto, merecendo reflexão e estudo mais aprofundado¹¹. Até o presente momento não existem estudos relatados na literatura científica quanto ao potencial estigma dos profissionais de saúde com relação aos fumantes; as consequências de tal comportamento podem ser graves e culminar com o negligenciamento dos cuidados de saúde nestes pacientes, os quais necessitam atendimento redobrado por serem dependentes químicos, resistentes ao tratamento.

O estigma envolvendo o tabagista é um tópico controverso. Se por um lado existem evidências que apontam para a não aceitação social como fator independente da redução do consumo tabágico¹², por outro lado há evidência na literatura de que esses pacientes percebem estigma por parte de seus médicos, contribuindo esta percepção para esconder o fato de que fumam, ou até mesmo evitar a busca por ajuda. Stuber et al.¹¹ identificaram que 40% dos tabagistas percebem estigma, sendo a atribuição do hábito de fumar a um fraco caráter significativamente associada a essa percepção. Provavelmente pelo mesmo motivo, até 8% dos pacientes fumantes referem manter o fumo em segredo de seus cuidadores na área da saúde¹³. Quando se analisam, por exemplo, pacientes diagnosticados com câncer de pulmão, a prevalência de estigma alcança alarmantes 95%¹⁴, com quase metade destes pacientes referindo tal percepção por parte de seu próprio médico. Por outro lado, a importância deste tema foi reforçada por estudo de Shen et al.¹⁵, que demonstrou associação significativa entre boa comunicação do

profissional da saúde com seu paciente e baixa percepção de estigma entre os pacientes com câncer de pulmão.

Em estudo no cenário brasileiro conduzido por Ronzani et al.¹⁶, 78% dos profissionais da saúde avaliaram os pacientes tabagistas como moralmente responsáveis pelo consumo da substância, atingindo tal atribuição maior prevalência que outras substâncias como maconha, álcool e cocaína, por exemplo. Nenhum estudo até o momento, entretanto, se destinou a investigar especificamente o estigma em relação ao paciente tabagista entre os profissionais da saúde.

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3 JUSTIFICATIVA

Em virtude do impacto do tabagismo na saúde pública e do papel central que os profissionais da saúde desempenham no tratamento do paciente tabagista e, conseqüentemente, na luta contra o tabagismo de modo geral, é de fundamental importância explorar amplamente os fatores relacionados ao tratamento e manejo destes pacientes. A literatura aponta crescente evidência de que o estigma pode representar um papel importante no dia-a-dia destes pacientes e na percepção que os mesmos têm de seus cuidadores na área da saúde.

Até o momento, estudos que abordem a percepção do profissional na área da saúde especificamente em relação a estes pacientes e que tente quantificar e objetivar o estigma são inexistentes.

4 OBJETIVOS DO ESTUDO

4.1 OBJETIVO GERAL

Investigar a sensibilização aos efeitos nocivos do fumo sobre a saúde e o potencial estigma dos profissionais de saúde da Irmandade Santa Casa de Misericórdia de Porto Alegre (ISCMPA) e dos estudantes da Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA) com relação aos fumantes.

4.2 OBJETIVOS ESPECÍFICOS

- a) Desenvolver um instrumento para avaliação da sensibilização aos efeitos do fumo e do estigma em profissionais e estudantes da área da saúde;
- b) Investigar o estigma com relação aos fumantes em profissionais e estudantes da área da saúde;
- c) Mensurar o conhecimento e sensibilização aos efeitos nocivos do fumo em profissionais e estudantes da área da saúde (fumo secundário e terciário).

5 ARTIGO CIENTÍFICO

O artigo apresentado foi redigido conforme regras da Revista *Nicotine & Tobacco Research*.

STIGMA TOWARDS SMOKERS AMONGST HEALTHCARE PROFESSIONALS AND STUDENTS

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Keywords: stigma, smoking, healthcare professional, medical students

ABSTRACT

Introduction: Knowledge of the harmful effects of smoking and lack of stigma regarding patient smokers are essential conditions allowing health professionals to provide competent and empathic care. However, evidence assessing healthcare professionals' awareness regarding smoking and notably stigma is still scarce. The aim of this study was to investigate stigma towards smokers amongst healthcare workers and students.

Methods: 384 healthcare providers and health sciences' students agreed to complete a questionnaire on socio-demographic data and smoking habits, as well as a 15-item instrument assessing stigma towards smokers. Descriptive data and univariate analyses stratified by gender, professional activity and smoking habit were performed using SPSS software version 22.

