

# The Italian National Institute of Health helpline to quit tobacco and nicotine dependence: 20 years of activity

Luisa Mastrobattista, Renata Solimini, Guido Mortali, Rosilde Di Pirchio, Graziella Lanzillotta, Piergiorgio Massaccesi, Claudia Mortali, Simona Pichini and Ilaria Palmi

*Centro Nazionale Dipendenze e Doping, Istituto Superiore di Sanità, Rome, Italy*

## Abstract

**Introduction.** Tobacco use is one of the world's leading preventable causes of death and is a major preventable risk factor of non-communicable diseases. Although smokers are aware of the health risks, their attempts to quit often fail, primarily due to the strong nicotine and/or tobacco dependence. Antismoking helplines have become an integral part of tobacco control efforts in many countries. In Italy, the ISS Antismoking Helpline is active since 2000.

**Material and methods.** The professional staff of the ISS Antismoking Helpline have gathered socio-demographic and smoking-related data via an electronic form, related to the received calls. The collected data have been processed in a dedicated database and analyzed to monitor the use and the quality of the service. In this study, a descriptive statistical analysis was conducted to inform about the activity of the helpline over the years.

**Results.** From May 2003 to June 2023 the helpline received 99,423 calls. Most smokers called to receive "support to quit" (82.6%). Counselling was provided in 11.4% of cases, and in the last two years has been strongly increased (40.0% of cases). The percentage of users requesting information on emerging tobacco and nicotine products is 1.2%, even if in 2023 this percentage has risen significantly (6.0%). Two legislative measures (in 2012 and in 2016) required to add the helpline number to all packets of tobacco cigarettes. Accordingly, the offer of counselling increased from 2.6% to 12.2%.

**Conclusions.** The available resources in tobacco control, including the helpline, are still not sufficient to meet all the users needs. Adequate policies and stable funding to fight tobacco and nicotine dependence need increased commitment from government institutions to ensure equal access to treatments for all Italian citizens.

## Key words

- tobacco dependence
- nicotine dependence
- smoking cessation
- antismoking helpline

## INTRODUCTION

Tobacco smoking is the main cause of preventable mortality worldwide: every year more than 8 million deaths are attributed to tobacco smoking, including around 1.2 million deaths from exposure to second-hand smoke. There is no safe level of exposure to tobacco (<https://www.who.int/news-room/fact-sheets/detail/tobacco>). In Italy, 10.5 million people are smokers are (20.5% of the population): 6.3 million males (25.1%) and 4.4 million females (16.3%) [1]. It is estimated that 17% and 6% of the total amount of deaths were attributable to smoking in Italian males and females, respectively [2].

Because of the governments efforts in high-income countries, the last decade has witnessed some profound changes in the global market for tobacco products and

many countries have seen a steady decrease in the prevalence of tobacco use [3]. Accordingly, new devices, such as electronic nicotine delivery systems (ENDS or e-cigarettes) or heated tobacco products (HTPs) have appeared on the market, becoming increasingly popular among consumers [4]. Users are attracted both by their design and by the tobacco industry's claims that such products contribute to "harm reduction" in current smokers. Unfortunately, the long-term health risks are still unknown and it is highly probable that they lead or maintain nicotine dependence [5]. Anyway, it is important to understand how they affect the behavior of smokers who wish to quit, adult non-smokers and the young people who never started to smoke. In Italy, e-cigarettes users (occasional+habitual) are 2.5% population (about 1,300,000 people). Instead, HTPs are used

(regularly or occasionally) by 3.7% Italian population, approximately 1,900,000 people. These products are mainly used by smokers in association with the traditional cigarettes (dual users), adding to the harm of smoking, the health risk from the use of these new electronic devices [1].

