Quando as Medicinas Interna e Familiar se unem… consulta de cessação tabágica: estudo retrospectivo de 2 anos

When general practice and Internal Medicine work as a team - stop smoking clinic: a 2-year retrospective study

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Resumo

O Tabagismo continua a ser uma causa importante de morbilidade e mortalidade a nível mundial. Após breve descrição do nosso projeto da Consulta de Cessação Tabágica implementado num Centro de Saúde, caraterização e análise dos dados, as autoras apresentam os resultados do estudo descritivo e retrospetivo após dois anos de consulta. A taxa de cessação foi de 25,0% e a de abandono de 28,5%. Os casos de insucesso foram mais prevalentes nos grupos etários mais jovens e em apenas dois doentes se verificou reação adversa à terapêutica instituída. A cooperação entre a Medicina Interna e a Medicina Geral e Familiar mostrou-se fulcral na concretização dos objetivos a que nos propusemos na luta contra o tabagismo.

Palavras chave: tabaco, tabagismo, consulta, cessação tabágica.

Abstract

Tobacco addiction is a major cause of morbidity and mortality worldwide. After a brief description of our project for a Stop Smoking Clinic in a HealthCare Center and data analysis, the authors present the results of a descriptive, retrospective study after a two year experience with this clinic. The success rate was 25% and the rate for quitting the clinic was 28.5%. The worst results were more prevalent in younger age groups. Only two patients reported adverse effects with treatment. The cooperation between General and Internal Medicine was essential in achieving our goals against tobacco addiction.

Key words: tobacco; stop smoking, clinic.

INTRODUCTION

Tobacco consumption kills 6 million people every year, all over the world,[1] around half a million within the European Union,[2] and without effective preventive steps, it can cause the death of around a billion people in this century.[1,3] The United States of America is responsible for 30% of the total of deaths due to cancer and 80% of the total deaths by lung cancer.[4]

Cardiovascular atherosclerotic disease, lung cancer and Chronic Obstructive Pulmonary Disease (COPD) are the three main causes of deaths tobacco related (CDC).

Such data make smoking the main cause of avoidable death.

Situation in Portugal

Around 20% of Portuguese people over 18 years of age smoke daily. In 2005/2006 the prevalence of smokers in Portugal was among the lowest at European level, being only overtaken by Sweden. However such prevalence has been kept constant since 1995/1996, whilst in most European countries has been decreeasing.[5]

Men smoke more than women (28% versus 11%), but, in the last 10 years, a worrying increase has been seen in the prevalence of smoking among women (from 8 to 11%) while in men it has been decreasing (from 33 to 29%).[5] Portugal is still the only European country where a positive correlation between tobacco and social economic strata: the higher it is, higher is smoking prevalence.

The Estudo Comparativo dos Custos e Carga da Doença Atribuíveis ao Tabaco e ao Álcool (Comparative Study of Costs and Disease Charge Caused by Smoking and Alcohol),[6] carried out in our country, brought some important conclusions:

• Smoking has no benefit to human health, not even in moderation.

• Smoking is the main cause of avoidable death killing three times more than alcohol. In 2005 was responsible for 12.615 deaths (11.7%), in a total of 107.839 deaths.

• While estimating the disease general charge, one can see that the years of life lost adjusted by disability (*Disability Adjusted Life Years - DALY's*) for diseases caused by smoking were 145.801 (3.5 times higher than alcohol). Such measure gives us the value of life years lost due to death and disability (decrease on the quality of life) caused by smoking. Respiratory diseases (49.4%) and cancer (26%) were the main sources of the disease charge.

• From an economic point of view, it generates costs for the National Health Service (Serviço Nacional de Saúde - SNS) 2.6 times higher than those caused by alcohol. Costs of around 126.2 million Euros caused by hospitalizations due to smoking and 364 million Euros for costs in outpatients clinics, being the total cost of 490 million Euros. It was also estimated than if the whole population would stop smoking it could save around 171 millions Euros to the SNS.

It still is one of the main causes of cardiovascular diseases, and knowing these are the main cause of disability and death in Portugal, it is urgent to fight such epidemics.[7,8]

Such issue has been a source of concern for the Health Department (Direção Geral de Saúde - DGS) as it can be seen with the document "COPD – Rules for a Good Practice on Smoking Cessation"[9] and "Stop Smoking: Program – Type of Action".[10]

In Madeira Autonomous Region (Madeira), that in 2005-2006 had a prevalence of 20% active smokers (source: National Institute of Statistics, 4th National Health Survey, 2005-2006), some investment has been also made in such direction. Outpatients' appointments for stop Smoking have been offered in Hospital dos Marmeleiros (Pneumology) and in Health Centers (HC) in Madeira West and Central Areas.