Results: Participants were mainly women (72%), nursing assistants, medical students, physicians and nurses (62%). Among participants, 11.5% were smokers/ex-smokers. The mean stigma score calculated from the instrument items was 25.8 ± 4.8 (mean \pm SD; lowest stigma=11; highest stigma=44). Nearly 25% of the participants were in the top quartile score, indicating stigma. Stigma regarding patient smokers observed amongst peers was reported by 37.5% of the participants. Student demonstrated lower stigma score when compared to professionals (25.3 ± 5.0 vs. 26.4 ± 4.7 , $p=0.023$); in the stratification been age and smoking status correlated variables.

Conclusions: The relatively high stigma score and the report of stigmatizing behaviors among health professionals towards patient smokers found in this study may not be an isolated reality. These results signalize the need to further investigate stigma against smokers by healthcare providers in broader contexts.

Implications: Stigma towards smokers among health professionals is a relatively new and little understood topic. This study is one of the first to measure stigma toward smokers amongst health providers. Considering its potentially large public health relevance, these results might need replication in different contexts before generalization.

INTRODUCTION

The World Health Organization (WHO) states cigarette smoking as one of the most current prevalent causes of preventable deaths today, with the alarming estimated number of 6 million deaths/year being the result of direct tobacco use.¹ In an effort to fight the tobacco industry advertisement of smoking as a glamorous habit,² and due to tobacco easy access, many international and national organizations created strategies to change that conception in a populational scale, stimulating campaigns to reinforce anti-tobacco legislation and awareness of the harmful effects of this substance.^{3,4} To date there are several studies reporting the positive impact of smoking cessation campaigns on the decrease of tobacco consumption, as well as the increase in awareness of the general population and the health professionals in particular about its harmful effects.⁵⁻⁷

Together with the clear benefit of anti-tobacco campaigns in terms of public health impact, it comes more recently to light the parallel emergence of smokers as a stigmatized group.⁸ The stigma related to tobacco smoking persons is a relatively new and not fully understood topic, with most available data derived from qualitative studies.⁹⁻¹¹ It has been claimed that stigma against smokers took place when strict anti-smoking public policies were widely introduced, stating that *those who smoke are maintainers of a harmful habit not only for themselves but also for others.*³

Social intolerance towards smokers has been shown to generate contrasted responses from smoking patients, especially regarding their health. At one hand, low social acceptability of smokers has been found an independent factor to quit smoking, as demonstrated by Alamar and collaborators.¹² On the other hand, low social acceptability has been reported as the reason why smoking patients delay their seek for medical assistance.^{10,13} Following a representative group of smokers, Stuber and colleagues reported that 40% perceived stigmatic behaviors in daily life; in addition, the potential link relating smokers to a weak character significantly increased that perception.¹⁴ As suggested by another study, it is possible that for this same reason, up to 8% of current smokers reported keeping their smoking status a secret from their healthcare provider¹⁵. Furthermore, when examining stigma in specific populations of smokers, it has been shown that vulnerable groups such as the lower income population¹⁶, mothers who smoke¹⁷ or lung cancer patients^{9,18} seem to become especially affected. Moreover, among lung cancer patients the

stigma prevalence reaches 95%, with almost half of these patients referring such behavior from their own physicians.¹⁸

Healthcare providers are key persons in helping patients to quit smoking and reinforcing the importance of adherence to anti-tobacco programmes.¹⁹ In order to be successful in this task, healthcare professionals must be not only be aware of the detrimental effects of smoking, but also to be able to guide their patients in quitting smoking without stigmatizing them, thus providing skillful and empathic care.²⁰⁻²² The value of a positive bond to smokers in the daily care of lung cancer patients was reinforced by Shen and colleagues, who found that the better the communication between patients and their doctors, the lower is the rate of reported stigma.²³ However, despite increasing warnings found in the literature about potential harms of stigma against the smoking patient, the assessment of stigmatic views among healthcare providers still remains very scarce. Enquiring primary care providers about patients' responsibility on legal and illegal substance consumption, Ronzani and colleagues²⁴ found that tobacco was judged by 78% of these professionals as being a patient moral responsibility, achieving higher rates than marijuana, alcohol or cocaine. Yet, to the best of our knowledge, no study has systematically examined stigmatic beliefs among healthcare providers focusing on the smoker patient, despite its importance for the success of smoking cessation policies. The aim of this study was to assess stigma towards smokers among healthcare providers and health sciences students of a university hospital in Southern Brazil.