Conventional cigarettes, e-cigarettes and HTPs contain nicotine. Nicotine is strongly addictive: it is estimated that a quarter of teenagers can become dependent upon it after smoking just three or four conventional cigarettes, and after smoking five packs, nearly 60% are dependent [6]. People addicted to nicotine, can greatly benefit from a range of effective tobacco cessation interventions. Without cessation support, only around 4% of attempts to quit tobacco are successful [7]. Tobacco/nicotine dependence may need persistent and repeated therapeutic interventions (either pharmacological or behavioural, even combined), as well as long-term follow-up until complete cessation is achieved [8].

The article 14 of the WHO Framework Convention on Tobacco Control (WHO FCTC) states that “each party shall take effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence” and “all parties should offer easily accessible and free quitlines in which callers can receive advice from trained cessation specialists” [9].

In many countries worldwide there are toll-free numbers known as “quitlines” or “helplines” to help smokers in quitting their dependence (<https://www.who.int/campaigns/world-no-tobacco-day/2021/quitting-toolkit/toll-free-quitlines>), providing easily accessible screening, counselling, call backs, mailing materials and referrals to community resources such as tobacco cessation services and support groups. Some quitlines also provide Internet and medication support, recorded messages, and automated responses via e-mail and text [10].

One important advantage of quitlines is their accessibility: they are particularly helpful for people with limited mobility and those who live in rural or remote areas [11].

Tobacco quitlines were developed during 1980s in UK, Australia and the United States [10]. In 1985 and 1988, call-in services were established in the Australian state of Victoria and in England, respectively. Quit Victoria and UK quit were the first broadly accessible telephone lines dedicated exclusively to helping smokers quit and had roles in the later development of quitlines in Australia and Europe [12].

From December 15, 2011 until May 31, 2013 (website maintained until June 20, 2015), the North American Quitline Consortium developed and implemented the pilot project Global Quitline Network, dedicated to supporting nations with new quitlines, and to implementing WHO FCTC cessation-related obligations (<https://www.naquitline.org/page/GQN>).

Currently, there are scores of publicly supported quitlines around the world. They exist in states as USA, Canada and Australia, in most European countries, and in several other parts of the world. As to Europe, according to the WHO, almost all 27 European Union Member States (EU MS) have a quitline, with the exception of Cyprus, Greece, Lithuania, and Portugal. The

quitline in France is not toll-free (<https://www.who.int/campaigns/world-no-tobacco-day/2021/quitting-toolkit/toll-free-quitlines>). Smokers that use quitlines increase their absolute quit rate by 4 percentage points, which represents a doubling of success compared to those who attempt to quit without support [13]. This rate can be further increased if the quitline is “proactive” and counsellors make follow-up calls to potential tobacco quitters.

This paper describes the results of 20 years of activities of the Antismoking Helpline (Telefono Verde Fumo, TVF), of the National Centre on Addiction and Doping (Centro Nazionale Dipendenze e Doping) at the Italian National Institute of Health (Istituto Superiore di Sanità, ISS).

## MATERIAL AND METHODS

The TVF service was established in 2000 and has been providing services that include current legislation information, counselling, cessation-related information and self-help quit tools to help smokers who wish to quit, to support the people in their fight against second-hand smoke, and to facilitate health promotion activities. ISS was the first public authority to use the toll-free helpline addressed to the population and specific targets with the aim to constitute a bridge between the citizen and the healthcare system [14]. The TVF has been set up not only to support smokers to quit, but also to provide counselling and information to no-smokers (with the aim to suggest the strategies for protection from second-hand smoke), health professionals, social workers, teachers, public institutions (the latter with the aim to cooperate in carrying out studies and health protection campaigns). Psychologists skilled in the telephone counselling and in the tobacco-related issues use the communicative-relational operating model of telephone communication, a specific method of telephone communication in public health, to provide evidence-based information or to help users in recognizing personal, familiar and environmental resources to make their own decisions and informed choices to modify their behavior. In this method, technical-scientific and relational-communication skills are combined to ensure a customized intervention on the individual needs, within a welcoming and not judgmental approach.

