ADHERENCE TO A SMOKING CESSATION GROUP BY SMOKERS ASSISTED AT A BASIC HEALTH UNIT

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ABSTRACT: **Objective:** to analyze the profile of smokers assisted at a basic health unit and understand the aspects related to adherence to a smoking cessation group. **Method:** Cross-sectional study with smokers assisted at a Basic Health Unit in Maringá in the State of Paraná. Data collection and descriptive analysis were performed in August-September 2016. **Results:** Seventy-two (72) smokers participated in the study. Of these, 51 were unaware of the National Tobacco Control Program (PNCT) and the proposed cessation groups. The barriers to adherence to the intervention groups identified in this study were difficult access (transportation) to the health unit and inability to join the groups due to the smokers' routine. Forty-two (42) respondents were willing to participate in a group intervention targeted to tobacco control and said that greater access to information and changes in the approaches used in these interventions were necessary. **Conclusion:** active search of the individuals in the community and use of a dynamic approach in group interventions are needed to meet the real needs of the participants. The variables identified may contribute to increase the participation of smokers in the program and, hence, smoking cessation rates.

KEYWORDS: Primary health care; Smoking cessation; National tobacco control program; Tobacco; Public health.

ADESÃO AO GRUPO DE CESSAÇÃO ENTRE TABAGISTAS DE UNIDADE BÁSICA DE SAÚDE

RESUMO: **Objetivo:** verificar o perfil de usuários tabagistas e compreender os aspectos relacionados à adesão ao grupo de cessação. **Método:** estudo transversal com tabagistas de uma Unidade Básica de Saúde de Maringá, estado do Paraná. A coleta e análise descritiva dos dados ocorreram entre agosto e setembro de 2016. **Resultados:** participaram do estudo 72 tabagistas; 51 desconheciam o Programa Nacional de Controle do Tabagismo e a proposta de grupos de cessação. As barreiras identificadas para a não adesão aos grupos foram dificuldade de locomoção à unidade de saúde e incompatibilidade de horários com a rotina dos tabagistas. Entre os entrevistados, 42 mostraram interesse em participar de intervenção voltada ao controle do tabagismo, sugerindo maior acesso a informações e mudanças na abordagem das atividades. **Conclusão:** há a necessidade de valorizara busca ativa dos indivíduos na comunidade e abordar dinamicamente os grupos para atender a real necessidade dos participantes. As variáveis levantadas podem contribuir para maior participação de tabagistas no programa e para a cessação do hábito de fumar.

DESCRITORES: Atenção primária à saúde; Abandono do hábito de fumar; Programa nacional de controle do tabagismo; Tabaco; Saúde pública.

ADHESIÓN AL GRUPO DE ABANDONO ENTRE FUMADORES EN UNIDAD BÁSICA DE SALUD

RESUMEN: **Objetivo:** Verificar perfil de fumadores, comprender aspectos relativos a adhesión al grupo de abandono. **Método:** Estudio transversal con fumadores de Unidad Básica de Salud de Maringá, Paraná. Datos recolectados y analizados descriptivamente de agosto a setiembre de 2016. **Resultados:** Participaron 72 fumadores; 51 desconocían el Programa Nacional de Control del Tabaquismo y la propuesta de grupos de abandono. Se identificaron como barreras para la no adhesión: dificultad de traslado a la unidad de salud e incompatibilidad horaria con rutinas de los fumadores. Cuarenta y dos entrevistados estuvieron interesados en participar de intervención orientada al control del tabaquismo, lo que sugiere mayor acceso a información y cambios de abordaje de las actividades. **Conclusión:** Es necesario valorar la búsqueda activa de los individuos en la comunidad y atender las necesidades reales de los participantes. Las variables relevadas favorecen mayor participación de fumadores en el programa y para abandonar el hábito de fumar.

DESCRIPTORES: Atención Primaria de Salud; Cese del Hábito de Fumar; Programa Nacional de Control del Tabaquismo; Tabaco; Salud Pública.

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INTRODUCTION

It is estimated that about one third of the global adult population smokes, which characterizes smoking as an epidemic. This habit is the main cause of avoidable deaths, being related to the premature deaths of approximately six million individuals, mainly in underdeveloped or developing countries \(^{[1]}\).

Smoking, one of the major risk factors for chronic non-communicable diseases, accounts for 71% of cases of lung cancer, 42% of chronic respiratory diseases and 10% of cardiovascular diseases, generating large expenditures with hospitalizations, medications and impacting productivity \(^{[2]}\).

