

Smoking reduction intervention in a large population-based study. The Inter99 study

Charlotta Pisinger, M.D.^{a,*}, Jørgen Vestbo, D.M.Sci.^b,
Knut Borch-Johnsen, D.M.Sci.^c, Torben Jørgensen, D.M.Sci.^a

^aResearch Centre for Prevention and Health, Glostrup University Hospital, DK-2600 Glostrup, Denmark

^bNorth West Lung Center, Wythenshawe Hospital, M23 9LT Manchester, UK

^cSteno Diabetes Center, DK-2820 Gentofte, UK

Available online 28 July 2004

Abstract

Background. Smoking reduction has been introduced as an alternative to smokers unable or unwilling to quit but has never been implemented in a population-based intervention.

Methods. Two thousand four hundred eight daily smokers in all motivational stages were included in a randomised population-based intervention study, in Copenhagen, Denmark. Smokers, unwilling or unable to quit, were encouraged to reduce their tobacco consumption. Furthermore, smokers in the high-intensity intervention were offered participation in smoking reduction groups.

Results. Twenty-three percent of those who attended both baseline and 1 year visit reported reduction by at least 5 g and 8% reported a halving or more. Halving of tobacco consumption was achieved significantly more often than in the background population, OR = 2.6 (1.6–4.4), even when assuming that non-participants had not reduced, OR = 1.7 (1.0–2.8). Reduction of at least 5 g doubled the probability of increased motivation to quit and a halving increased it more than four times. The reductions were not validated. Less than 2% attended the smoking reduction groups.

Conclusion. The smoking reduction intervention was significant in self-reported reduction of tobacco consumption and subsequently increased motivation to quit. This may open new perspectives, with reduction as a first step towards cessation, a possible supplement to smoking cessation strategies.

© 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved.

Keywords: Inter99; Population-based; Randomised; Smoking reduction; Smoking reduction group; Tobacco consumption; Motivation

Introduction

Heavy smokers who are at the highest risk of developing diseases related to tobacco consumption are unfortunately those who find it most difficult to quit [1].

Smoking reduction (reduction in the daily tobacco consumption) has been introduced as an alternative to smokers unable or unwilling to quit. Smoking reduction could be justified either by a reduction in risk or by promoting smoking cessation.

There are conflicting scientific data regarding the health improvements from smoking reduction. Some studies have

shown health improvements [2–10] while recent epidemiological and some experimental studies have found no improvement in health outcome [11–15]. Whether smoking reduction increases the probability of cessation is still unclear. In studies of general population samples, rates of smoking cessation were increased among the few who reduced more than 50% [16,17], and clinical trials have reported an increased motivation to quit after the end of the trial [18,19]. Large reductions in tobacco consumption and long-term maintenance could be achieved in experimental studies with smokers not willing to quit smoking [20,21].

Smoking reduction intervention has never been implemented as a strategy in population-based studies. In this large population-based lifestyle intervention study, smoking reduction intervention was implemented for smokers unable or unwilling to quit. The aim of this paper was to describe

* Corresponding author. Research Centre for Prevention and Health, Glostrup University Hospital, Building 84/85, Nordre Ringvej, DK-2600 Glostrup, Denmark. Fax: +45-43-23-39-77.

E-mail address: chpi@glostruphosp.kbhamt.dk (C. Pisinger).

the smoking reduction intervention, the results after 1 year and the influence on motivation to quit.

Methods and measurements

The Inter99 study

Inter99 (abbreviation of Intervention 1999) is an ongoing population-based intervention study, which started in March 1999. The study is at Research Centre for Prevention and Health, Glostrup University Hospital, Copenhagen. The Copenhagen County Ethical Committee and the Danish Health Board have approved the study. The aim of the study is to prevent cardiovascular disease and diabetes mellitus by non-pharmacological intervention, that is, through change of lifestyle. We focused on changes in smoking, diet and physical activity. The study population was randomly selected within age strata (30–60 years) from a defined area of the suburb of Copenhagen. The subjects were pre-randomised into one of three groups: a high intensity intervention group A ($n = 11,708$), a low intensity intervention group B ($n = 1308$) and a non-intervention group C ($n = 48,285$). A random sample of 5264 persons in the background population (group C) served as control group and received questionnaires at baseline and after 1, 3 and 5 years to register spontaneous lifestyle changes in the background population. Eighty-two of the persons in group AB were non-eligible. The remaining 12,934 individuals received a personal invitation with a prearranged date and time of a consultation. On the day of attendance in the

clinic, all participants completed questionnaires, underwent a medical health-examination and were given an individual cardiovascular risk assessment with a computerised programme PRECARD® [22] and a lifestyle consultation. The initial participation rate was 52.5%. A total of 2408 daily smokers were included at baseline: 2168 in group A and 240 in group B (Fig. 1). A daily smoker was defined as a smoker who smoked at least 1 g of tobacco daily. Occasional smokers were smokers who smoked less than 1 g daily.