The TVF operates Monday to Friday, 10 am to 4 pm, with voicemail active outside these hours and on public holidays. The calls are anonymous and free of charge. Upon receiving a call, the professional staff gather socio-demographic and smoking-related data via an electronic form. The collected data are then processed in a dedicated database and analyzed to monitor the use and the quality of the service to inform policy decisions, and support practitioners and researchers in designing effective interventions.

## Reference legislative framework

The actions of TVF have taken place within the context of two recent EU legislative measures. In 2012 Italy adopted the EU Directive 2012/9/EU, which required the inclusion on tobacco packets of additional warnings from the specific list of fourteen warnings set out in the Annex of the Directive [15]. As the specific warning

“Quit smoking stay alive for those close to you” had to be completed by a reference to the telephone number/web site of the helpline/cessation service, the TVF has been added in rotation on the packets. In 2016, Italy adopted the EU Tobacco Product Directive 2014/40/EU [16], which established that each unit packet must carry combined health warnings, including information on how to quit smoking (e.g., telephone numbers, e-mail addresses or websites). Therefore, the TVF has been added to all packets.

### **Reactive and proactive counselling**

TVF offers the possibility of choosing a path to stop smoking, consisting of several telephone sessions, based on reactive or proactive counselling. In the reactive mode it is the smoker who calls back according to the shared calendar, maintaining anonymity. In the proactive mode the user has to leave anonymity to be called back and followed by the same professional throughout the support process. In both reactive and proactive modes, a schedule of phone sessions with the specialist is planned to develop the necessary skills in the individual to activate processes of change and empowerment, and to guide them through the stages of change preparation, abstinence, and maintenance. The protocol is an adaptation of the methodology proposed by the WHO [10] and combines elements of problem solving and coping strategies, with elements of emotional and motivational support.

### **Smoking cessation services (SCS) updates**

Since 2000, the TVF has been taking a census and updating the network of SCS, to provide citizens with up-to-date information on the registry of services, the assistance provided, and how to access them. All the services belong to the National Health Service, to the Italian League Against Cancer (Lega Italiana per la Lotta contro i Tumori, LILT) or to the “private social” sector.

The SCS offer specialized and diversified paths to quit smoking mainly providing evidence-based intervention such as pharmacotherapies, individual and group counselling, with the assistance of a multidisciplinary team of professionals including physicians, nurses and psychologists.

Recently, the online platform “Smettodifumare” (“quitsmoking”) website (<https://smettodifumare.iss.it/>) was launched, primarily dedicated to those ready to quit smoking and also to those who are still considering it. Thanks to this new platform, smokers can now use the updated geolocated map to identify the SCS that best meets their needs.

### **Collection of information on emerging tobacco and nicotine products**

Recently TVF started to monitor how people perceive these emerging tobacco and nicotine products and how they affect the behaviour of smokers who wish to quit, adult non-smokers and the young people who have never started smoking, and to provide scientific information about their safety and health risks on the long-term.

## **RESULTS**

Although TVF has been active since 2000, the following results cover the period 2003-2023, as callers data has been systematically collected since 2003. From May 2003 to June 2023 the helpline received 99,423 calls, excluding inappropriate calls ( $n=14,806$ ). Therefore, our descriptive analysis concerned a total of 84,617 calls. Trend overtime of the calls is shown in *Figure 1*.

The calls came from all over the national territory, with the North being the most represented region in Italy (33.4% of total calls). Most callers were smokers themselves (86.4%), although other calls were from family and friends seeking help for their loved ones to quit smoking (5.7%) (*Table 1*).

Two-thirds of the users were male (62.4%) and all age groups were represented, although the 46-55 age group was the most represented (15.7%). Specifically, 25.2% of callers were up to 35 years old (4.7% young people <18 years old), 43.4% were adults 36-65 years old and 14.3% were over 65 years old (2.8% >75 years old).

Most smokers contacted the helpline to receive “support to quit smoking” (82.6%). The 7.7% callers asked for information about SCS (e.g., how to access them, their smoking cessation programs), while 2.3% requested health information, therapies and legislation. The 1.1% of callers asked for information about new tobacco and nicotine products.