METHODS

Study design and setting

This is a cross-sectional observational study. Participants were assessed through a self-completed questionnaire from November 2015 to March 2016. The study was conducted at the university hospital *Irmandade Santa Casa de Misericórdia de Porto Alegre* (ISCOMPA) associated to the *Universidade Federal de Ciências da Saúde de Porto Alegre* (UFCSPA), both located in the city of Porto Alegre, Southern Brazil. Fieldworkers who conducted the survey were students and residents of the institution who were trained for a standardized approach of the healthcare and students' population enrolled in the study, supervised by a medical teacher. Fieldworkers were randomly allocated to the different buildings of the institution's campus to apply the study questionnaires.

Study participants

Participants in the study consisted of medical doctors, nurses, physiotherapists, psychologists, nutritionists, hearing and speech specialists and students of the same health sciences areas. Inclusion criteria were being 18 years of age and older, and being a healthcare provider at ISCMPA or a student at UFCSPA. Excluded from the study were employees from the institutions who had no professional contact with patients (e.g. administrative and security personnel) or students who were attending other university courses than medicine, nursing, physiotherapy, nutrition, psychology or hearing and speech therapy (course for other than a health profession formation).

The study was approved by the Ethics Committee of Human Research of the institution ISCMPA. All participants agreeing to participate in the study signed an informed written consent form. Participation occurred on a voluntary basis and without any type of secondary benefice. Questionnaires were confidential and anonymized.

Protocol and Instruments

Survey

Each participant answered to two self-completed instruments. The first was a socio-demographic questionnaire which included data on age, sex, marital status, number of children, profession, family/individual income and smoking habits. In this study, we considered never smokers the participants who claimed not having smoked more than 20 cigarettes (including cigars and pipe, as well as industrialized and artisanal cigarettes) in life and none in the last 6 months; current smokers were participants who had smoked more than 20 cigarettes in life and were actual smokers in the last 6 months; former smokers were participants who had smoked more than 20 cigarettes in life but none in the last 6 months²⁵.

The second questionnaire comprised a total of 15 items (from now on called '*stigma questionnaire*') including 11 statements to assess the participants' stigma beliefs towards a smoking person, including a direct item about perceived stigma behavior in the work environment and an item about generally observed prejudice against smokers. Regarding knowledge about smoking harmful effects, there were also 2 items to assess that specifically to secondary and tertiary smoking harmful

effects. Table 1 displays the 15-item instrument. Answers to each item were based on a 4-point Likert scale, varying from 1: fully disagree to 4: fully agree.

Development of the stigma questionnaire

Since a thorough review of the literature revealed no specific questionnaire to assess stigma toward smokers, we adapted selected items from the *Internalized Stigma of Mental Illness Scale* (ISMI), which was also validated in its Portuguese version²⁶. The ISMI was conceived to assess stigma against persons with psychiatric disease and previously adapted to the substance dependent patient²⁶. Targeting the development of a short questionnaire, 11 items were selected and adapted to the smoking context, based on their content and appropriateness to assess our main subject of research (i.e. stigma). In order to verify the suitability of the adapted items, we conducted a preliminary study including 50 participants. No comprehension difficulties were identified in this sample.

The total stigma score ranged from 11 to 44 points, since the questionnaire has 11 items of stigma, including two reverse items, and four possibilities of response. The higher the score, the higher the stigma it represented. In addition to the stigma items, two questions addressed the knowledge of participants regarding the effects of second- and third-hand tobacco effects²⁸ (items 9 and 10). Two additional items assessed pre-experienced situations of prejudice against smoking patients (items 14 and 15), including a specific item about such perception by peers. Observed prejudice at work was the main variable of interest in this section, represented by the sentence *"I have already witnessed a situation of prejudice towards a smoker in my work environment"*.

Statistical Analyses

Statistical analyses were carried out with Statistical Package for the Social Sciences (SPSS), software version 22. Descriptive statistics were performed to obtain participants overall socio-demographic characteristics, stigma score, awareness of smoking detrimental effects and perceived prejudice situation.

We analyzed normality of the stigma scores distribution in our sample using the Kolmogorov-Smirnoff test. Stratification of stigma scores according to sex, professional or students categories and smoking status were assessed by one of the

following non-parametric tests: Mann-Whitney test or Chi-square depending on the variable. For statistical significance ' p ' value should be ≤ 0.05 .

From the answered stigma questionnaire, we had a missing rate of 0.8% in the answers, corresponding to 34 empty fields of the 4224 possible answers (11 items, each ranging from 1 to 4). The missing data was imputed in each item with the calculated mean of the respective item.

