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Gradual versus abrupt quitting among French treatment-seeking smokers

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ABSTRACT

Objective. This study examined the prevalence and predictors of gradual quitting among treatment-seeking smokers.

Method. This study examined quit attempts among 28,156 adult smokers who attended French smoking cessation services nationwide between 2007 and 2010. Predictors of gradual quitting were determined using multivariate regression models.

Results. Only 4.4% quit gradually whereas 48.7% quit abruptly and 46.9% continued smoking. 34.1% of abrupt quitters and 31.9% of gradual quitters were abstinent at 1 month post-quit ($p = 0.108$). Gradual quitting was associated with: older age, heavy smoking at baseline, no previous quit attempts, low self-efficacy, baseline intake of anxiolytics, symptoms of depression and history of depressive episodes. Gradual quitters had a similar anxio-depressive profile than continued smokers but were more educated and more likely to have reported previous quit attempts. Prescription of oral nicotine replacement therapy (NRT) only as opposed to combination NRT doubled the odds of gradual quitting. Likelihood of gradual quitting compared with continued smoking improved with the number of follow-up visits.

Conclusion. Our findings suggest that hard-to-treat smokers may be more likely to quit gradually than abruptly. However, intense follow-up with adapted treatment appears to be crucial to achieve cessation gradually in French smoking cessation services.

Introduction

Until recently, smoking cessation guidelines in France, the United Kingdom and the United States did not recommend gradual quitting but rather encouraged cessation specialists to assist smokers in quitting abruptly (Fiore et al., 2008; Le Foll et al., 2005; National Institute for Health and Clinical Excellence, 2008). Yet, smokers in the general population appear to be interested in cutting down to quit. 43.5% of quit attempts reported in the 2011 English Smoking Toolkit Survey included cutting down first (West and Brown, 2012). In France, 44.7% of smokers interested in quitting plan to quit gradually (Guignard et al., 2013).

Besides, between 2005 and 2010, the prevalence of smokers in the French general population has increased and the percentage of smokers interested in quitting has decreased from 64.8% to 57.6% (Guignard et al., 2013). Given smokers' difficulties to quit, the UK and French guidelines have been complemented in 2013 by tobacco harm reduction guidance encouraging gradual quitting among smokers unable to or not interested in quitting abruptly (Haute Authorité de Santé, 2013; National Institute for Health and Clinical Excellence, 2013).

Literature seems to support the promotion of gradual quitting along with abrupt quitting. Indeed, a Cochrane meta-analysis of randomized studies comparing both methods of quitting found no significant difference in subsequent abstinence rates, regardless of use of pharmacotherapy (Lindson-Hawley et al., 2012). Nevertheless, data from the International Tobacco Control (ITC) Policy Evaluation Survey conducted in the United States, Canada, the UK and Australia revealed that abrupt quitters were twice more likely to achieve 1-month abstinence than gradual quitters (Cheong et al., 2007).

These apparently mixed findings may be explained by the fact that in real life settings, gradual quitting is chosen by instead of randomly assigned to smokers with characteristics that may thus differ from those of abrupt quitters. The ITC Survey has shown that older smokers (≥40 years), women, smokers with low socioeconomic status as well as smokers who had reported high perceived difficulty to quit were more likely to quit gradually than abruptly (Siahpush et al., 2010). The ITC Survey also uncovered that users of smoking cessation medication and quitline services were more likely to quit gradually. In several European countries, marketing licences for oral forms of nicotine replacement therapy have been updated to include cutting down to quit

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(Beard et al., 2013; Zellweger et al., 2008). Yet, little literature exists on reduction versus abrupt quitting in real-life tobacco treatment settings (Jiménez-Ruiz et al., 2009; Samaan et al., 2012; Wee et al., 2011).

In an effort to assess the effectiveness of French smoking cessation services in assisting smokers who experience the most difficulty quitting, the present study examined the proportion of treatment-seeking smokers who quit gradually, along with their profile. We focused on reduction by half because it has been reported to be the most common objective for smokers interested in cutting down to quit (Hughes et al., 2007). We determined predictors of gradual versus abrupt quitting, and then examined the association between method of quitting and abstinence at one month post-quit.

Material and methods

Population

230 French cessation services nationwide contributed data from 62,508 treatment-seeking smokers to the national smoking cessation on-line database (the "Consultation de tabacologie" — CDT programme). During their first visit in a cessation service between October 2007 and December 2010, smokers filled a standardised paper questionnaire. Anonymised questionnaires are registered in the database by staff in cessation services. This national programme has received the agreement of the French National Auditing Committee on Informatics and Individual Liberty.

Over 90% of participating services are outpatient hospital-based cessation services. Staff usually includes at least a nurse and a physician. Smoking cessation training is offered to French health professionals through either a one-year university degree or brief training. The content of training programmes is designed with respect to smoking cessation guidelines and has been presented elsewhere (Le Louarn et al., 2005; McLoughlin, 2006).