Specialties as Internal Medicine and General and Family Practice deal daily with different spectrums of tobacco related diseases. In the perspective of the Family Doctor, to whom is imposed a preponderant role in prevention, is often difficult to conciliate an effective approach to stop smoking with the daily work load and with the complexity and specificity of the medical act in each appointment.

Therefore, it makes sense to create a Stop Smoking Clinic in the Island Eastern Area based in team work between the General and Family Practice and Internal

TABLE I

General and specific objectives of the Stop Smoking Clinic

General objectives
• To reduce the number of smokers, morbidity, hospital admissions and early mortality due to smoking related diseases and this way, to contribute to get some health gains and quality of life and the reduction on economic, individual and social costs resulting from these diseases treatments

Specific objectives
• To encourage people to acquire a healthy life style and habits • To increase the proportion of a physically active population • To prevent and/or manage an eventual weight increase

Medicine enabling the follow-up, the therapy orientation and the prevention of relapses in smokers wanting to quit smoking.

OBJECTIVE

This publication aims to divulge the characterization and assessment of results obtained since the onset of the Stop Smoking Clinic in the Health Centre of Santo da Serra – Madeira East Area (February 2010 to February 2012).

MATERIAL AND METHODS

A project was designed for the Stop Smoking Clinic implemented in the beginning of February 2010 in a Health Centre serving around 2500 people in Madeira Island East Area, having as model the proposed by Rebelo, L.[11] and following the Health Department guidelines.[9]

The general and specific objectives of the clinic are defined in *Fig. 1*. Criteria were established for clinical referral, although not closed, smokers motivated for stop smoking, with a consumption of ≥ 20 cigarettes per day and a moderate to high degree of addiction (Fagerström's Test ≥ 3, see below).

Patients screening is made by the Family Doctor with a quick enquiry on the smoking habits and predisposition to quit smoking. Having such predisposition, he offers help and refers the patient to the Stop Smoking Clinic made by the Internist who will attend weekly the Health Centre, out of his working schedule as a volunteer, and/or by the Family Doctor according to their availability.

In the first appointment tests are carried out to evaluate the degree of nicotine addiction and the degree of motivation, using respectively the Fagerström's Test

1- How long after getting up do you smoke your 1st cigarette (minutes)?

☐ < 5 (3) ☐ 6 a 30 (2) ☐ 31 a 60 (1) ☐ > 60 (0)

2- Is it difficult for you not to smoke in places where it is not allowed to smoke?

☐ Yes (1) ☐ No (0)

3- Which is the cigarette more difficult to quit?

☐ The first one in the morning (1) ☐ Any other (0)

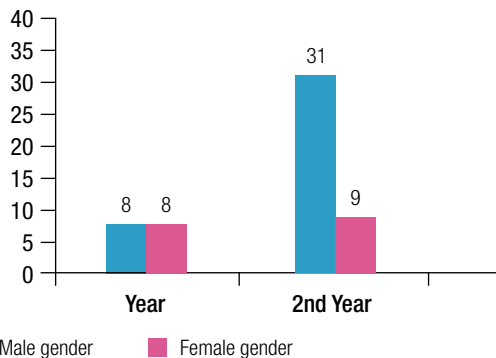**4- How many cigarettes do you smoke every day?**

☐ < 10 (0) ☐ 11 - 20 (1) ☐ 21 - 30 (2) ☐ > 31 (3)

5- Do you smoke more at the beginning of the day?

☐ Yes (1) ☐ No (0)