RESULTS

Out of 404 health professionals and students invited to participate at the study, 384 subjects agreed with that (94.8%). 5.2% of the approached individuals declined due to lack of time to complete the questionnaires.

Table 2 shows the participants' characteristics. A total of 384 healthcare professionals and health sciences students agreed to participate in the study (mean age 27.7 ± 8.4 years), with participants ranging from 17 to 60 years old; they were predominantly women (72.3%) with the great majority being never smokers (88.3%) and only a small proportion being current smokers (3.6%). Among current and former smokers (11.4% of the total study population), there was a tendency to smoking be more common between males (19.3% vs. 9.7% of the women, $p=0.078$) and, when compared to never smokers, they were significantly older (32.2 ± 8.6 vs 27.1 ± 8.2 , respectively; $p < 0.001$). Overall, the most frequent occupations among health professionals and health sciences students were nursing assistants (21.4%), medical students (18.0%), physicians (12.8%), and certified nursing (9.6%), totalizing 62% of the study population.

Awareness about the detrimental effects of second-hand smoking was reported by 369 (96%) participants amongst the overall population, independently of gender, occupation (student versus professional) or smoking status. By contrast, awareness of third-hand smoking effects was found in only 37.5% of the participants, being this proportion significantly higher in professionals when compared to students (50.5% versus 24.8%; $p < 0.001$).

Among participants, 76% of the participants agreed that there is prejudice against smokers in the general population, and this conception was more frequently described by the students (85.6%) when compared to health professionals (70.8%, $p < 0.01$). Concerning the observation of stigma towards patient smokers by peers, 37.2% of the participants reported having witnessed such behavior in the working place.

The calculated stigma score in the overall studied population was 25.8 ± 4.8 (mean \pm SD). Nearly 25% of the population was found in the top quartile score indicating stigma. In models stratifying by smoking status, we found a significantly lower stigma score in the group combining former and current smokers, compared to never smokers ($23.6 \pm 4.7.0$ versus 26.2 ± 4.7 , respectively, $p=0.001$). The comparison of stigma scores between men and women was not statistically significant. However, stratification of stigma scores by status (professionals versus students) reached statistical significance (26.4 ± 4.7 versus 25.3 ± 4.9 , respectively; $p=0.023$). Further analyses showed that medical students presented an even lower score of 24.6 ± 4.8 , when compared to the remaining study population 26.2 ± 4.8 ($p \leq 0.013$).

DISCUSSION

The aim of this study was to assess stigma towards smokers amongst healthcare professionals and students. Findings here described showed an averaged relatively high stigma score in participants of the study, notably in healthcare professionals. In addition, scores in the latter population were found significantly higher when compared to health sciences students.

As shown by previous studies, the presence of stigma can jeopardize a good healthcare practice, negatively impact the patient-professional relationship and critically delay patients' search for health assistance.^{10,13}

By training and experience, health professionals are more familiar with the harmful effects of cigarette smoking on patients, as opposed to young students. This might lead to stronger feelings about the long-term impact of smoking on patients' health, and possibly be amalgamated with stigma. Regardless, more than one third of our participants reported having witnessed misbehavior of peers against a smoker in the working environment. Those data are worrying, since that had occurred in the same population of health professionals who are meant to be trained to recognizing the harmful effects of tobacco, but not to transferring own fears into stigmatizing patient smokers. This might substantially hinder the patient-professional relationship with predictable unhealthy consequences to patients. In a previously published survey, nearly one third of the interviewed lung specialists admitted not treating smokers and referencing their smoking patients to other colleagues²⁹, showing the tendency to marginalize such patients. On the other hand, from the patients point of

view, studies showed that patients who perceive stigma from their doctors more frequently avoid telling them about their smoking habits^{15,30}. Hiding this information would result in less professional support to quit smoking. In a larger picture, it may contribute to increase the already high rates of smoking worldwide¹, interfering in the early diagnosis and treatment of respiratory and other systemic diseases with a great public health impact.

Common sense supported by available evidence gathered in other morbidity conditions than smoking has shown that education and knowledge leads to less stigmatizing attitudes from society and care givers^{31,32}. This contrasts with our findings where health professionals shower higher stigma scores than students. Given the limited results of smoking cessation tries by patients, we might conjecture whether stigma from health professionals against smokers would not relate to frustration following repetitive incentives and lack of success in the abandon of the smoking habit by patients, even facing severe diseases and reduced quality of life due to smoking. According to Bell and colleagues³, the potential stigma presented by health professionals may relate to the belief that the persistent smoker neglects his right to health and health care when choosing to smoke.

