Pires, G.A.R.; Charlo, P.B.; Marques, F.R.D.M.; Covre, E.R.; Paiano, M.; Salci, M.A.; Analysis of the smoking control program in a middle municipality in Paraná

DOI: https://doi.org/10.36489/saudecoletiva.2021v11i67p6789-6800

Analysis of the smoking control program in a middle municipality in Paraná

Análisis del programa de control del humo en un municipio medio de Paraná Análise do programa de controle do tabagismo em um município de médio porte do Paraná

ABSTRACT

Objective: To analyze the treatment outcomes for smoking cessation offered by the Basic Health Units, inserted in the Tobacco Control Program, of a medium-sized municipality in the State of Paraná. Method: Documentary, descriptive research with a quantitative approach. The data used included the municipal plans and the documents available at the Municipal Health Department of the municipality from 2015 to 2019. The results were tabulated in the Microsoft Exel 2016 Software, analyzed by descriptive and inferential statistics, using the chi-square test of Pearson with the aid of the Epilnfo version 7.0 statistical environment. Results: During the period analyzed, the municipality assisted 2,339 users. There was a decrease in demand and treatment effectiveness, in addition to an increase in treatment dropout rates. Conclusion: The municipality offers assistance to smokers, as provided for by the National Tobacco Control Program, however, it presents weaknesses for it to occur successfully. **DESCRIPTORS:** Tobacco Use Disorder; Primary Health Care; Smoking Prevention.

RESUMEN

Objetivo: Analizar los resultados del tratamiento para el abandono del hábito de fumar que ofrecen las Unidades Básicas de Salud, insertas en el Programa de Control del Tabaco, de un municipio mediano del Estado de Paraná. Método: Investigación documental descriptiva con enfoque cuantitativo. Los datos utilizados incluyeron los planes municipales y los documentos disponibles en la Secretaría Municipal de Salud del municipio de 2015 a 2019. Los resultados se tabularon en el Software Microsoft Excel 2016, analizados mediante estadística descriptiva e inferencial, utilizando la prueba de chi-cuadrado de Pearson. con la ayuda del entorno estadístico Epilnfo versión 7.0. Resultados: Durante el período analizado, el municipio atendió a 2.339 usuarios. Hubo una disminución en la demanda y la efectividad del tratamiento, además de un aumento en las tasas de abandono del tratamiento. Conclusión: El municipio ofrece asistencia a los fumadores, conforme a lo previsto por el Programa Nacional de Control del Tabaco, sin embargo, presenta debilidades para que esto ocurra con éxito.

DESCRIPTORES: Tabaquismo; Atención Primaria de Salud; Prevención del Hábito de Fumar.

RESUMO

Objetivo: Analisar os desfechos do tratamento para a cessação tabágica oferecido pelas Unidades Básicas de Saúde, inseridas no Programa de Controle do Tabagismo, de um município de médio porte do Estado do Paraná. Método: Pesquisa documental, descritiva, de abordagem quantitativa. Os dados utilizados incluíram os planos municipais e os documentos disponíveis na Secretaria Municipal de Saúde do município do período de 2015 a 2019. Os resultados foram tabulados no Software Microsoft Excel 2016, analisados por estatística descritiva e inferencial, aplicado o teste de qui-quadrado de Pearson com auxílio do ambiente estatístico Epilnfo versão 7.0. Resultados: Durante o período analisado, o município assistiu 2.339 usuários. Observou-se queda na procura e na efetividade do tratamento somado ao aumento nas taxas de abandono do tratamento. Conclusão: O município oferece atendimento às pessoas tabagistas, conforme previsto pelo Programa Nacional de Controle do Tabagismo, contudo, apresenta fragilidades para que o mesmo ocorra de forma exitosa.

DESCRITORES: Tabagismo; Atenção Primária à Saúde; Prevenção do Hábito de Fumar.

