Prevention and treatment of obesity

VALORISATION

An important aspect of scientific work, besides its value for the scientific community, is the translation of research findings into something with social impact. This chapter describes the relevance of the work presented in this thesis for society as a whole, including the target population, that is, people with obesity or at risk of it, lifestyle coaches, health care professionals, health brokers, health professionals, other bridging professionals and educational institutes. It also discusses how the findings of the studies described in this thesis can contribute to the work of other researchers.

Relevance for society

The studies presented in this thesis had a highly practical approach and focus, especially the Coaching on Lifestyle (CooL) study. This study evaluated the CooL intervention, in which people who are obese or at high risk of obesity are guided by a lifestyle coach. The topics in this combined lifestyle intervention (CLI) relate to obesity and lifestyle, including physical activity, dietary behaviours, sleep and stress management. This thesis has revealed the complexity of the implementation process of the CooL intervention, the facilitating and impeding factors in this process and the lifestyle changes achieved by the CooL participants over time.

CooL was implemented in a real-world setting to increase the chances of achieving sustainability of a nationally disseminated intervention programme. At the start of the implementation process in the pilot study, it was a programme that still needed further development. As a result of this, the research team and the stakeholders, including the lifestyle coaches who were the co-developers, encountered various real-world implementation barriers and were challenged to find ways to overcome these impeding factors. Furthermore, the action-oriented approach mean that the research team was in close contact with those who actually carried out the programme and other stakeholders. Thanks to this approach, this study was closely connected to the real-world setting in which the subsequent nation-wide implementation was expected to take place.

Health care insurance

The CooL intervention was started at the request of practitioners. The health insurance company CZ initiated the development and the evaluation of the CooL programme to improve participants' lifestyle. The goal of this pilot for CZ was to develop an optimal system for the reimbursement of CLIs by health insurance companies, with the ultimate aim of reducing the health care costs in the longer term. While our pilot study was underway, the Dutch government decided that CLIs will indeed be covered by the health insurance from 2019 onwards. This decision was partly based on the results of the studies described in this thesis. Since various parties were waiting to see the results of a successfully implemented CLI, the CooL results came at exactly the right time.

The new guidelines for the reimbursement state that CLIs can be carried out by various professionals [229]. The specific professionals or combination of professionals involved

should at least have all the competences required to execute an effective CLI, comparable with the competences of a lifestyle coach with at least a degree from a university of applied sciences. Individual health insurance companies are allowed to add additional quality requirements for these professionals, based on the minimum required competences.

Our studies found that the prospect that the new guidelines will apply from 2019 onwards had a positive influence on the motivation of the lifestyle coaches, referrers and other stakeholders in both the pilot regions and the regions that started the implementation after the pilot period.

The population of people with obesity or at increased risk of it

The implementation of the new guidelines and the reimbursement of CLIs by the health insurers from 2019 onwards is relevant for the Dutch population of people with obesity or at increased risk of it. It is expected that 3.5 million Dutch people will qualify for CLIs [242]. This number was calculated for the purpose of the nationwide implementation of CLIs, in which the CooL research team assisted the authors, who performed the analysis [242].

The reimbursement of CLIs is very relevant for the target population. These people have usually tried to lose weight before, but are unable to maintain this weight loss due to motivational, habitual and contextual factors. This population will benefit from the support of a coach and of their peers in group sessions, as well as from the easy accessibility of reimbursed programmes. The fact that CLIs will be offered free of charge for participants will be even more welcome for people with a low socio-economic status. This target population has been difficult to reach over the last 35 years [243]. The CooL study has succeeded in including in its study sample a relatively large percentage with a low educational level. Nevertheless, reaching the populations that are most in need of it will remain a challenge for the nationally disseminated CLIs, and their success in this respect needs to be closely monitored.

Further development of CooL into a programme protocol

The fact that the lifestyle coaches were responsible for the further development of the content of the programme motivated them to design a detailed CooL programme protocol that meets the new national guidelines for CLIs. All qualified lifestyle coaches in the Netherlands can now buy the CooL programme materials from the company 'Expertisecentrum Leefstijlinterventies' (Expertise Centre for Lifestyle Interventions) and start it up in their own region. The basic programme consists of a format with an open character, meaning that lifestyle coaches can use the practical exercises and adapt them to what they feel comfortable with, and so as to fit the participants' needs. However, the attainment targets of the programme have been defined, to ensure the quality of the intervention. These targets include all topics that should be addressed in the programme. CooL received an official accreditation ('first indications of effectiveness') from the Dutch Centre for Healthy Living, and is included in their Dutch database of best

practice interventions [236]. This accreditation is required for the reimbursement of the programme by the health insurers.