Although the stigma score among our students was lower in comparison to the one among professionals, they are not exempt from stigmatizing smokers in the future once they become professionals. A cross-sectional study³³ has shown that nearly half of undergraduate students enrolled in the survey had not been taught about the reasons why people take up smoking. Also, the same study showed that only 12.5% of their sample reported experiencing formal training in smoking cessation therapy, analogous to findings of a recent Brazilian study.³⁴ All these data show that little attention is given during graduate training to the psychological factors involved in acquiring and persisting with a smoking habit; also, that smoking cessation therapies are not part of the healthcare professional' training³³. Thus, it can be inferred that universities are training professionals who know all about the harmful effects of smoking, but are clearly unprepared to effectively lead the smoker patient to quit the habit. This may mean that professionals are more prone to stigmatizing attitudes. Therefore, health professionals should be supported to attend to these issues during training.

Strengths of this study are the systematic investigation of stigma towards smokers in a representative sample of health professionals and students, a subject

not sufficiently addressed in the literature. At the same time, the study has also a number of limitations. First, data collected in the study derive from a single institution and included a relatively young population. Smoking is known to have contrasted connotations depending on culture and ethnical beliefs, justifying expansion of research to distinct contexts³⁵. Future studies might also include institutions in different locations, to allow comparisons of stigma scores in regions with high variations in the prevalence of smoking. Second, health sciences students in this study have not been stratified according to years of training. It is possible that the perception of the smoking habit might have varied depending on the level of knowledge and personal experiences with the smoker patient throughout their training. It would therefore be interesting in a later study to compare results from students in the first and last year of medical school, thus providing cues to define tailored learning strategies to address the smoking issue during the academic training. Third, participants in this study comprised a majority of non-smoking persons, which might have contributed to accentuate the relatively high stigma scores found in the results. Future studies should focus on a higher number of smokers or ex-smokers health professionals.

In conclusion, findings of this study highlight a potential factor in professional competencies to empathically address patient smokers. The study also underlines the need to open discussions and training about the importance and consequences of stigma against patient smokers, and the crucial role of health professionals on patients' decision to quit smoking. Further efforts to develop the best adequate approach to avoid stigma by healthcare providers also targeting continuous education might contribute to a better adherence to smoking cessation with a substantial impact on public health costs.

Funding

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Conflict of Interests

The authors declare no conflict of interest to disclose.

Duplicate Statement

The manuscript has not been previously published in print or electronic format, and is not being under consideration by another scientific journal or electronic media.

Acknowledgements

The authors are indebted to the healthcare professionals and the health sciences students for their willingness to diligently participate in this study. They also thank the ISCMPA and the UFCSPA for facilitating the logistics during the collection of data.

Table 1. Instrument for the assessment of awareness of smoking effects and stigma towards smokers amongst health professionals and health sciences students

<ol style="list-style-type: none">1) I avoid being close to a smoker2) I am ashamed to be seen with a person who smokes3) I feel that smokers should not have children4) I would feel disappointed if I was a smoker / I feel disappointed being a smoker5) I can tell if a person is a smoker by the way he/she looks like6) I would be embarrassed if a relative of mine was a smoker7) You would take less seriously a health professional who smokes8) Smokers can have a fulfilled life despite being a smoker9) To breathe in a place where someone smokes may be harmful to your health10) To breathe today, in a place where someone has smoked yesterday, may be harmful to your health11) I would hire a nanny who smokes12) I consider that to not quit smoking is a sign of personal weakness13) I consider smokers as being less valuable than other people14) I believe that people have prejudice toward smokers15) I have already witnessed a situation of prejudice toward a smoker in my work environment

Table 2. Characteristics of study population

Population Characteristics	N = 384 *
Gender	
Male, No. (%)	106 (27.6)
Female, No. (%)	277 (72.1)
Age in years (mean, \pm SD)	27.7 \pm 8.4
Smoking History	
Current smokers, No. (%)	14 (3.6)
Past smokers , No. (%)	30 (7.8)
Never smokers, No. (%)	339 (88.5)
Civil Status	
Single, No. (%)	273 (71.1)
Married, No. (%)	80 (20.8)
Widowed, No. (%)	1 (0.3)
Stable Partnership, No. (%)	28 (7.3)
Profession	
Student, No. (%)	174 (45.3)
Professionals, No. (%)	202 (52.6)
Family Income **	
\leq 1576	35 (9.1)
1577 to 3152	110 (28.6)
3153 to 7888	133 (34.6)
7889 to 15760	60 (15.6)
\geq 15761	40 (10.4)
Number of children (mean, \pm SD)	0.39 \pm 0.79
Members in the family (mean, \pm SD)	2.9 \pm 1.3

*In some sub analyses lower total number of participant due to missing data.