All daily smokers, but not occasional smokers, in group A were offered participation in smoking cessation or smoking reduction groups. Daily smokers in group B were not offered participation in groups. All daily smokers were offered follow-up after 1, 3 and 5 years. The study design is described in detail elsewhere [23].

The lifestyle consultations in groups A and B

The health professionals: two medical doctors, four nurses and a dietician were trained as smoking cessation counsellors and in lifestyle counselling. The consultation lasted 15–45 min, was based on motivational interviewing and was a dialogue with the smoker, taking into account the smoker's wishes, previous quit experiences, resources and life situation. All daily smokers received a personalised smoking consultation depending on their motivation to quit. Smokers unwilling to, or not ready to quit soon, were given the advice to think more about the harm and disadvantages of smoking, to reduce their tobacco consumption as much as possible and to quit “one day”. Additionally, they were

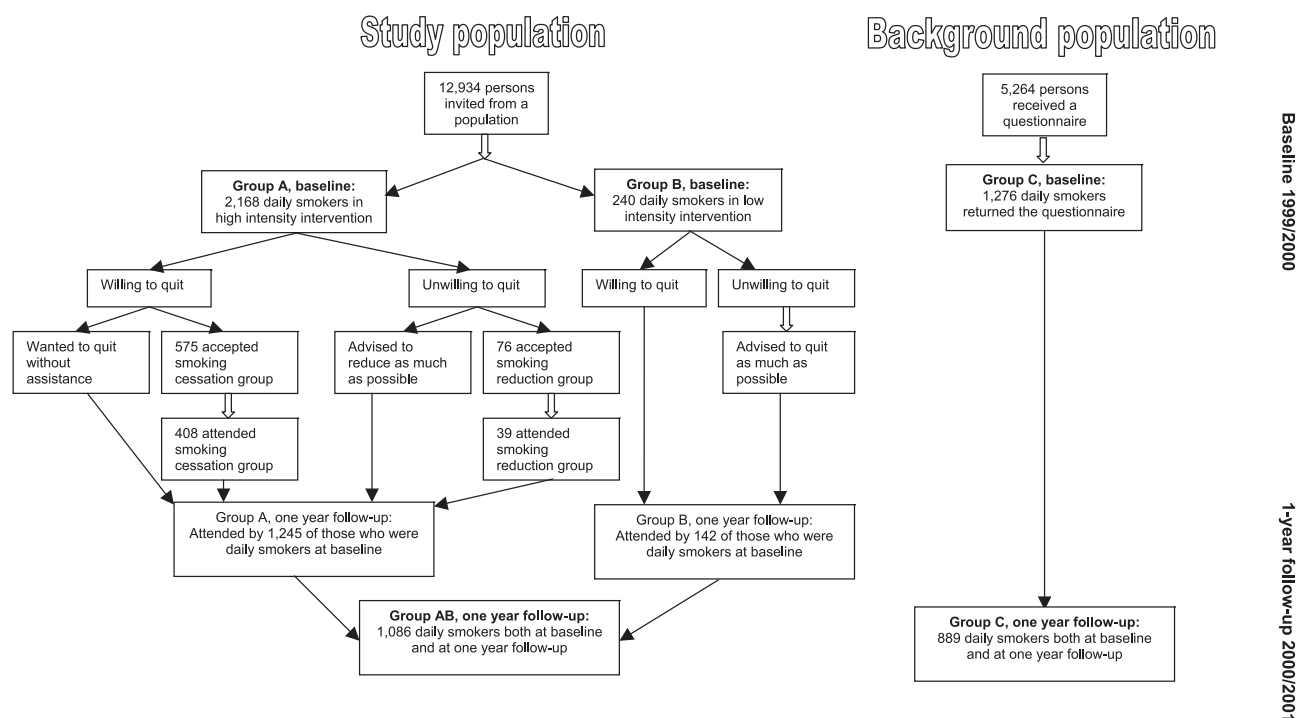


Fig. 1. Flowchart for daily smokers in Inter99.

Download English Version:

<https://daneshyari.com/en/article/9206330>

Download Persian Version:

<https://daneshyari.com/article/9206330>

[Daneshyari.com](https://daneshyari.com)