A study conducted by the World Health Organization predicts that by 2030 more than eight million deaths will occur as a result of tobacco use, and 80% of them will take place in low-and middle-income countries, if the current tobacco use trends are maintained \(^{[3]}\).

In Brazil, it is estimated that 156,200 people die each year from diseases associated with active and passive smoking, particularly in the most vulnerable population segments \(^{[4]}\). The expenses incurred with the consequences of the use of tobacco products in the country are estimated in almost BRL 57 million per year, as follows: BRL 39.3 billion in medical care and treatment and BRL 17.5 billion associated to the decrease in productivity \(^{[5]}\).

In view of the aforementioned, in 1986, the Ministry of Health, and the Brazilian National Cancer Institute (INCA), launched the National Tobacco Control Program (PNCT) whose strategic objectives are based on three pillars: (i) prevention of early use of tobacco, (ii) encouragement of smoking cessation and (iii) restriction of exposure to secondhand tobacco smoke in outdoor settings \(^{[6-7]}\). In 2013, the publication of Ordinance No. 571 of the Ministry of Health aimed to improve smoking cessation guidelines within the healthcare network for individuals with chronic diseases under the Unified Health System (SUS) \(^{[8]}\).

Smoking cessation assistance includes behavioral counseling, which may or may not be associated with pharmacological treatment \(^{[9]}\). Because of their favorable benefit-cost ratio, group interventions allow simultaneous assistance to many people, who feel more satisfied with the care received \(^{[10]}\). Thus, it is believed that Primary Health Care (PHC) can have a positive impact on smoking control, since it provides an environment that brings health professionals and the community closer together, focusing on actions aimed to promote, maintain and improve health \(^{[11]}\).

With the implementation of the PNCT, Brazil is among the world countries with the most advanced tobacco control policies \(^{[12]}\). However, although the Program’s actions are innovative, strategies are still needed to significantly reduce the prevalence of smoking \(^{[13]}\).

A study conducted in a public university, through the implementation of a Smoking Cessation Program (PCT), found that, of the 128 smokers who participated in the program, 76% attended the first meeting, and of these, 71% effectively completed the PCT. The groups that underwent follow-up assessment had abstinence rates of 27% to 32%, which are higher than expected with the use of psychological treatment alone. It is inferred that recruitment strategies combining active strategies (personal contacts, personalized invitations and individual interviews) and reactive strategies (posters, corporate e-mails, and newspaper disclosures) are more effective in attracting smokers who adhere to the treatment \(^{[10]}\).

The substantial impact of smoking on the population’s health draws attention to the importance of overcoming limitations and obstacles that prevent the effective implementation of the PNCT in primary health care, in order to increase the success of the program from 3% to 30% in 1 year \(^{[1]}\). Therefore, the present study aimed to identify the profile of smokers of a Basic Health Unit and understand the aspects related to adherence to a smoking cessation group.

METHOD

Descriptive cross-sectional study with smokers assisted by a Basic Health Unit (UBS) in the city of Maringá, Paraná.
The participants were smokers registered in the referred unit. The inclusion criterion was smokers living in the area covered by the UBS where the study was conducted, and the exclusion criterion was smokers aged less than 18 years.

The population of smokers registered at the UBS was composed of 146 individuals. However, 72 participated in the study, as 66 could not be contacted and eight refused to participate.

The UBS where the study was conducted holds smoking cessation groups. Each group must have at least 10 participants. The group interventions take place weekly and last approximately two months.

Data was collected between August and September 2016, through interviews, which were preferably carried out by telephone. However, because of the problems associated to this type of interview, such as ineligible numbers or non-answered calls, even after three attempts at different times, 46 interviews were conducted through home visits. The interviews (both by telephone and face-to-face) lasted in average 20 minutes.

A structured instrument with 32 questions was used for the interviews. The instrument was prepared by the authors and previously tested with a population not selected for the study. It included the following variables: a) sociodemographic: age, gender, family income, marital status, schooling and skin color; b) related to smoking: number of cigarettes/day, alcohol intake and use of illicit drugs, physical exercise, motivation and self-perception of damage; c) related to knowledge and viewpoint about cessation groups: knowledge of the existence of PNCT and treatments, participation in groups, adherence and non-adherence factors, and interest in quitting smoking.

Data organization, tabulation and summarization of the data was performed in Microsoft Excel 2010. Then, descriptive analysis was used to interpret the data.

The study was approved by the Health Department of the city of Maringá and by the Research Ethics Committee of Centro Universitário Cesumar, under protocol no 1.694.692.