RECEIVED ON: 02/17/2021 APPROVED ON: 03/17/2021



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INTRODUCTION

hronic non-communicable diseases (NCDs) represent a global crisis for public health, with tobacco being one of the main risk factors for its development. (1) Tobacco use is responsible for the deaths of 7 million people every year, characterizing a global epidemic.⁽²⁾ If the current consumption trend continues, in the year 2030 there will be about 8 million deaths from tobacco use, 80% of which will occur in low and middle income countries, as is the case in Brazil.⁽³⁾

In the Brazilian scenario, it is estimated that 428 people die daily as a result of smoking, and 12,6% of all deaths registered in the country are related to tobacco consumption. In addition, about 156.216 deaths could be prevented annually with smoking cessation. ⁽¹⁾ Thus, in the country, individual and collective actions focusing on the treatment and prevention of smoking fall under the responsibility of Primary Health Care (PHC), regulated as the main locus of care for the smoker, due to its characteristics as a promoter of comprehensive care and longitudinal, considered necessary components for the management and control of smoking on a continuous basis ⁽⁵⁾ based on the principles and guidelines that make up the National Tobacco Control Program (PNCT - Programa Nacional de Controle do Tabagismo).^(1,4)

The PNCT seeks to reduce the individual, social and environmental harm caused by tobacco products, aiming to reduce the number of smokers and consequently morbidity and mortality. Through educational, communication and health care actions, the PNCT establishes that the approach and treatment must be carried out primarily in the Basic Health Units (UBS), due to their capacity for decentralization and capillarity.⁽⁴⁾ In this context, the Family Health Team (FHS) is a primary strategy for Health Care and proposes to reorganize PHC in Brazil, as it offers a reorientation of the work process with greater potential for expansion and resolution, which can impact in the health situation of individuals. ⁽⁵⁾

They stand out as the focus of actions to be developed by the PNCT within the scope of PHC: to reduce the initiation of tobacco consumption; protect the population against the risks of passive smoking; reduce social acceptance of smoking; increase access to treatment for smokers; control and monitor tobacco

products; and monitor industry trends/ consumer trends. (4)

Thus, the treatment of smoking in Brazil is developed prioritizing the technique of structured counseling/intensive approach in the form of smoking cessation groups. This technique seeks to understand the reasons that lead the individual to smoke, and uses strategies to change beliefs and behaviors, aiming not only at smoking cessation, but also at preventing long-term relapse. In specific cases, medications can be used to support this approach. (4-6)

In this context, the following research question emerged: "What are the treatment outcomes for smoking cessation offered by a medium-sized municipality in the State of Paraná?". To answer this question, the present study aimed to analyze the treatment outcomes for smoking cessation offered by the UBS, inserted in the Tobacco Control Program (TCP), in the city of Maringá/PR.

METHOD

This is a documentary, descriptive study with a quantitative approach that analyzed the outcomes of the treatment for smoking cessation offered by the UBS inserted in the TCP of the municipality of Maringá/ PR, in the period from 2015 to 2019. The choice of this period is justified due to the lack of consistent data from previous years to support the study's analysis.

The municipality of Maringá is considered medium-sized and is located in the Northwest of the State of Paraná, with an estimated population of 430.157 inhabitants. ⁽⁷⁾ Between 2015 and 2017 it had 33 UBS and 68 FHS, and from 2018 there was an expansion of the service with the opening of another UBS and six new FHS, totaling 34 UBS and 74 FHS. ⁽⁸⁾

Data collection took place from March to June 2019 through official documents from the Municipal Health Department of Maringá and monthly and/ or annual reports developed by the UBS of the municipality that offered support groups for smoking cessation. The inclusion criteria were the UBS that offered smoking treatment during the analysis period, and data that contained incomplete information was excluded.

The treatment outcomes for smoking cessation chosen for analysis in this study were: number of groups performed; treatment initiation rate; completion rate; abandonment of sessions; smoking cessation at the end of treatment and use of drug therapy.

The results were organized and tabulated in an electronic spreadsheet in the Microsoft Excel 2016 Software, and were analyzed using descriptive and inferential statistics. Pearson's chi-square test was applied with the help of the Epi Info version 7.0 statistical environment, in which a contingency table with a 2x2 format was elaborated. The level of significance was set at α = 5% (p <0,05), so, for there to be a positive correlation, the p value found should be less than the level of significance.