The TVF number was found by 79.4% of the callers on the cigarette pack.

### **Reactive and proactive counselling**

Among the services offered by the TVF, the direct intervention of the specialist (providing counselling and self-help material) concerned 23.3% of the users: in particular, counselling was provided in 11.4% of cases, although in the last two years has been significantly increased by 40.0%. Moreover, the offer of counselling increased from 2.6% (period 1) to 12.2% (period 2). Health information represented 18.0% of the total information provided by the helpline staff (*Table 2*). Reactive counselling has been implemented on an experimental basis from 2019, while proactive counselling has been implemented from 2020. Currently, the number of smokers enrolled is too small to proceed with an evaluation of the intervention. Since 2018, the number of calls per year has experienced a decrease (*Figure 1*), likely due to both the increase in the average duration of each call, i.e., from about 3 minutes (2003-2018) to approximately 7 minutes (2019-2023), and the implementation of reactive and proactive counseling.

### **Reference legislative framework**

In order to assess the impact of the two legislative measures above described [15, 16], the TVF calls were divided into two periods, corresponding to the entry into force of the two acts: from 2<sup>nd</sup> of May 2003 to 31<sup>st</sup> of December 2012 (period 1) and from 1<sup>st</sup> of January 2013 to 30<sup>th</sup> of June 2023 (period 2) (*Table 1* and *Table 2*).

A significant increase in the number of calls from smokers was observed: 65.6% in period 1, rising to 90.2% in period 2.

As regards to the gender, the male callers increased

**Table 1**

Italian Antismoking Helpline (Telefono Verde Fumo, TVF): main characteristics of the users (from the 2<sup>nd</sup> May 2003 to the 30<sup>th</sup> June 2023)