** Expressed in Brazilian R\$.

Table 3. Outcomes comparing healthcare (HC) professionals and health sciences (HS) students

	HC professionals n = 202	HS students n = 174	p value
Age (mean \pm SD)	32.3 \pm 8.3	22.2 \pm 3.8	<0.001
Women/ Men, No.(%)	149 (73.8)/ 53 (26.2)	124 (71.3)/ 50 (28.7)	0.643
Never smokers, No.(%)	172 (85.1)	162 (93.1)	0.007
Stigma score (mean \pm SD)	26.41 \pm 4.7	25.27 \pm 4.9	0.023
Awareness of smoking effects			
Second-hand, No. (%)	196 (97.0)	173 (99.4)	0.08
Third-hand, No. (%)	101 (50.5)	43 (24.8)	<0.001
Stigma observed in peers, no. (%)	79 (39.1)	64 (36.8)	0.671
Stigma observed in normal context, No. (%)	143 (70.8)	149 (85.6)	0.01

Total n = 376 (8 participants missing data on occupation were excluded from the stratified analyses)

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6 CONCLUSÕES

O objetivo principal deste estudo foi avaliar a sensibilização aos efeitos do fumo e o estigma com relação ao tabagista entre os profissionais e estudantes da área da saúde, uma vez que crescente literatura demonstra que situações ou comportamentos estigmatizantes vivenciados pelos pacientes estão associados ao retardo na busca por atendimento de saúde pelo paciente e à inadequada relação entre o profissional de saúde e seu paciente.

Nossa população estudada é composta de 384 participantes, sendo a maioria do sexo feminino (72.3%) e 90% nunca fumantes. Quando avaliados quanto à sensibilização em relação aos efeitos nocivos do tabagismo, 98% demonstraram estar cientes dos efeitos do fumo secundário, também chamado fumo passivo. Quando avaliados quanto aos efeitos potencialmente nocivos do fumo terciário (resíduos de tabaco depositados em móveis e utensílios), entretanto, somente 38,3% demonstraram estar sensibilizados para tal tema. A população de profissionais se mostrou, com 50,5% versus 24,8% dos estudantes mais informada sobre o tema ($p < 0.001$). Esse dado mostra que, pelo menos a nível de exposição secundária ao fumo, nossos profissionais e estudantes estão sensibilizados para o tema. Com relação ao fumo terciário a análise foi restrita por não ser esse o objetivo principal do estudo. É entretanto curioso que mesmo sendo este um tema mais recentemente abordado na literatura, os estudantes, teoricamente mais imersos no meio acadêmico, tenham se demonstrado significativamente menos sensibilizados ao tema.

Nosso estudo encontrou índices de estigma relativamente altos entre os profissionais e estudantes da área da saúde. O escore médio de estigma calculado para a população estudada foi de $25,8 \pm 4,8$ em uma escala com intervalo de 11 (menor estigma possível) a 44 (maior estigma possível), com quase 25% desta população situando-se acima do percentil 75%.

Um dado interessante identificado por nosso estudo foi o de que estudantes apresentaram escores de estigma significativamente menores do que os profissionais de saúde ($25,3 \pm 4,9$ vs. $26,4 \pm 4,7$, respectivamente; $p = 0.023$). Embora o estudo não permita comprovação, estes dados poderiam ser o reflexo da recorrente frustração dos profissionais da saúde às tentativas infrutíferas das medidas promotoras da cessação do tabagismo nos pacientes fumantes.

Ainda não menos relevante foi o dado de que quase 40% dos estudantes e profissionais reportaram já terem presenciado uma situação de preconceito contra o tabagista em seu ambiente de estudo ou trabalho, ou seja, na UFCSPA ou na ISCMPA. Esses dados são preocupantes, especialmente se levarmos em conta que estes mesmos profissionais são muitas vezes os veículos através dos quais o aconselhamento e o tratamento de tais pacientes deve ocorrer.

