Make it last: the more, the better … or less is more?

Valorization

The present thesis is not only valuable for the scientific community, the findings can also be translated into relevance for society as a whole. The current chapter describes the societal value of the work presented in this thesis, in terms of practical relevance of the study results, and the target groups for whom these results are of interest.

Relevance

Many adults in the Netherlands cope with chronic diseases. Considering the aging of the Dutch inhabitants, these numbers will even increase in the upcoming years. In 2019, half of all Dutch adults were overweight/obese, which can lead to chronic illnesses such as type II diabetes and cardiovascular disease. In 2018, 613.800 Dutch adults were diagnosed with COPD. Healthcare costs for COPD are extensive. In 2017, healthcare costs for COPD were 912 million Euros (RIVM, 2020). These diseases are to a large extent preventable if people would have a healthy lifestyle (no smoking, no stress, healthy eating, being physically active, and sleeping well). People who already have developed a chronic illness also benefit from improving their lifestyle (Molema, Van Erk, Van Winkelhof, Van 't Land & Kiefte-De Jong, 2019). Along with prescribing medicines, healthcare professionals should more often use 'lifestyle as medicine'. Sustained participation in regular exercise among COPD patients could potentially lead to reductions in exacerbations or hospital admissions, which eventually will lead to reducing healthcare costs (Spruit, Pitta, McAuley, ZuWallack & Nici, 2015). Especially in (pulmonary) rehabilitation, people can get caught in a pattern of repeated relapse and re-entering rehabilitation time to time, a phenomenon called 'revolving door syndrome'. This leads to extensive healthcare costs, which might be prevented in case we develop effective maintenance programs following (pulmonary) rehabilitation, so benefits of the rehabilitation program will be sustained. The present thesis showed that long-term maintenance of lifestyle changes is a challenge to many people. The studies in the present thesis revealed predictors of successful lifestyle change and maintenance: participants in lifestyle interventions need to develop autonomous motivational regulations for the changed behavior, and healthcare professionals can facilitate this process by applying lifestyle coaching skills and a brokering role. With this knowledge, more effective maintenance programs can be developed. Successful implementation of the increased knowledge will eventually lead to a reduction of healthcare costs for society.

Target groups

The studies in the present thesis are of interest to multiple target populations.

The population of people with chronic diseases or at increased risk of it

It is expected that a lot of Dutch people will qualify for 'lifestyle as medicine'. CLIs and smoking prevention programs that are now reimbursed by health insurance companies are offered free of charge to participants. These preventive interventions are especially suitable for people with a low socio-economic status. New maintenance programs to be developed for COPD should also aim to become reimbursed, because among COPD patients the amount of people with a low socio-economic status is quite high. Not only the study populations in the present thesis can benefit from lifestyle interventions. All chronic diseases for which 'lifestyle is medicine', such as patients with kidney diseases, or people

who followed cardiac rehabilitation, can be coached to improve and maintain a healthy lifestyle.

Healthcare context

To many healthcare professionals, addressing lifestyle in their consultations is experienced to be difficult: 'people often relapse so it is not worth the investment', 'addressing lifestyle costs too much time to be feasible in my consultations', 'talking about lifestyle is intrusive into private life'. The present thesis showed that improving coaching and conversation skills is needed. Very often, when healthcare professionals tell patients what is best for them (applying 'sticks & carrots'), patients do not follow their advice. Mastering autonomy-supportive coaching and conversation skills is essential in guiding patients to make their own choices toward a sustained active lifestyle (www.blcn.nl/hoe-werkt-een-leefstijlcoach/). These coaching techniques are not easily applied in routine practice, and require intensive training and support by feedback (Martins & McNeil, 2009). Competences and skills for lifestyle coaching should therefore be taught to healthcare professionals. We recommend healthcare professionals to follow a post-graduate course in lifestyle coaching. Next to autonomy-supportive coaching and conversation skills, this course also improves the skills of lifestyle coaches regarding entrepreneurship, networking, signaling and referring to other healthcare professionals and key persons in the public domain. In this way, greater intersectoral collaboration between healthcare professionals and other stakeholders regarding chronic diseases will be stimulated. Lifestyle coaches and health brokers can help to bridge the gap between the public domain and healthcare domain.

Health insurance companies

A maintenance program for COPD patients inspired by CLIs like CooL / HealthyLIFE will probably lead to a reduction in healthcare costs due to better maintenance of lifestyle changes. Stakeholders are recommended to develop new maintenance programs for COPD patients, or integrate the COPD population and their needs into already existing CLIs like CooL / HealthyLIFE, together with health insurance companies (healthcare domain) and municipalities (public sports domain).

Educational institutes

The skills to be effective in lifestyle coaching should already be taught in educational programs to all types of healthcare professionals. It is worthwhile to integrate the topic of lifestyle in the medical training of all healthcare professionals, from general practitioners to professionals working in hospitals and rehabilitation centers, so they will focus more on prevention and will become skilled in applying 'lifestyle as medicine'. It is hard to unlearn former habits, and it takes time to practice coaching skills, so it would be most efficient if young healthcare professionals already learn effective skills in lifestyle coaching. Besides, it is recommended that coordinators of these educational programs refine their courses based on the insights provided in this thesis. For example, the recommendation of focusing on motivation quality rather than the amount of motivation, and how to do this, can be incorporated in the program.

Researchers

There is a need for more effective maintenance interventions. It is generally recommended in health promotion to rely on theories as a starting point (Eldredge, Markham, Ruiter, Fernández, Kok & Parcel, 2016). Interventions based on SDT have been shown to be efficacious in enhancing participation in health behaviors across multiple populations and contexts (Teixeira et al., 2012). The Motivation and Behavior Change Techniques of Teixeira et al. (2020) can be used by researchers to develop more effective maintenance interventions. The intervention mapping protocol could guide the development (Eldredge et al., 2016). An action-oriented research approach is advised to implement and improve the intervention, and a cost-effectiveness study will prove whether the maintenance intervention indeed leads to better outcomes and a reduction of healthcare costs.