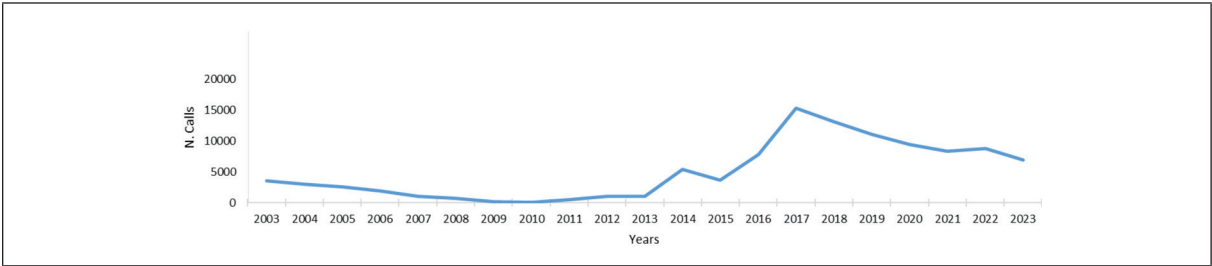
		Total period (2 <sup>nd</sup> of May 2003-30 <sup>th</sup> of June 2023)		Period 1 (2 <sup>nd</sup> of May 2003-31 <sup>th</sup> of December 2012)		Period 2 (1 <sup>st</sup> of January 2013- 30 <sup>th</sup> of June 2023)	
		Number (N)	Percentage (%)	Number (N)	Percentage (%)	Number (N)	Percentage (%)
<b>TOTAL CALLS*</b>		84,617					
<b>Gender</b>	Male	52,787	62.4	6,272	48.1	46,515	65.0
	Female	31,830	37.6	6,762	51.9	25,068	35.0
<b>Age</b>	<18	3,984	4.7	98	0.8	3,886	5.4
	18-25	8,796	10.4	363	2.8	8,433	11.8
	26-35	8,563	10.1	1,216	9.3	7,347	10.3
	36-45	11,799	13.9	1,913	14.7	9,886	13.8
	46-55	13,298	15.7	1,417	10.9	11,881	16.6
	56-65	11,668	13.8	927	7.1	10,741	15.0
	66-75	8,050	9.5	271	2.1	7,779	10.9
	>75	2,390	2.8	30	0.2	2,360	3.3
	Not indicated	16,069	19.0	6,799	52.2	9,270	13.0
<b>Geographic area of callers</b>	North-west	18,697	22.1	3,222	24.7	15,475	21.6
	North-east	9,585	11.3	1,344	10.3	8,241	11.5
	Centre	16,403	19.4	2,720	20.9	13,683	19.1
	South	20,294	24.0	2,336	17.9	17,958	25.1
	Islands	9,863	11.7	1,160	8.9	8,703	12.2
	Not indicated	9,775	11.6	2,352	17.3	7,423	10.4
<b>Type of callers</b>	Smoker	73,086	86.4	8,548	65.6	64,538	90.2
	Relative/friend	4,784	5.7	1,538	11.8	3,246	4.5
	Former smoker	873	1.0	641	4.9	232	0.3
	Other	3,140	3.7	1,733	13.3	1,407	2.0
	Not indicated	2,734	3.2	574	4.4	2,160	3.0
<b>Main areas of interest<sup>§</sup></b>	Quit smoking	75,687	82.6	11,469	88.0	64,218	81.7
	Smoking cessation services (SCS)	7,048	7.7	391	3.0	6,657	8.5
	Information (health, therapy, legislation)	2,115	2.3	312	2.4	1,803	2.3
	Emerging tobacco and nicotine products ***	980	1.1	Undetected	Undetected	980	1.2
	Other	2,841	3.1	338	2.6	2,503	3.2
	Not indicated	3,012	3.3	524	4.0	2,488	3.2
<b>Source</b>	Packet of cigarettes	67,203	79.4	1	0.01	67,202	93.9
	Health professional	732	0.9	348	2.7	384	0.5
	Relatives/friends	722	0.9	574	4.4	148	0.2
	Informational materials	941	1.1	701	5.4	240	0.3
	Internet	1,846	2.2	434	3.3	1,412	2.0
	Magazine/newspaper**	3,885	4.6	3,503	26.8	382	0.5
	Radio/TV**	1,192	1.4	1,104	8.5	88	0.1
	Other	674	0.8	162	1.2	512	0.7
	Not indicated	7,422	8.8	6,221	47.7	1,201	1.7

\*The total number relates only to appropriate calls, counselling sessions or dropped phone calls; \*\*Data collected up to 07/11/2022; \*\*\*Data collected from October 2015; §The user's request may include more than one area of interest.

**Table 2**  
Italian Antismoking Helpline (Telefono Verde Fumo, TVF) offer, from the 2<sup>nd</sup> of May 2003 to the 30<sup>th</sup> June 2023\*

		Total period (2 <sup>nd</sup> of May 2003-30 <sup>th</sup> of June 2023)		Period 1 (2 <sup>nd</sup> of May 2003-31 <sup>th</sup> of December 2012)		Period 2 (1 <sup>st</sup> of January 2013-30 <sup>th</sup> of June 2023)	
		Number (N)	Percentage (%)	Number (N)	Percentage (%)	Number (N)	Percentage (%)
Direct action	Counselling	14,082	11.4	260	2.6	13,822	12.2
	Self-help tools	14,633	11.9	1,824	18.2	12,809	11.3
Territory orientation	Smoking cessation services (SCS)	48,472	39.4	4,693	46.8	43,779	38.7
	Health professional	4,500	3.7	391	3.9	4,109	3.6
Information	Therapies	4,569	3.7	130	1.3	4,439	3.9
	Legislation	1,239	1.0	521	5.2	718	0.6
	Health	22,136	18.0	391	3.9	21,745	19.2
	Other	9,472	7.7	1,174	11.7	8,298	7.3
	Not indicated	3,918	3.2	651	6.5	3,267	2.9

\* The offer can include more than one type of information.