RESULTS

Seventy-two (72) smokers participated in the study, of which 37 (51.39%) were female, 42 (58.33%) were aged 35-59 years; 52 (72.22%) were white; 33 (45.83%) were married and 37 (51.39%) had completed 8 or more years of schooling. Regarding monthly family income, 32 (44.44%) individuals earned BRL 880.00 to 1,760.00 (Table 1).

<table>
<thead>
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<th>Variables</th>
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<th>%</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
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<tr>
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</tr>
<tr>
<td>≥ 60</td>
<td>21</td>
<td>29.17</td>
</tr>
<tr>
<td>Skin color</td>
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<td></td>
</tr>
<tr>
<td>White</td>
<td>52</td>
<td>72.22</td>
</tr>
<tr>
<td>Brown</td>
<td>19</td>
<td>26.39</td>
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<td>Yellow</td>
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<td>1.39</td>
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Regarding the characteristics related to smoking, 30 (41.67%) participants have been smoking for more than 30 years and 17 (23.62%) smoked more than 20 cigarettes/day. Anxiety was the main stimulus for smoking, according to 46 (63.8%) smokers, and the other reasons reported by the individuals were the addiction itself, the postprandial period, family problems, bariatric surgery, alcohol use and loneliness. Regarding the main obstacle for quitting smoking, 45 (57.69%) reported lack of interest, the few times available for intervention groups, the use of an unattractive approach and failure in previous attempts.

Table 2 – Characteristics related to the smoking habit among smokers assisted at a Basic Health Unit. Maringá, PR, Brazil, 2016. (continues)
Thirty-two (32) subjects (44.44%) drank frequently and 11 (15.27%) had used illicit drugs at least once in their lives. When asked about physical activity, only 24 (33.33%) reported practicing some type of physical exercise.

A little more than half of the respondents, 37 (51.39%) recognized the harmful effects of smoking on their health, and the main complaints were morning cough, reported by 14 (19.44%) individuals; hoarseness, reported by 11 (15.28%); weight loss, reported by four (5.56%) participants; dyspnea, reported by 11 (15.28%) participants, and nervousness when on abstinence, reported by eight (11.11%) individuals.

Regarding the smoking cessation therapy adopted, 42 (62%) participants said they were aware of the types of treatment available, although most of them were unable to cite them, demonstrating lack of knowledge about drug therapy.

Asked about the availability of a specific program targeted to facilitate smoking - the PNCT - 51 (70.33%) said they had never heard about it. Regarding the participation in cessation or psycho-behavioral support groups, 64 (88.89%) said they had never participated in such groups. The reasons for non-adherence to these types of groups were difficult access to the UBS, for 47 (73.43%), lack of information about the program, for 17 (26.56%), and inability to participate in the program because of the smokers’ daily activities or lack of time, for 11 (17.18%) respondents (Table 3).

Regarding suggestions to improve adherence to the group, 31 (36.04%) participants suggested greater dissemination of the program and its results; 27 (31.39%) suggested changes in the way the activities were conducted, and 23 (26.75%) said the intervention groups should be more frequent. It should be stressed that 42 (58.33%) respondents showed interest in participating in an intervention focused on smoking control (Table 3).

**Table 3 - Aspects related to adherence to smoking cessation groups by smokers assisted at a Basic Health Unit. Maringá, PR, Brazil, 2016. (continues)**

<table>
<thead>
<tr>
<th>Questions</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in any smoking cessation or psycho-behavioral support group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>64</td>
<td>88.89</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>11.11</td>
</tr>
<tr>
<td>Awareness of the existence of the PNCT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>70.33</td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>29.67</td>
</tr>
</tbody>
</table>
 Despite the availability of smoking cessation programs, the number of smokers who participate in such activities, particularly in the cognitive-behavioral group, is still very small. Difficult access to the basic health unit or inability to participate in the program because of the daily activities of the individuals are major obstacles to the success of these group interventions. The establishment of group interventions in alternative times could be a solution.

Lack of information about the availability of these groups in PHC was another important obstacle identified in this study that led to non-adherence of smokers to the referred activity. So, more effective dissemination of the activities, groups, as well as access to information, are needed. A study demonstrated the important role of active recruitment, combining new technologies with more individualized strategies, in order to meet the specific needs of the smokers in order to contribute to greater adherence to smoking cessation groups. Therefore, training should be provided to the health professionals who work with these groups to better explore the resources available in the SUS and ensure access to all the services provided.