Relevance for lifestyle coaches

The CooL study and the national development of CLIs are also relevant for the profession of lifestyle coach. At the time the pilot started, in 2014, the lifestyle coach was a novel profession in the Dutch health care system. Over the course of the pilot period, lifestyle coaches became a more familiar phenomenon in the field of obesity prevention. The upcoming reimbursement of CLIs will probably lead to more people wanting to start with the CooL programme, increasing the need for coaches across the Netherlands.

The studies described in this thesis have provided lifestyle coaches in general with insights into what is relevant for executing their jobs. The action-oriented approach of the study enabled them to immediately integrate the knowledge they acquired in their routine practice. Coaching competences and empathy were found to be important competences for the coaches to have, and were well-developed among the coaches in this pilot. At the same time, it was found that the lifestyle coaches should further improve their entrepreneurial and networking skills, to create better stakeholder support, to increase the awareness of the concept of lifestyle coaches among professionals in the network and to create a sustainable professional network. Stakeholder support is necessary to successfully implement the intervention and to acquire a better position in the health care chain for tackling obesity.

In this light, coaches can take on the role of an 'ambassador' for the programme. If they cannot invest time in these networking activities themselves, or if they do not feel comfortable about doing so, other professionals can assist them. Additionally, lifestyle coaches could further develop the role of central care provider, by acting as a central point of contact regarding participants' lifestyle goals and by taking the lead among all care providers the participant has to deal with.

Comparable programmes

CooL formed a starting point for two other interventions, namely the healthyLIFE and Healthy Heart interventions. These two interventions differ slightly from CooL in terms of lifestyle coaching. After the CooL pilot study, one region (in the southern part of the Netherlands) started to implement CooL for adults, and further developed it into the healthyLIFE programme [244]. In healthyLIFE, they have integrated physical activity sessions with an exercise coach in the programme and provide several options for group size, i.e. a one-on-one programme, a buddy programme and a small group programme. Some activities are implemented during the lifestyle coaching sessions, e.g. supermarket safari, cooking workshop and walking activity.

The Healthy Heart intervention is executed by lifestyle coaches in one Dutch city (in the Randstad conurbation in the west of the Netherlands) [245]. The programme focuses not only on overweight, but also includes other lifestyle problems (e.g. smoking). Its

study includes a control period, after which adults with an increased risk for cardiovascular diseases can start with the lifestyle programme. These two interventions were, like CooL, funded by the health insurance company CZ. More studies and a variety of programmes should create greater awareness of lifestyle coaching, and knowledge will be gained regarding effective coaching strategies.

Not only CZ, but also other health insurance companies have initiated lifestyle programmes. An example is that the VGZ company funded the Keer Diabetes2 Om intervention [246]. In this programme various professionals (i.e. coach, dietician, nurse and programme coordinator) counsel patients with type 2 diabetes for half a year, starting with an intensive two-day programme. The development of these and similar initiatives will improve the scientific basis of the CLI.

Health care context

Not all health care professionals treat people with obesity the same as persons without obesity, due to prejudices, such as that obese patients are lazy and not motivated to try and improve their health [150]. They perceive it as a waste of time to treat these obese patients. Furthermore, at the time when our pilot started, obesity care was not a common theme to discuss during consultations in primary care [29]. Although the idea that obesity should be addressed in an integrated approach was gaining some ground, this happened at a very slow pace [14]. Integrated approaches to the prevention of chronic diseases have become more common since. Currently, health care professionals and policy makers are more aware of the importance of the impact of lifestyle behaviour on health outcomes [165].

Studies in this thesis could encourage health care professionals to acknowledge the relevance of their role in relation to obesity and prevention. First of all, these professionals have the possibility from 2019 onwards to refer obese patients to a reimbursed intervention, namely CooL or one of the other certified CLIs (currently BeweegKuur and SLIMMER). Second, health care professionals could take up their role in obesity prevention by using a more preventive approach instead of a curative approach, and by taking more time to motivate their patients and to give them lifestyle advice.