Fagerström's test

FIG. 1

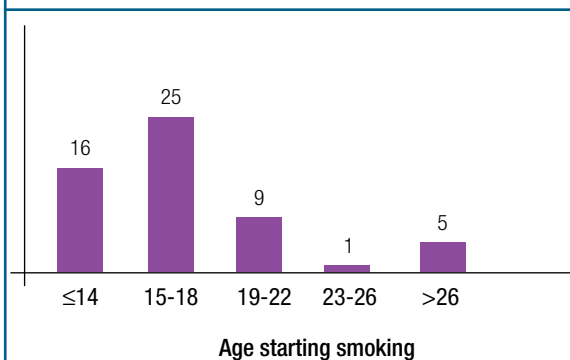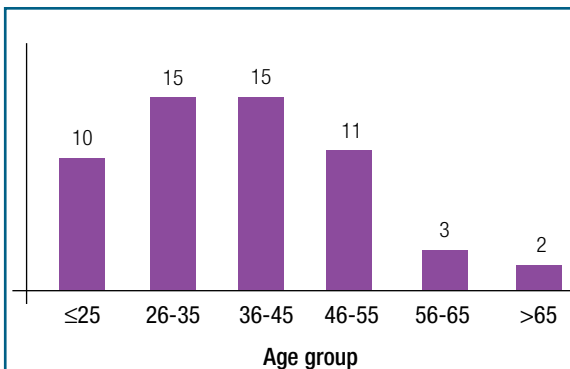Patients distribution by age group and age they have started smoking (n=56)

FIG. 3

Patients distribution by gender and year (n=56)

FIG. 2

(Fig. 1) and the visual analogic scale from 0 to 10. The smoking load was measured in terms of units/packs/year (packs/year) and to estimate the general cardiovascular risk was used the *Systematic Coronary Risk Evaluation* (SCORE). The calculation of the cessation rate was made as follows: % of patients in maintenance stage / total no. of patients × 100, the maintenance stage refers to those patients who quitted smoking for at least 6 months, without relapses.

Each patient is approached according to the indi-

viduality and specificity of each case. The cessation strategy is always negotiated with the patient never imposed. However, the patient is informed that lack of motivation and/or noncompliance with the minimum objectives imposed are criteria for being discharged from the clinic.

Two years after the clinic had started, the following variables were characterized and analyzed: gender, age, pathologies background, no. of appointments, results of Fagerstrom's test and the degree of motivation, the smoking load, cardiovascular risk, cessation and drop out, number of referrals to a nutritionist /psychologist, whether to use pharmacotherapy and respective monitoring of adverse events.

RESULTS

In 2 years, 56 patients were observed, 16 in the 1st year and 40 in the 2nd year *(Fig. 2)*, in a total of 292 appointments (average of 5 appointments per patient). Around 70% were male and the average age was 38 years (minimum 16, maximum 73). 54% (n=30) of patients

TABLE II

Comorbidities distribution (n=56)

Dislipidemia	16
High blood pressure	13
Alcoholism	10
Depressive syndrome	5
Obesity	5
Peripheral vascular disease	4
Asthma	3
Diabetes mellitus type II	3
Drug addiction	3
Sudden death of a close relative	2
Epilepsy	2
Copd	2
Ankylosating spondylitis	2
Neoplasm in close relative	2
Pulmonary thromboembolism	1
Gout	1
Hyperthyroidism	1
Basal cellular carcinoma	1
Abdominal aorta aneurisma	1
Cardiomyopathy	1
Renal lithiasis	1
HIV	1
Vascular cerebral disease	1
Without background	11

Patients distribution by level of addiction (above) and level of motivation (below) l(n=56)

FIG. 4

was within the age group between the 26 and 45 years of age *(Fig. 3)*.

The average age when the smoking habits started were of 17 years (minimum 6, maximum 38), with 73% (n=41) being ≤18 years of age and 29% (n=16) ≤14 years *(Fig. 3)*. In this sample patients would smoke in average 27 cigarettes per day (minimum 7 and maximum 60) (non-exhibited data).

The more prevalent comorbidity were dyslipidemia (29%), high blood pressure (23%) and alcoholism (18%), and 20% (n=11) of patients were previously healthy *(Table II)*.
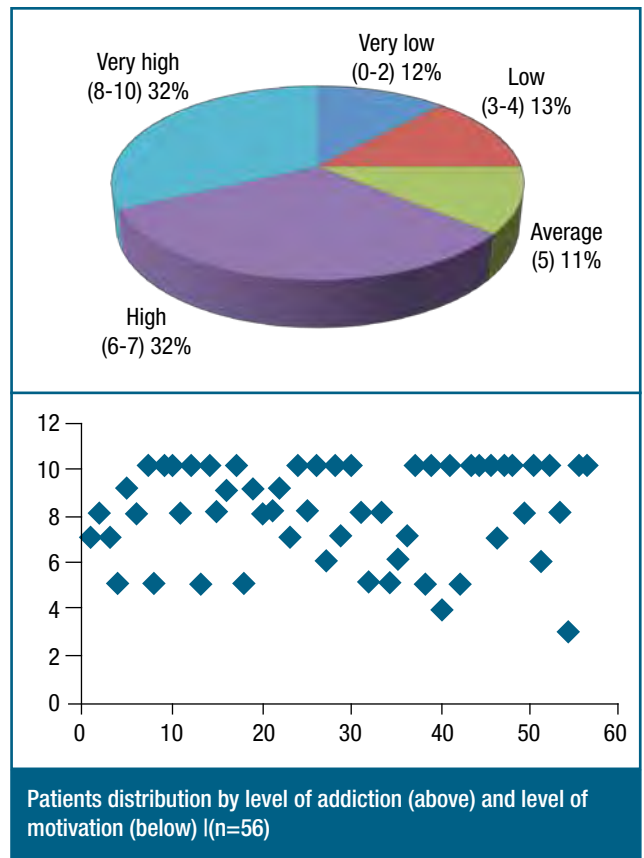
Most patients had a reason to quit smoking whe-