Also, many users do not hesitate to express lack of interest in such activities. In 2008, the Brazilian Society of Pulmonology and Tisiology presented several smoking cessation guidelines, including a measure of motivation to quit smoking, in order to help health professionals identify an individual’s stage of readiness to quit smoking, and hence provide more effective counseling, which includes understanding and active listening.

A study aimed to investigate the reasons for discontinuation of treatment provided under the PNCT found that they are associated with the place where the program is developed, the type of therapy used, the times available for meetings and the professionals responsible for care.

The use of a cognitive-behavioral therapy as the only strategy does not seem to favor continuity of treatment for smoking cessation either. Thus, a more creative approach, more focused on the needs of the individuals, can be suggested to ensure resolute care. The use of techniques that integrate behavioral therapy, such as encouraging the creation of a support network among participants (e.g. exchanges of experiences, creation of a telephone contact list, etc.), seems to help not only during treatment, but also after its completion.

In this regard, several studies emphasize the importance of professional qualification as a strategic action for the consolidation of anti-tobacco interventions. The health team must be motivated and capable of offering alternatives that captivate the smoker and facilitate smoking cessation, and at the same time prepared to deal with possible failures.
Group interventions for smoking cessation are positive strategies, as they offer social support - exchange of experiences regarding the peculiarities of the smoking behavior and the difficulties to quit this habit. However, health professionals gain more insight on the needs and characteristics of the smokers in face-to-face meetings. Besides, more dynamic approaches focused on the factors that trigger a smoking craving may contribute to arouse greater interest in participating in the activities, increasing adherence to the program.

The combination of these approaches with drug therapy can improve the success rates of smoking cessation. Yet, as shown in this study, this type of treatment is not very common. Thus, smokers should be aware of the possibility of association of pharmacological treatment with group interventions and make the most of it.

Anxiety and stress situations are major targets that should be addressed in interventions, as they are considered important triggers for the urge to smoke. Thus, activities monitored by physical educators, workplace activities, relaxation techniques or the use of antidepressants can be very useful.

Regarding sociodemographic data, it is known that in Brazil the incidence of smoking is higher in males, most of them black individuals living in the countryside. Regarding schooling, smoking prevalence is inversely related to education. Also, the lower the income, the higher the prevalence of smokers.

Such data contrasts with the findings of the present study, which can be explained by the fact that the Basic Health Unit selected is located in an area of higher purchasing power where and with a population that has some specific characteristics.

In general, a significant percentage of the smoking population is composed of individuals with low educational level, which implies the need to adapt the information strategies on tobacco-related diseases and available smoking cessation tools to this population.

Analysis of the length of time of tobacco use also revealed that most individuals started smoking during adolescence. For some authors, smoking is a pediatric disease, especially in developing countries. Depressive young people often start smoking and develop severe nicotine dependence. Therefore, the development of actions aimed at preventing the onset of smoking is recommended, especially in PHC.

A study on discontinuation of smoking cessation treatment in the PNCT found that most smokers had performed 1-3 previous smoking cessation attempts. Such information can be used to guide behaviors and interventions in order to avoid the use of practices that have proven unsuccessful.

There are few studies focused on the difficulties of adherence to smoking cessation groups, which made it difficult to promote a more in-depth discussion of the topic in the group. Another limitation of this study is the incompatibility between personal data in the smokers’ records and the reality observed, such as ineligible numbers, incorrect addresses and individuals who had already quit smoking registered as smokers.

**CONCLUSION**

Most people are unaware of the existence of a program targeted to smoking cessation - the PNCT - and its own local initiatives, such as the group interventions for smoking cessation provided by PHC, which may explain low adherence rates.

Thus, focus on active search and the development of new recruitment strategies of individuals in the community are recommended, which include access to transportation, more available times for the group interventions, and the use of a dynamic approach that meets the real needs of the participants. Approaches focused on the factors that trigger a smoking craving - anxiety, depression, stress, eating habits - could be incorporated into the groups interspersed with some moments of more personalized attention. It is believed that these measures can contribute to a successful participation in the program and hence to smoking cessation.
It is also important to emphasize the importance of professional qualification to ensure that the guidelines recommended by the PNCT are applied and that the most suitable therapeutic plan is offered to the user, ensuring accessibility.

Given the lack of studies on adherence to and success of smoking cessation groups, further research is needed on smokers’ concerns and the difficulties related to quitting the habit. Understanding the factors that impact the dynamics of the entire smoking cessation process is essential for the fulfillment of the national smoking cessation guidelines at the local level.

REFERENCES