This study is ethically assessed by the Permanent Project Evaluation Commission - Ordinance No. 009/2017/HEAL-TH and by the Permanent Ethics Committee in Research with Human Beings (COPEP - Comitê Permanente de Ética em Pesquisa) under Certificate of Presentation of Ethical Appreciation (CAAE -Certificado de Apresentação de Apreciação Ética) No. 57222016.1.0000.0104 and Opinion No. 2.278.656.

RESULTS

In the period from 2015 to 2019, the municipality of Maringá / PR assisted a total of 2,339 users in their support groups for smoking cessation in the UBS inserted in the TCP. Of this total, the rate of completion of treatment was 55,7%, abandonment 44,3%, cessation of consumption 30% and use of drug therapy 68,8% (Table 1).

In 2015, a higher rate of initiation to the treatment of smoking cessation was observed (31,3%). Still, 65,5% completed the treatment, 59,7% stopped smoking until the last session and 73,1% used some medication as a support for cessation. Regarding the dropout rate, about 34,5% did not complete the sessions (Table 1). However, these results did not remain constant, and in the following years, falls in initiation rates and, consequently, completion of treatment were observed. In 2016, 64% of users completed the four sessions, and 63,9% ceased tobacco use. In the same year, 72,6% used medication support, and 36% of participants abandoned treatment (Table 1).

In relation to 2017, there was also a decrease in the number of people who started treatment and an increase in the abandonment rate, in which 46,1% abandoned the group and 25,4% ceased tobacco consumption. This year, the rate of users who used medication also remained high, at 77,4% (Table 1).

In the years 2018 and 2019, the number of users who started smoking treatment remained practically stable, but the cessation rate decreased to 12,2% and the abandonment rate increased to 64,4%. Consequently, the rate of medication use also decreased, with 46,9% of users who started the group using some type of medication as a support for smoking cessation (Table 1).

Regarding the development of support groups for smoking cessation by UBS in Maringá, it was observed that the offer over the years has fluctuated and declined. The years 2015 and 2016 were the period with the largest number of activities carried out, with a total of 30 UBS offering at least one group during the year, prevailing those that offered three and one group annually. In the following years, the number of UBS that

cessation, between 2015 to 2019. Maringá/PR, 2021.							
TREATMENT OUTCOME		2015	2016	2017	2018	2019	TOTAL
IREATIVIEN	TOUTCOME	N (%)					
Initiation		733(31,3)	511(21,8)	492(21)	300(12,8)	303(12,9)	2339(100)
Conclusion		480(65,5)	327(64)	265(53,9)	123(41)	108(35,6)	1303(55,7)
Abandonment		253(34,5)	184(36)	227(46,1)	177(59)	195(64,4)	1036(44,3)
Cessation of consu	Imption	287(59,7)	209(63,9)	125(47,2)	46(37,3)	37(12,2)	704(30,0)
Use of Drug Thera	ру	536(73,1)	371(72,6)	381(77,4)	179(59,6)	142(46,9)	1609(68,8)
UBS that held grou	lps	30	30	23	18	16	
C C 11 202							

Source: Survey data, 202. n: absolute number.

held groups decreased, 2019 being the year with the lowest number of groups offered in the municipality. In the same year, 16 UBS held support groups for smoking cessation, with the majority holding two groups in the period, as shown in Table 2.

It is observed that the majority of UBS offered only one group annually, and the total of UBS that did not carry out groups, more than tripled in the period. When analyzing and correlating the extremes of users' participation in the Program, in the years 2015 and 2019, it was possible to observe the level of significance (Table 3). The number of users who completed treatment and ceased tobacco use in 2019 was lower when compared to 2015, as well as the total number of users who started treatment and used some type of medication. However, when observing the level of significance, those users who started the treatment had a significant correlation with the conclusion and with the smoking cessation at the end of the treatment sessions.

DISCUSSION

This study analyzed the outcomes of the treatment for smoking cessation offered by the UBS, inserted in a TCP in the municipality of Maringá/PR in the period from 2015 to 2019. When analyzing the outcomes, it was identified that the treatment offered to the population by the PHC was based in the execution of support groups for smoking cessation on a quarterly basis and conducted by a team of trained health professionals.