Furthermore, this research project can stimulate greater intersectoral collaboration between health care professionals and other stakeholders regarding obesity. Having more professionals with a bridging function in the health care chain would be beneficial for the intersectoral collaboration to prevent and treat obesity. Health brokers have shown their specific added value in bringing stakeholders together and facilitating intersectoral collaboration. They connect different stakeholders with each other, such as politicians, policy makers, health promotion practitioners, social and welfare workers, and private parties. A stronger collaboration between health brokers and lifestyle coaches can substantially enhance the integrated approach to reducing the burden of disease caused by unhealthy lifestyle.

Relevance for health brokers and other bridging professionals

The 'Health Broker Wheel' model, which was developed in our health broker study, can be used by health brokers, health promotion practitioners or other 'bridges' as a tool to better implement their brokering role and to facilitate intersectoral collaboration. The tool can also help to monitor and evaluate this role. Health brokers can stimulate integrated care and collaboration within the wider local community. We hope that this study will encourage policy makers and practitioners to work together in a more integrated way.

Relevance for educational institutes

This research project had close connections with various training programmes. Coordinators of these training programmes can adjust their courses based on the insights provided in this thesis. Programmes for lifestyle coaches should focus more on their entrepreneurial and networking skills, as well as their role within the health care chain of obesity prevention. Furthermore, the courses for lifestyle coaches of children and adolescents should emphasise the complexity of childhood obesity problems and potential additional problems faced by their families. One of supervisors in this research project (SG) teaches in the training programme for paediatric lifestyle coaches at the Dutch Academy for Lifestyle and Health (AVLEG). During her involvement in the training programme, she also provided some insights from the research perspective. It is useful to provide training courses for lifestyle coaching at a high educational level, because of the complexity of the coaching skills and knowledge required.

Apart from the training programmes for lifestyle coaches, coaching skills should also be taught throughout all training courses for health care professionals such as dieticians, physiotherapists and general practitioners. Since many different types of professionals are potentially involved in CLIs, they should all have a high basic level of coaching skills. Additionally, not only lifestyle coaches, but also other health care professionals should focus more on prevention and on providing lifestyle advice. The topic of lifestyle should also be better integrated in the medical training of general practitioners and in the training of other health care disciplines.

Our health broker study resulted in collaboration between AVLEG and the main researcher to develop a new training programme for health brokers. It has already been investigated whether there is a need for such a programme and what it should contain, and further development work is being planned.

In addition, this thesis has stimulated discussions at Maastricht University about the competence profiles of students with regard to obesity-related topics. Master students should not only develop their scientific skills, but should also acquire practical skills, so as to prepare them for their professional life. The context of this type of public health problems is often complex, and there are no 'magic bullet' solutions available for these 'wicked' problems. These problems therefore need to be approached in a flexible way, applying adaptive management strategies (i.e. adapted to the local context). This the-

sis may help to further stimulate improvements in the education of students, teaching them how to deal with wicked problems and complex contexts.

Relevance for researchers

The action-oriented study design of the CooL study is useful for researchers who want to study an intervention in a complex real-world setting. A strength of this approach was that it resulted in close and effective collaboration between the lifestyle coaches and the researchers, which enabled the implementation process to be closely followed and improved when needed. However, limitations of this design included taking ad-hoc decisions and the challenge for the researchers to maintain an objective view. Furthermore, the differences between the ways the coaches executed the programme could not be investigated systematically, because of the continuing changes to the programme over time. As a follow-up to the CooL study, two PhD students have initiated studies to further improve the contents and monitoring of CLIs.

The Dutch national media, such as newspapers (AD, De Limburger and Trouw), websites and social media, were interested in the CooL pilot from the beginning, and closely followed the developments of the pilot study and the intervention. We learned that it is useful to have a contact person at a newspaper and to use these contacts, rather than sending out general press releases. We also found out that the title of a newspaper article will only be established at the moment of publicaton, since it is written by the subeditor. The resulting heading can have considerable impact on the way the article is perceived by the readers, so it is advisable to provide a suggestion for a title when reviewing the draft version of the article.

We expect our recommendations throughout this thesis to be helpful in improving the dissemination, recruitment and monitoring of CLIs. If CLIs are reimbursed by health insurance, it will be useful for researchers to continuously monitor the intervention outcomes, in order to evaluate the long-term effects on a larger scale in a real-world setting. In addition, the costs of national implementation should be investigated, in terms of health care and societal costs of the CLIs, compared with other health care methods. Finally, it is important to evaluate the implementation process, in view of the changes taking place in the health care and prevention chain, and the time that is needed to implement the intervention at the national level. Such an evaluation should also investigate the influence of the implementation context.