Challenges in smoking cessation for people with chronic obstructive pulmonary disease

Valorisation

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Valorisation is the process of creating value out of knowledge. It is about translating scientific knowledge into practice. The societal value of the different studies in this dissertation is already discussed in the individual chapters. We now summarise the implications of the major findings of this dissertation. We will discuss this in three parts: societal relevance, target groups, products and innovation, and realisation.

Societal relevance

As described previously in this dissertation, COPD is a major public and individual health problem. In the Netherlands, around 607,000 people had COPD in 2015[1]. Due to exacerbations and comorbidities a lot of these patients end up in hospital every now and then. Besides, approximately 6,400 people died in the Netherlands in 2015 with COPD as the primary cause[1]. Due to sick leave and premature disability or death this results in a huge economic burden; in the Netherlands, smoking-related health care costs amount around 3 billion euro[1], while costs for COPD and asthma care amount more than 1.5 billion euro[1]. Giving up smoking is the most effective way to prevent the disease from worsening and, therefore, delay premature disability and death[2, 3]. However, in the general discussion (Chapter 7) we described that many smokers are not able to quit due to psychological and social factors. Thus, it is of utmost importance for patients with COPD to be supported in their attempts to quit smoking. We will discuss how this support can be effectively offered.

Target groups, products and innovation

Physicians and other health care providers

The first health care contact with smokers is often with the general practitioner. Therefore, general practitioners are a significant target group to discuss smoking behaviour with patients and support them with quitting. In the Netherlands, practice nurses expand their activities increasingly and most practices also facilitate nurses for support. These nurses are often the right persons to offer smoking cessation support to the patients. Most of the chronic care, including COPD care, is delivered by practice nurses as well, which makes them the designated person to provide smoking cessation treatment to smokers with COPD. For smoking cessation support in general practice the smoking cessation guideline from the Dutch College of General Practitioners is

most often used[4]. Unfortunately, a lot of physicians do not seem to comply with these guidelines.

In Chapter 4 and 6 we gained further insight into the quality of the smoking cessation support from physicians. We found that autonomy was very important for smokers in general and patients with COPD in particular requested a less paternalistic doctor-patient communication. They also indicated they would appreciate receiving some personal attention from their physicians, with exploration of social interactions, health perceptions, feelings and concerns. Physicians, on the other hand, indicated they needed tools and guidance in how to support smokers with quitting. Therefore, we would recommend introducing an informative smoking cessation program with teaching of evidence-based smoking cessation treatments and communication, into the vocational training and postgraduate medical training. Because, if doctors are not well-informed and motivated, then how can patients be?

Guideline developers

The previously mentioned smoking cessation guidelines, used in general practices, discuss general smoking cessation issues and attitudes. We would suggest to add patient-specific advices to these general guidelines, such as paying special attention to discuss depressive symptoms, nicotine dependence and self-efficacy, as these factors might be COPD-specific barriers to quitting. This might also be useful for other specific groups of patients. Therefore, it would be useful to further map out which specific patients need what kind of specific attention.

Services

In the introduction of this chapter we already mentioned that smoking cessation treatments that are provided are not often used, and we know from this dissertation that lack of time and experience (Chapter 6) are often mentioned as barriers for providing smoking cessation advice. It might therefore be interesting to look into the effectiveness of smoking cessation support services. At the moment the United Kingdom (UK) offers the world's most comprehensive support for smokers to quit[5]. Stop Smoking Services have been established throughout the UK. Some are under local authority control, others remain as part of the National Health Services. These services offer practical support and pharmaceutical treatments on prescription to help smokers to give up at no or very low cost[5]. These services show great promise. In the

Netherlands, we do not have such large-scale services. The ones that we have are rather hard to find and not free of cost. It is interesting to notice that we do have clinics with multidisciplinary treatment of eating disorders or other drug addictions. Unfortunately, for nicotine addiction there are no such facilities and on the basis of the results of this dissertation we would argue in favour of such service facilities.

Government

Governments have the obligation to care for the health of the residents. Governmental actions such as raising taxes are extremely cost-effective interventions to reduce tobacco use and prevent COPD[6]. The tobacco industry contradicts this information, but their arguments are not evidence-based. They state that raising taxes will lead to more illicit trade and smuggling. The only evidence that does exist is that increase in cigarette taxes and the passage of comprehensive clean air laws are the cornerstone of strategies that have been successful in reducing smoking rates[6]. These tax revenues could then be used for tobacco control, health promotion and other public health interventions. Mass media campaigns and cessation policies also play an important role in reducing the smoking rates[6]. In the Netherlands, we saw that a national reimbursement policy accompanied by media attention was followed by an increase in quit attempts and quit rates[7]. An increased use of cessation treatments was one of the reasons for this[8, 9]. Furthermore, as previously mentioned, in the Netherlands, commercial cessation methods are widely promoted and people lack knowledge of evidence-based smoking cessation treatments[10]. Therefore, it is highly recommended that evidence-based smoking cessation methods are promoted and alternative, non-evidence-based treatments, are not advocated. Campaigns on the health consequences of smoking are very important too.

Realization

We will discuss the main findings from this dissertation with the vocational training institute with the recommendation of introducing an informative smoking cessation program. We can assist in the development of such a training program. Furthermore, we will advise the Dutch College of General Practitioners guideline panel to consider adding COPD-specific elements to the next update of the smoking cessation guideline. We advise researchers to further map out which additional information is needed in the guideline for other specific patient groups.

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