In routine care, smokers are offered tailored counselling, support and educational information. A previous analysis of this database indicated that cessation specialists discuss and tailor an intervention plan with smokers during their first visit (Baha and Le Faou, 2009). Additionally, cessation specialists can prescribe nicotine replacement therapy (NRT — patch, oral forms or a combination of both) or varenicline. Cessation services are not free of charge. However, 9 out of 10 people in France have at least minimal health insurance, which covers 70% of the cost of cessation visits, along with a fixed partial coverage of NRT (50 euros per year per insured person).

Data selection for the present analysis is detailed in Fig. 1. We examined retrospectively records from 28,156 adult smokers (aged ≥ 18 years, not pregnant) who were followed up (attended ≥ 2 visits) in cessation services. Half of smokers systematically registered during their first visit did not return for follow-up. A similar percentage of smokers defaulting from treatment without having set a quit date has also been observed in the UK, although not systematically monitored (Lowey et al., 2002). Table 1 presents a comparison of baseline measures between non-returning smokers and followed-up smokers.

Measures

In the standard questionnaire routinely used in French cessation services, smokers self-report socio-demographic information, current use of psychotropic medication, history of depression, tobacco-related information, and alcohol and cannabis consumption. To evaluate self-efficacy, smokers are asked to mark from 0 to 10 how confident they are in their ability to quit. Nicotine dependence is assessed using the Fagerström test (Heatherton et al., 1991). The French

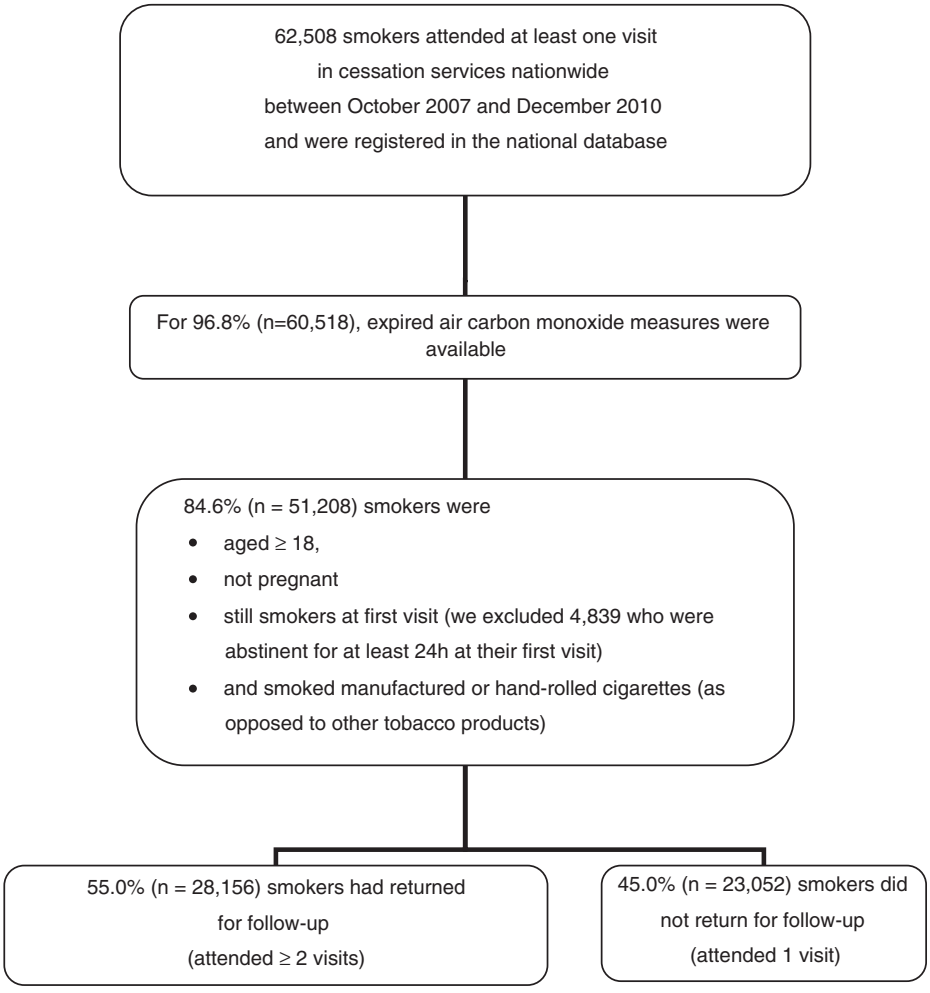

Fig. 1. Selection of the study population extracted from the French national smoking cessation database among smokers registered between 2007 and 2010 in smoking cessation services nationwide.