**Figure 1**  
Trend in time of the number of calls (2003-2023).

from 48.1% to 65.0%, and female callers decreased from 51.9% to 35.0%.

With respect to the age, there was a significant increase of calls from young people <18 (from 0.8% to 5.4%) and from those aged 18-25 (from 2.8% to 11.8%). The number of calls from older users also increased in period 2: from 2.10% to 10.9% for those aged 66-75, and from 0.2% to 3.3% for those aged over 75.

Following the two legislative measures, the callers who found the telephone number on the cigarette packets increased from 0.01% to 93.9% in period 2, when the telephone number was added to all packets.

**Smoking cessation services (SCS)**

The first SCS began operating in the end of the 90s [17], although from 2000 the TVF has been taking a census and updating the network of SCS. Their number increased steadily between 2000 and 2010 but then they declined between 2011 and 2018. From 2019 onwards, there was a significant decrease in SCS, that reached the lowest number in 2022 (n=223).

The last census was concluded in May 2023 and 241 “services” were detected, that is an increasing number compared to the last year (Figure 2).

In the SCS multidisciplinary team, the most represented professionals are physicians (36%), psychologists (21%) and nurses (18%).

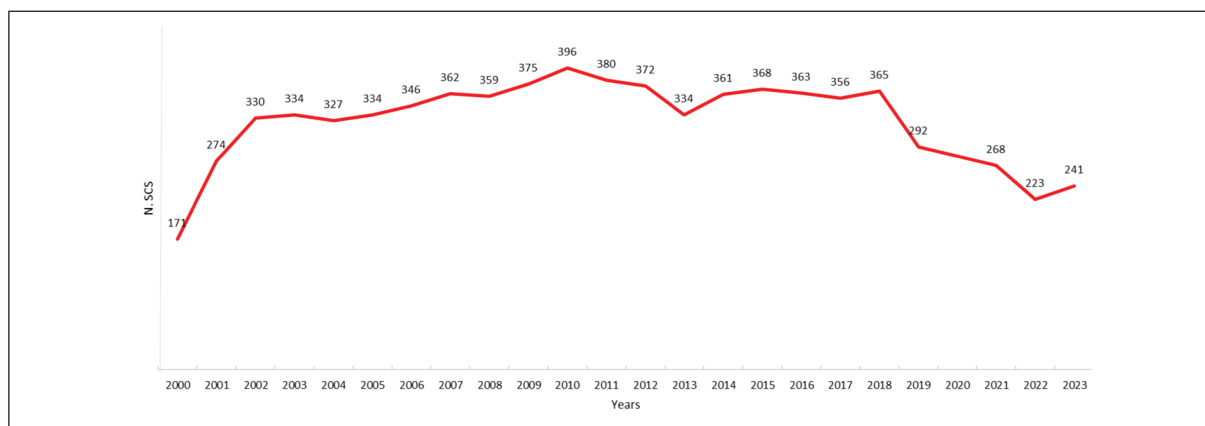
The SCS included integrated interventions: counselling was the first proposal (97.0%), followed by pharmacotherapy (91.0%), individual psychotherapy (39.0%), group psychotherapy (35.0%), and psychoeducational groups (32.0%).

The SCS can be accessed in several ways and through different forms of contributions: some of them are completely free of charge and others require the payment of the healthcare ticket.

**Collection of information on emerging tobacco and nicotine products**

The TVF has been collecting information on emerging products since October 2015. It was undetected in period 1 and considering only period 2, this percentage is 1.2%. In addition, the percentage of users requesting information on these products has risen significantly in the last year (6.0% in 2023). The most frequent questions are related to the safety of the devices, whether they are less harmful to health than conventional cigarettes, whether they help to quit smoking, their nicotine content. The latest survey (April 2022 - May 2023) about the callers, has shown that 57% of users have made at least one attempt to quit smoking. Among those who specified how they attempted to quit, nine out of ten did it on their own: the majority by discarding the cigarette pack (82.0%) or reducing the number





**Figure 2**  
Trend of number of operative Italian smoking cessation services (2000-2023).

of smoked cigarettes (13.0%), 10.0% unsuccessfully attempted to quit using an electronic cigarette or a heated tobacco product (3.0%).