Recognizing that smoking has an evolutionary pattern similar to NCDs, and may also show periods of remissions and relapses, the Ministry of Health updated the guidelines of the Health Care Network for People with Chronic Diseases, defining that the identification and reception of smokers must be carried out in all SUS care points, primarily in PHC services. ⁽⁹⁾

PHC was recognized as the main gateway for users to the health services offered by SUS, and it was defined that the

Table 2. Support groups for smoking cessation developed by the Basic Health Units, by quarter, between 2015 to

UBS adherence to the offer of smoking treatment must be carried out by the National Program for Improvement of Access and Quality of Primary Care (PMA-Q-AB - Programa Nacional de Melhoria do Acesso e da Qualidade da Atenção Básica), which aims to increase access and improve the quality of services, ensuring a standard that allows greater transparency and effectiveness of PHC actions across the country. ⁽⁹⁾

The approach to the user who wants to stop using tobacco in the form of a group meeting is an important strategy to assist in the cessation process. These groups have a collective follow-up feature, with periodic meetings that allow the exchange of experiences between participants, allowing the creation of a bond between professionals and users and subsequent follow-up after the end of the group meetings, following the Protocol's proposal. Clinical and Therapeutic Guidelines for Smoking (2020).^(10, 6)

Smoking cessation groups, following the principles of structured counseling/

2019. Maringá/PR, 2021.	Ũ					
GROUPS BY QUARTER	2015	2016	2017	2018*	2019*	GROUPS TOTAL
GROOPS BI QUARTER	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Four	7(21,2)	7(21,2)	6(18,2)	-	-	20
Three	8(24,2)	8(24,2)	4(12,1)	4(11,7)	5(14,7)	29
Тwo	7(21,2)	7(21,2)	7(21,2)	4(11,7)	6(17,7)	31
One	8(24,2)	8(24,2)	6(18,2)	10(29,5)	5(14,7)	37
None	3(9,2)	3(9,2)	10(30,3)	16(47,1)	18(52,9)	50
UBS with Groups	30	30	26	18	16	

Source: reserch data, 2021. *Total of 34 UBS

Table 3. Correlation of user participation in smoking groups in the years2015 and 2019. Brazil, 2020.

YEAR	20	15	20	Р	
TEAR	N	%	N	%	Р
Started treatment	733	303			
Concluded it	480	65,5	108	35,6	0,001
Ceased consumption	287	59,7	37	12,2	0,001
Used medication	536	73,1	172	46,9	0,07
Source: research data, 2020.					

intensive approach, are held in the form of group meetings and must be composed of at least four initial sessions, held weekly. The TCP also recommends maintenance sessions, which should take place after the completion of the weekly sessions. Initially, these should take place every two weeks, with at least two sessions; and a monthly session to prevent relapse until one year after the start of treatment. ^(4,6) The Municipal Health Department offers periodic training to health professionals in accordance with the protocols established by the Ministry of Health, addressing the context of smoking, which include everything from the approach to the smoking user, the symptoms and the recommended methodologies for the treatment and development of groups. ⁽⁴⁾

In 2015, three UBS in the municipality still did not have trained health professionals to carry out these groups. In the following years, all of them had at least one health professional trained by a team to develop the treatment actions, totaling 151 professionals able to develop the actions of the TCP with the population, as recommended by the Ministry of Health. ⁽⁶⁾

To ensure better assistance to these users, the Ministry of Health has made it mandatory to train health professionals who work in smoking cessation groups with training on historical, preventive and pharmacological aspects related to smoking, contextualizing knowledge about tobacco and health policy, smoking prevention and exposure, and also details the approach to the smoker and the role of the health professional in the TCP. ⁽¹¹⁾

Another aspect observed in this study was the decline in relation to the supply and demand for treatment in the municipality. It is noted that the number of UBS that did not carry out any group during the years analyzed increased, and the attendance of users throughout the sessions decreased. The frequency in the group is positively correlated with the success of smoking cessation. Smoking group abandonment was present in all the years analyzed, and the number of participants who abandoned treatment before the end of all sessions was relatively high.