Nosso estudo apresenta algumas limitações, como o fato de ser unicêntrico, não permitindo generalização dos resultados. Estudos multicêntricos, que levem em conta a diversidade sócio-cultural do nosso país seriam interessantes para corroborar ou não esses resultados. Nosso estudo é um dos poucos a abordar a delicada questão do estigma em relação ao tabagista entre os profissionais da saúde, podendo ser de utilidade para estimular o diálogo com estes profissionais e motivar formação complementar pela Instituição. Esperamos que nossos achados sirvam para desencadear ações focadas no manejo destes pacientes, contribuindo para a formação continuada e a busca permanente por prestação de serviço humanizado, com eficiência e qualidade crescentes, em conformidade com as metas das nossas Instituições de ensino e assistência.

ANEXO A - PARECER DA COMISSÃO DE ÉTICA EM PESQUISA (CEP)**IRMANDADE DA SANTA CASA DE MISERICORDIA DE PORTO ALEGRE -
ISCMPA****PARECER CONSUBSTANCIADO DO CEP****DADOS DO PROJETO DE PESQUISA**

Pesquisador: Margaret Weidenbach Gerbase

Título da Pesquisa: Sensibilização, Estigma e Efeitos do Fumo Passivo em Fumantes

Instituição Proponente: IRMANDADE DA SANTA CASA DE MISERICORDIA DE PORTO ALEGRE

Versão: 2

CAAE: 45817915.0.0000.5335

Área Temática:

DADOS DO PARECER

Número do Parecer: 1.155.241

Data da Relatoria: 14/07/2015

Apresentação do Projeto:

Não existem estudos na literatura sobre a avaliação do estigma com relação aos fumantes em profissionais da saúde.

Tendo em vista a pouca evidência científica existente sobre o assunto, o estudo também investigará o efeito do fumo passivo em fumantes convivendo com outros fumantes no domicílio ou no ambiente de trabalho e lazer.

Objetivo da Pesquisa:

Investigar a sensibilização e o estigma com relação aos fumantes em profissionais da saúde na ISCMPA e estudantes de ciências da saúde na UFCSPA. Analisar os efeitos do tabagismo passivo sobre os sintomas respiratórios, a função pulmonar e a percepção de qualidade de vida de pacientes fumantes ativos.

Avaliação dos Riscos e Benefícios:

Os riscos foram bem descritos e apresentado o que será realizado quando houver intercorrência.

Foram descritos vários benefícios desde a obtenção de dados fidedignos da população em amostra até a publicação dos resultados.

Comentários e Considerações sobre a Pesquisa:

A metodologia foi bem descrita desde a busca de dados, pacientes que consultam no ambulatório da Pneumologia e os funcionários. Também ficou de forma clara quem aplicará o questionário. O público alvo serão pacientes fumantes do Ambulatório de Tratamento do Tabagismo da ISCMPA e do Ambulatório de Pneumologia do Hospital Santa Clara da ISCMPA e enfermeiros/as, fisioterapeutas, técnicos/as e auxiliares de enfermagem, médicos/as e nutricionistas e estudantes da UFCSPA que responderão o questionário da Escala de Investigação de Sensibilização e Estigma sobre o Fumo.

Patrocinador Principal: Financiamento Próprio

Considerações sobre os Termos de apresentação obrigatória:

Todos apresentados e adequados.

Recomendações:

Não

Conclusões ou Pendências e Lista de Inadequações:

Pendências respondidas, aprovado.

Situação do Parecer:

Aprovado

Necessita Apreciação da CONEP:

Não

Considerações Finais a critério do CEP:

Após reavaliação do protocolo acima descrito, o presente comitê não encontrou óbices quanto ao desenvolvimento do estudo em nossa Instituição e poderá ser iniciado a partir da data deste parecer.

Obs.:

1 - O pesquisador responsável deve encaminhar à este CEP, Relatórios de Andamento dos Projetos desenvolvidos na ISCMPA. Relatórios Parciais (pesquisas com duração superior à 6 meses), Relatórios Finais (ao término da pesquisa) e os Resultados Obtidos (cópia da publicação).

2 - Para o início do projeto de pesquisa, o investigador deverá apresentar a chefia do serviço (onde será realizada a pesquisa), o Parecer Consubstanciado de aprovação do protocolo pelo Comitê de Ética.