## DISCUSSION

Among the treatments to quit smoking, pharmacotherapy combined with behavioural support has been shown to be effective [8]. In addition, toll-free helplines can provide information and support to smokers in quitting: people can use these services by calling or by signing up to receive calls from counsellors. Some tobacco cessation quitlines (such as in UK) have pioneered telephone support for smokers willing to quit. Indeed, according to the statistics on NHS stop smoking services in England (April 2022 to March 2023), among the reported number of quit attempts by smokers, the most common intervention is telephone support, with 53% of those setting a quit date utilizing this intervention (<https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-nhs-stop-smoking-services-in-england/april-2022-to-march-2023-q4/part-2---stop-smoking-services>). In 2021, the Tobacco Control Scale (TCS) [18] presented the findings of a survey on tobacco control efforts in 37 European countries [19]. The TCS assessed the implementation of tobacco control policies at the country level, assigning points to each policy, with a maximum score of 100. Cessation support has a maximum score of 10 points, with quitlines contributing a score of 2 points. Italy achieved an overall score of 6 for this policy, accordingly the expected score for the quitline indicator is 2/2, including an additional point for counsellors responding for at least 30 hours a week. Several EU MS have not yet implemented a quitline, along with some non-EU countries such as Norway, Serbia, Bosnia & Herzegovina.

All these helplines have their own specific characteristics that depend on the geographical place, on the professionals involved and on the specific objectives of the service. Indeed, most helplines provide services through proactive counselling and in this case the counsellors use outbound calls. The outbound service, which often entails multiple follow-up sessions, is typically scheduled by agreement with the smoker. In this

concern, the efficacy of such proactive interventions has been established by randomized controlled trials. The TVF provides services through reactive counselling, in which the smoker calls back for assistance and since 2020 has provided outbound counselling calls.

One of the strengths of the TVF, like most of the quitlines, is the anonymity and that is free of charge. Although most quitlines in Europe are free, some of them are not, such as in the case of the Queensland Quitline in Australia (<https://www.quitline.qld.gov.au/how-to-quit/get-help-from-quitline/about-quitline-services/success-rate>).

ISS TVF targets not only smokers willing to quit, but also all stakeholders related to tobacco and nicotine dependence as well as health professionals, educators, people concerned about the effects of second-hand smoke or parents seeking help for their teens.

The type of TVF callers has changed over the years: while smokers represented the 86.4% users during the reporting period (2003-2023), it is evident how they have significantly increased following the introduction of legislation requiring tobacco companies to include the toll-free number on all cigarette packs. Indeed in the years 2013-2023, smokers increased by 24.6 percentage points compared to the previous period (2003-2012). The widespread diffusion of the TVF number on cigarette packs motivated smokers to call. Users' requests about how to stop smoking and how to contact SCS amount to 90.3%: this percentage remains relatively constant both before and after the enforcement of the two legislative measures (91.0% period 1; 90.2% period 2).

TVF callers are mainly men, probably because of the higher prevalence of male smokers in Italy [1].

Interventions to prevent and treat tobacco and nicotine dependence are more difficult to implement in young people and the elderly due to their specific characteristics: the former are less inclined to quit, the latter have more difficulties to access the SCS. The TVF number on cigarette packet has widened the target group also to these "extreme" age groups, i.e., young people <18 and the elderly >65: the number of calls of these age groups increased fivefold.

The TVF number on cigarette packets has fundamentally changed the way users access helpline information: while until 2012 newspapers, radio and/or television accounted for 26.8% and 8.5% respectively, these percentages became residual from 2013 (0.5% and 0.1% respectively), so that this data were no longer collected from 2022 onwards. This fact shows how the way in which the same information is provided (cigarette packs vs media), influences the type of users of the service (smokers, young people and the elderly, more males than females).

