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Research Paper

Smokers' identity and quit advice in general practice: General practitioners need to focus more on female smokers

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ABSTRACT

Objective: We examined smoker and non-smoker self-identities among smokers visiting their general practitioner (GP) for other reasons than smoking cessation counselling. We determined whether identity impacted on patients' appreciation of GP-initiated conversations about smoking and quit advice, and subsequent quit attempts, and examined the role of gender.
Methods: Secondary analyses of a cluster-randomised controlled trial in which baseline and 12-month follow-up data were collected among 527 daily ($n = 450$) and non-daily smokers ($n = 77$).
Results: Participants identified more with smoking than non-smoking. Participants with stronger non-smoker self-identities were more often female, appreciated the conversation about smoking more, were more likely to receive quit-advice and to have attempted to quit at 12-month follow-up. Participants with stronger smoker self-identities were also more often female, and appreciated the conversation more. Men with stronger non-smoker self-identities were more often asked about smoking and advised to quit, and appreciated the conversation more than women.
Conclusion: Non-smoker identity was more important for receiving quit-advice, appreciation, and quit attempts than smoker identity. Future research needs to unravel why female smokers appreciated the conversation less than male smokers.
Practice implications: We suggest to incorporate an identity-component in smoking cessation interventions. GPs should increase their focus on female patients who smoke.

1. Introduction

A brief advice to quit smoking provided by a general practitioner (GP) effectively increases quit rates with 1–3% compared to an unassisted quit attempt [1]. Overall, acceptance of an unsolicited conversation about smoking is relatively high, both among the general population and smokers [2,3]. However, some smokers may become annoyed or report guilt because they perceive their smoking as personal failure [4]. This contradiction is also reflected in other studies, where some smokers found it encouraging when their GP linked their symptoms to smoking [5], whereas others expressed resistance to this [6]. Another study showed that overall, smokers appear to make more negative than positive statements about quitting smoking when this subject is brought up by their GP or nurse [7].

Previous work in general practice has shown that how smoking is discussed, or quit advice is provided, is important for how smokers respond [5]. In addition, several smoker characteristics play a role [8]. For example, women and older smokers were found to be less open to a GP-initiated conversation about lifestyle [2]. Another potentially important factor is how smokers perceive themselves, that is, their *identity* as a smoker or non-smoker. People are motivated to behave in line with their identity, and to protect their identity in the face of threat [9–11]. PRIME theory

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states that identity exerts a stable influence on behaviour, in contrast to other factors that may change from moment to moment, such as urges, or less immediate factors such as outcome expectations [9]. In addition to identifying with smoking, smokers may also identify with non-smoking (i.e., they can see themselves as non-smokers). Already in 1998, Butler et al. suggested that "considering how the patient views himself or herself as a smoker (. . .) may be useful to doctors when talking to patients about smoking" ([4], p. 1881). However, to our knowledge, the role of smokers' identity has not yet been investigated in the general practice setting.

Research on smoking and identity has shown that smokers' self-perceptions are related to their responses to anti-smoking messages and regulation. These studies have shown that smokers respond more negatively (e.g., defensively, feeling victimized) when they identify more strongly with smoking and more positively (e.g., compliance, increased motivation to quit) when they identify more strongly with non-smoking [12–14]. Smokers' self-perceptions are also found to be associated with subsequent smoking behaviour. Controlling for important factors such as nicotine dependence and perceived behavioural control, smokers who identified more strongly with smoking had weaker intentions to quit and were less likely to attempt to quit, whereas smokers who identified more strongly with quitting or non-smoking were more likely to intend and attempt to quit [15–23]. Furthermore, smokers who increasingly perceived themselves as non-smokers after quitting were less prone to relapse [24,25]. In sum, identity appears to be related to smoking cessation and to responses to anti-smoking messages and regulation. Given these findings, we hypothesise that smokers' identities also play a role during GP visits. In addition, there is some evidence to suggest that female smokers identify more with non-smoking and less with smoking than male smokers [16,23], which led us to examine the role of gender as well. The current prospective study therefore aimed to answer the following research questions (RQs):