Porto Alegre, 21 de julho de 2015

Assinado por:

ELIZETE KEITEL

(Coordenador)

ANEXO B - NORMAS DA REVISTA EM QUE O ARTIGO SERÁ SUBMETIDO PARA PUBLICAÇÃO

Nicotine & Tobacco Research

Instructions to Authors

Nicotine & Tobacco Research is the official journal of the Society for Research on Nicotine and Tobacco. The articles published in the journal focus primarily on the neurobiology, psychology, epidemiology of nicotine and tobacco use, clinical aspects of the subject particularly with regard to interventions in tobacco cessation, and issues concerned with tobacco policy and public health related to nicotine and tobacco use and dependence.

All material to be considered for publication in Nicotine & Tobacco Research should be submitted in electronic form via ScholarOne Manuscripts, the journal's online submission site.

If you experience any problems during the online submission process please consult the Author's User Guide, which provides detailed submission instructions on how to submit your paper. Alternatively, please contact the journal's Managing Editor, who will be pleased to assist you.

Types of Submissions

The journal publishes five categories of manuscripts:

1. Original Investigation

An empirical report of data collected and analyzed. This type of paper will normally report a substantial piece of original work.

Sections for main manuscript document: Introduction, Methods, Results, Discussion, Acknowledgments, References.

This submission will normally not exceed 4,000 words of text with a 250-word abstract and no more than 4 figures and tables combined (multi-part figures count as separate figures). The number of references should not exceed 50. The abstract

should be structured as follows: Introduction, Methods, Results, and Conclusions. If authors wish to submit articles that exceed these limits significantly, they should contact the Editor-in-Chief before submission. If the request has been approved please indicate this in the cover letter. The 4,000-word limit does not include the title page, abstract, or references.

2. Review

Scholarly review of literature, identifying trends or gaps in literature, providing new synthesis, and outlining future directions.

This submission will normally not exceed 6,000 words of text with a 250-word abstract and no more than 4 figures and tables combined; tables longer than 1 page will be published as online-only supplementary material. The number of references should not exceed 100. If authors wish to submit articles that exceed these limits significantly, they should contact the Editor-in-Chief before submission. If the request has been approved please indicate this in the cover letter. Authors considering submitting this type of article to the journal might find it useful to contact the Editor-in-Chief before embarking on the preparation the review for advice on whether or not the proposed review discusses an issue or issues which the Editorial Board are likely to consider to be of general interest to the readership of the journal.

3. Brief Report

An empirical report preliminary or pilot data.

Sections for main manuscript document: Introduction, Methods, Results, Discussion, Acknowledgments, References.

This submission must not exceed 2,000 words of text with a 250-word abstract and no more than 2 figures and tables combined; tables longer than one page will be published as online-only supplementary material. The abstract should be structured as follows: Introduction, Methods, Results, and Conclusions. The number of references should not exceed 20.

4. Commentary

Extended discussion of a published paper or editorial comment about relevant topic; most are invited; inquire about topic before submitting. The number of references should not exceed 20.

5. Letter to the Editor

Brief discussion, review, or reanalysis of published paper; should be data-based. Authors of critiqued papers will be invited to provide a response, which will be published concurrently.

Letters should be no more than 1,000 words, figures/tables should not be included, and the number of references should not exceed 10.

How to Format Your Manuscript

Manuscripts must include the sections listed below in the order they are presented. All word limits include citations within the text. The entire text should be double-spaced. Submitting an incomplete manuscript will cause a delay in review. The journal conforms to the AMA Manual of Style, 10th Edition. For publication, manuscripts must conform to the journal's style. Do not incorporate any footer or headers in your submission. Turn off Track Changes. Do not include line numbers. Do not include footnotes.

Manuscript Structure

1. Title page. This should list the title of the article and the full names and institutional addresses for all authors. Each author's highest academic degree should follow his/her name. The e-mail address of the corresponding author should also be included.

2. Abstract. For original investigations and brief reports, the abstract is limited to 250 words and should be structured as follows: Introduction, Methods, Results, and Conclusions. Please ensure that the conclusion of your abstract captures the main message of your article in an accurate, clear, concise, stand-alone statement. Abstracts for reviews are also limited to 250 words but the sub-headings may differ. Commentaries and letters do not require abstracts.

3. Implications. Provide a brief description about what the study adds (50-100 words).

4. Main Text. Use the guidelines in the Types of Articles table to structure the sections. Original Investigations and Brief Report sections are: Introduction, Methods, Results, and Discussion. Use a maximum of three level headings. For example:

HEADING 1: Uppercase, large font, bold

- **Heading 2:** Lower case, standard size font, bold
- **Heading 3:** Lower case, standard size font, italicized

5. Funding. List all sources of funding for the research. See Funding for further details.

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