The TVF offers counselling to about 11.4% of callers. This type of direct intervention has increased in period 2 (12.2%) compared to period 1 (2.6%), although this increase is mainly in the last two years (40%). Unfortunately, this activity is not sufficient to meet all the users needs. Hence, the continuity between the TVF and the local healthcare units, in particular the SCS, is a fundamental part of continuity of care.

Smoking prevalence [20] and use of e-cigarettes [21] substantially changed due to the COVID-19 lockdown in Italy. During the lockdown period (March 1, 2020, to April 30, 2020), the total number of calls was 1,457 (33 a day) and the duration of calls increased from 8 minutes to 15 minutes, with users expressing concerns about the combined effects of smoking and COVID-19. Moreover, smokers followed by the SCS asked for support from the TVF as the SCS suspended their activity, while other smokers considered the lockdown as an opportunity to take care of themselves and try to stop smoking.

Since the beginning SCS increased considerably between 2000 and 2010. However, despite the constant activation of new SCS, others are being closed, resulting in an overall decrease of their number in the last years. The recent COVID-19 pandemic has redirected most healthcare professionals towards its battle. In 2022, SCS reached the lowest number since 2001. The distribution of SCS is not homogeneous across the Italian territory: 61.0% of services are in the North, 17.0% in the Centre and 22% in the South and the Islands [22], which makes it difficult for many citizens to access treatment. SCS are not always free of charge but sometimes require some kind of payment (e.g., healthcare ticket), the economic commitment represents another discriminating factor to access treatment. The diffusion and the use of emerging products is strongly increasing in the last few years. This is reflected in a significant increase in the number of calls requesting information about them. Many users ask whether they are useful for smoking cessation: the currently available scientific evidence does not allow a definitive sentence. The Italian clinical practice guideline for the treatment of tobacco and nicotine dependence suggests that e-cigarettes (with or without nicotine)

should not be used compared to pharmacotherapy (e.g., nicotine replacement therapy or NRT, varenicline) or counselling. In addition, due to the lack of a scientific reference literature, the guideline has introduced a specific note for HTPs, advising that they should not be used for the treatment of tobacco and nicotine dependence [8].

## CONCLUSIONS

The TVF is a complementary strategy to an overall tobacco and nicotine control policy and its effectiveness is related to the extent to which it provides accessible and acceptable quality services for smokers willing to quit. Besides, it can provide correct and scientific information for non-smokers, health care professionals, teachers, social workers, and users of emerging products. TVF is broadly accepted by the public, because it eliminates barriers to access, such as transportation issues and the inability to afford treatments. TVF has the fundamental characteristics of removing socio-economic barriers that affect people and of being linked to the territory, with a direct channel with SCS. The TVF is set up in a Public Institution and the counsellors are employed to provide information and to support smokers to quit, by offering reactive or proactive telephone counselling. Unfortunately, the available resources are still not sufficient to meet all the users needs.

TVF could better respond to the numerous requests for help by increasing the number of counsellors able to promptly take care of the user and reduce telephone waiting times. Moreover, SCS are steadily declining and are unequally distributed throughout the country to address the multiple requests from users. Pharmacotherapy is not free of charge, and SCS sometimes require some kind of payment as healthcare ticket, making difficult for several citizens to have access to treatment.

Policies to fight tobacco and nicotine dependence are complex and multifactorial, and they need increased commitment from government institutions to ensure equal access to treatments for all Italian citizens.

## Authors' contributions

IP and LM conceptualized the study, GM analysed the data and IP wrote the first draft of the manuscript; RD particularly took care of the introduction; CM, GL, RD, PM and RS provided important contributions for the interpretation of findings; RS and SP carefully revised the final draft of the manuscript. All Authors have read and approved the last version of the manuscript.

## Conflict of interest statement

The Authors declare no conflict of interest.

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