1. How strongly do smokers who visit their GP identify with smoking and non-smoking, and are smoker and non-smoker self-identities related to patient characteristics (RQ1)?
2. To what extent are smokers asked about their smoking status and advised to quit (RQ2A), and does this relate to their smoker and non-smoker self-identities (RQ2B)?
3. To what extent do smokers appreciate and accept conversations about smoking with their GP (RQ3A), and does this relate to their smoker and non-smoker self-identities (RQ3B)?
4. To what extent do quit advice and smoker and non-smoker self-identities predict quit attempts at one-year follow-up (RQ4A), and do quit advice and identity interact in predicting quit attempts (RQ4B)?
5. To what extent do the relations examined in RQ2-RQ4 differ between men and women?

2. Methods

2.1. Design

This study presents secondary analyses of data collected in a cluster-randomized controlled trial that examined the effectiveness of a low-intensity, practice-tailored training programme in smoking cessation counselling among 47 GPs [26]. The study was approved by the Medical Ethical Board of the Leiden University Medical Centre (P10.125). Data collection took place at pre-training, at one month post training, and at one year follow-up. Further details about the trial and GP characteristics are described elsewhere [26].[1] The current study focuses on the smokers that visited participating GPs during the intervention period, and includes a baseline (pre-training and one month post-training combined) and one year follow-up measurement.

2.2. Participants and procedure

At baseline, patients of participating GPs aged 18 and older completed a paper-and-pencil questionnaire after their GP visit ($N = 3401$; 677 smokers). Participants were included in the current analyses ($N = 527$) if they were daily ($n = 450$, 85%) or non-daily, but regular smokers ($n = 77$, 15%) at baseline, and had complete data for identity, gender, and at least one of the three acceptance variables (see Measures). At baseline, participants smoked on average 13.31 ($SD = 8.65$) cigarettes per day. Eighty-two (16%) participants had never attempted to quit smoking previously, 253 (48%) attempted to quit smoking more than a year ago, and 188 (36%) in the last year (Table 1). All participants were sent a postal follow-up questionnaire (completed by 172 participants, 34%), approximately 11 months after baseline.[2] Baseline data were collected from January to December 2011, and follow-up data were collected between January and September 2012.

2.3. Measures

2.3.1. Baseline

2.3.1.1. Background characteristics. Date of birth, gender, nationality (Dutch/Non-Dutch), educational level, having children (yes/no), and educational level (recoded into lower [no education, only primary school, or lower level vocational education], middle [pre-vocational secondary education, middle level vocational education], and higher education [senior higher secondary education or pre-university education, polytechnic

[1] Twenty-six GPs (55%) were male and 30 GPs (64%) had been working as GP for over 15 years. Average age of GPs was 51.17 years ($SD = 7.61$), average working experience 7.11 years ($SD = 1.52$), average number of conversations with patients about smoking during the past week 4.00 ($SD = 2.59$), and average attitude toward implementing smoking cessation care was 2.80 ($SD = 0.48$; on a 10-item scale ranging from 0 [negative] to 4 [positive]; $\alpha = 0.69$). Multivariate logistic regression analyses showed that these GP characteristics were not significantly related to acceptance or appreciation of an unsolicited conversation abou t smoking by patients (see Supplementary material).

[2] Attrition was not significantly related to gender ($p = 0.45$), educational level ($p = 0.26$), number of cigarettes smoked daily ($p = 0.65$) and presence of smoking-related condition ($p = 0.14$). Participants who completed the follow-up questionnaire were more likely to be aged 61 or older ($\chi^2(4) = 13.53$, $p = 0.01$) and to have children ($\chi^2(1) = 7.52$, $p = 0.01$), and had stronger smoker self-identities ($t(525) = -1.99$, $p = 0.047$) and non-smoker self-identities ($t(525) = -2.12$, $p = 0.04$). A marginally significant effect of nationality suggested that participants at follow-up were more likely to be Dutch ($\chi^2(1) = 2.99$, $p = 0.08$).

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