Another study also carried out in the city of Maringá/PR in 2018, pointed out some aspects related to the lack of adherence to smoking cessation groups, such as the difficulty of getting to the UBS (73,43%), the lack of information

about the program (26,56%) and incompatibility with routine or lack of time (17,18%). ⁽¹²⁾

The lack of users' adherence to treatment was also evident in another study that evaluated the performance of a TCP in a UBS in the city of São Luís/ Maranhão in the period of 2017. He observed that despite the municipality's large investment in pharmacological strategies and non-pharmacological drugs for the treatment of smoking, the Program developed in a timid manner,

> In this sense, a more creative and dynamic approach to be adopted in the groups could meet the needs of the participants, added to an approach focused on the triggering factors of the desire to smoke, such as anxiety, depression, stress and eating habits.

with the population not receiving due recognition of the actions to combat smoking offered by SUS. $^{\left(13\right) }$

Non-pharmacological therapeutic interventions for smoking cessation are considered to be a primary strategy to aid in the smoking cessation process, since it has an effective cost-benefit ratio, allowing simultaneous assistance to multiple people, making the individual feel welcomed and be able to share experiences and challenges. ⁽¹²⁾

The approaches used initially involve evaluations related to comorbidities, smoking history and degree of nicotine dependence assessed by the Fagerström test. After the initial interview, the user is placed in groups of cognitive-behavioral therapy (CBT), in addition to drug therapy (patches, chewing gum and pills) to users with a high level of chemical dependence on nicotine.⁽⁴⁾

The use of CBT as the only strategy also does not seem to favor the continuity of treatment for smoking cessation, ⁽¹¹⁾ which reinforces the idea of adjusting the group to the reality of the population, adapting the therapy to be used, aiming at a higher adherence rate and, consequently, abandoning tobacco consumption. In a Cochrane review, it was found that interventions that combine CBT with drug support increase the success of smoking cessation when compared to isolated interventions. ⁽¹⁴⁾

In this sense, a more creative and dynamic approach to be adopted in the groups could meet the needs of the participants, added to an approach focused on the triggering factors of the desire to smoke, such as anxiety, depression, stress and eating habits. Such factors could guarantee greater success in the participation of users in the activities of the Program and in the cessation of smoking. ⁽¹²⁾

Regarding the use of medication as an aid to treatment, there was a high incidence in all the years analyzed. It is known that drug treatment significantly increases the chances of smokers reaching cessation, however, it plays an auxiliary role in monitoring the individual, contributing to the relief and control of the signs and symptoms of withdrawal crises. $^{\rm (4)}$

A study on the motivational factors for the reduction or cessation of smoking and difficulties faced in this period, refutes that withdrawal symptoms are barriers encountered by people who wish to cease tobacco consumption, reinforcing that the use of pharmacological therapy, as support for the smoking cessation is essential for successful treatment, especially when associated with behavioral interventions.⁽¹⁴⁾

It is noteworthy that the number of people who used some type of medication is relatively greater than the number of participants who completed the treatment and achieved smoking cessation. This reality points out that people start treatment, remove the medication and then abandon it.

From the study carried out, there was a drop in the number of users who com-

pleted the treatment and ceased tobacco consumption in 2018 when compared to 2015, which reinforces the need to foster the formation of new groups, as well as the use of more effective therapeutic approaches.

The limitation of the study appears in the fact that the data only portrays the reality of a municipality in the state of Paraná, which makes it impossible to generalize the results obtained to other realities in the country. In this sense, it is suggested to carry out further studies to discuss this topic, aiming to assess the outcomes of smoking treatment, seeking to understand how the treatment offered for smoking cessation has impacted the lives of users who seek it through the TCP.

CONCLUSION

Analyzing the outcomes of the treatment for smoking cessation offered by the UBS inserted in a municipal TCP in the State of Paraná allowed us to identify that the treatment was centralized in the offer of support groups for smoking cessation conducted by trained health professionals. Despite investments in the training of these professionals, there is a fall in relation to the numbers related to smoking cessation at the end of the groups and the offer of this treatment by the UBS, with a significant increase in the number of Units that did not develop any group annually. In addition, there is a decrease in users who started smoking treatment in the municipality.

Thus, investments by PHC managers and health professionals in improving this treatment are recommended, considering the emerging need for assistance to the smoking population, given the long-term consequences of smoking for users and the health system.

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