ther health or money as around 23% were unemployed (data not showed).

The average smoking load in this sample was 29 pack/years (min. 1 and maximum 100) with 53% of cases having over 25 pack/years (data not showed).

The Fagerström's test average was 6, with 64% of patients presenting a high result (6-7) or very high (8-10) *(Fig. 4)*. The average for level of motivation was 9.

Regarding the therapy implemented, all patients have been subject to behavioral therapy but only 39% went through such intervention, while 34% were medicated with varenicline, 29% with nicotine replacement therapy (NRT) and 2% with bupropion *(Table III)*. Two patients showed intolerance to varenicline (nausea and vomiting) but only in one of them was withdrawal necessary.

The stop smoking rate (patients in maintenance stage) was 25% (n=14) *(Fig. 5)*. If we consider patients who are not actually smoking (patients in a stage of action and maintenance) the percentage raises to 43% (n=24). At present 28.5% (n=16) are keeping

TABLE III

Implemented therapy (n=56)

	n	%
Nicotine replacement therapy	14	25%
Varenicline	19	34%
Bupropione	1	2%
Only behavioral therapy	22	39%

Visit Outcome (n=56)

FIG. 5

■ Patients quitting smoking / maintenance stage*

■ Patients quitting smoking – action stage **

■ Patients keeping on smoking

■ Patients dropping out the clinic

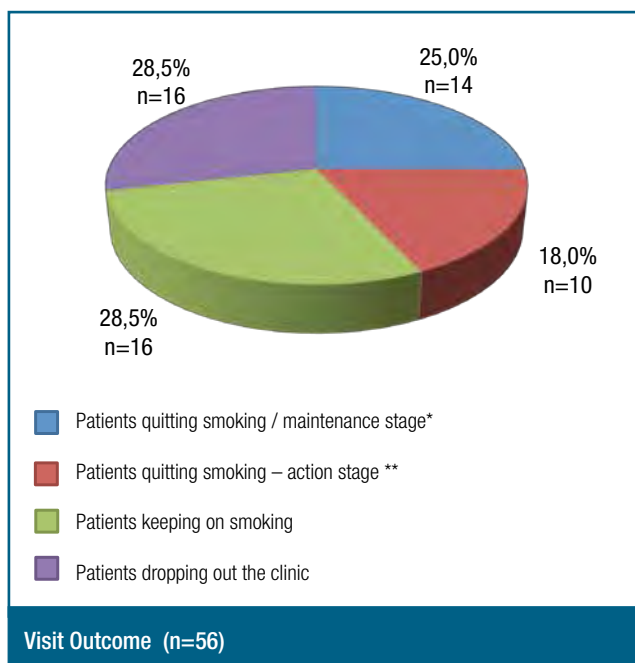Clinic drop out rate (n=16)

FIG. 6

their smoking habits, although reduced regarding their usual. 5% (n=3) of patients were referred to a nutritionist.

The clinic drop out rate was 28.5% (n=16) *(Figure 6)*: 56% (n=9) have given up the clinic, 25% (n=4) were discharged by lack of motivation and non compliance with the proposed objectives and 19% (n=3) moved home. The average age in this group was 36 years old.

When we compare some characteristics of patients in maintenance stage with those who did not quit smoking *(Table IV)* we see that in the first group the smoking load, the addiction degree was higher (32 vs. 27 e 7 vs. 6 respectively).

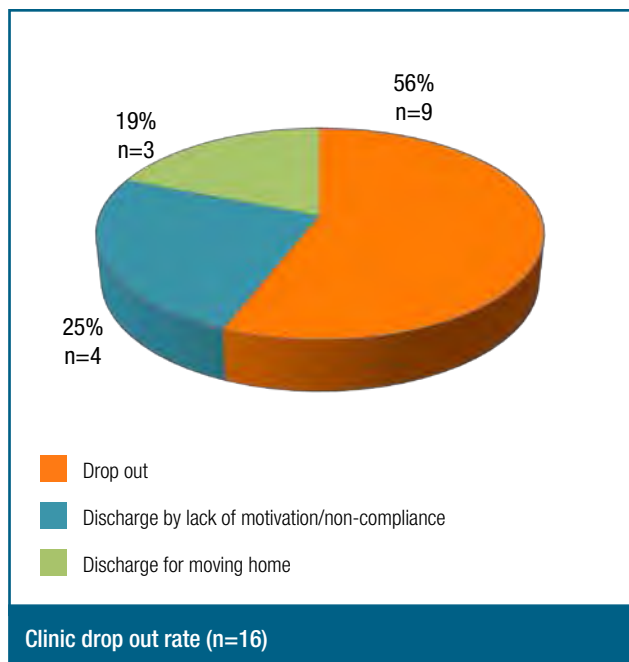At present, 71.5% (n=40) are still active in the appointment and have an average cardiovascular risk (SCORE) of 3% (minimum 0 and maximum 19%). Patients who are at present in a maintenance stage had an average SCORE decrease in 2% (minimum 0 and maximum 11%) (data not showed).

DISCUSSION AND CONCLUSION

At present, smoking is considered a disease, conversely to what happened in the past where it was considered just a socially accepted bad habit.

Comparing with the 1st year, it was seen an increase on the demand/referral to the 2nd year clinic, showing by an increase of the no. of patients to 150%. This was due to a good acceptance and access on the part of Health Center users who encouraged relatives and friends to attend the clinic. An interesting aspect which was seen, in a small village, was the encouragement among the patients themselves, challenging each other to quit smoking.

Interestingly, COPD patients were poorly represented in such sample. Although we had the concern of recruiting COPD patients, the lack of motivation and inertia to quit smoking accounted for refusal to join the clinic.

As it has been described in the literature, we verified with our experience that higher it is the number of appointments per patient, higher is the success on cessation. As it should be expected, patients who are

TABLE IV

Characteristics of patients who quitted smoking in relation with those who did not

	Patients quitting smoking – maintenance stage	Patients dropping out the clinic
Average starting age (years)	17	18
Smoking load (packs/year)	32	27
Fagerström's test	7	6
Level of motivation	8	8

not smoking at present have shown a higher degree of motivation and a lower addiction degree albeit there is only a small difference between the two groups.

After a two years experience it was seen a cessation rate reaching (25%) which is within the objectives we had initially outlined (20 a 30%) but well below the results achieved in a national series published with a cessation rate at one year of 42.4% (sample of 536 patients).[12] Probably this is due to the fact the sample is small and to the adjustment of the referral criteria which was strict from the moment the appointments started regarding motivation.

The surprising finding was the group of patients in maintenance stage had higher smoking loads and addiction degrees when compared to patients who dropped out the clinic, has shown to us that failure was not related with the measure of such factors but more likely with the lack of motivation after the first appointment.

We are concerned with the cases who failed due essentially to the patients lack of motivation to quit smoking. We highlight the fact that in such sample, 73% started smoking in their teens. It is necessary to intervene more actively in this age group which is difficult to approach. Effectively the most challenging cases in our clinic were adolescents (n=3). The financial argument does not reach them directly because they rely on a third party for their living, and the health argument is hardly effective at this stage. The argument we try to highlight was the look (early ageing) and the physical performance they realize is below what they expect. In the three cases, patients did not come to the clinic of their own free and spontaneous will although they had accepted to attend it. One of them was by parental imposition what was not effective in the cessation, the other was

due to a pregnancy having in the meanwhile moved home and keeping on smoking, and lastly the third one was initially due to money issues and later due to a pregnancy. In this last case, the patient attended the clinic for over a year and at present the patient is an active stage.

With this work, the authors still aim to highlight the importance of cooperation between Family Practice and Internal Medicine that, we deem ever more necessary. The multidisciplinary approach in this target population and the team motivation, that includes the patient, are crucial in reaching the objectives we aimed in the fight against smoking. ■

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