

# **A prevention and health promotion programme for persons with overweight in Primary Health Care**

Patient outcomes and nurses' experiences in terms of weight, lifestyle, health and risk factors

Akademisk avhandling

Som för avläggande av medicinsk doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligen försvaras i K2320 C Kylberg, Medicinargatan 7, Göteborg den 11 december, klockan 13:00.

av Marie Bräutigam Ewe

Fakultetsopponent:

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Linköpings Universitet

## **Avhandlingen baseras på följande delarbeten**

- I. Marie Bräutigam Ewe, Marie Lydell, Jörgen Månsson, Gunnar Johansson, Cathrine Hildingh. Dietary Advice on prescription: experiences with a weight reduction programme. *Journal of Clinical Nursing*. 2016; 26: 795-804
- II. Marie Bräutigam Ewe, Marie Lydell, Håkan Bergh, Cathrine Hildingh, Amir Baigi, Jörgen Månsson. Characteristics of patients seeking a health promotion and weight reduction program in primary care. *Journal of Multidisciplinary Healthcare*. 2019; 12: 235-242
- III. Marie Bräutigam Ewe, Marie Lydell, Håkan Bergh, Cathrine Hildingh, Amir Baigi, Jörgen Månsson. Two-year weight, risk and health factor outcomes of a weight-reduction intervention programme: Primary prevention for overweight in a multicentre primary healthcare setting. *Scandinavian Journal of Primary Health Care*. 2020; 38(2), 192-200
- IV. Marie Bräutigam Ewe, Cathrine Hildingh, Jörgen Månsson, Marie Lydell. Primary care nurses' perceptions and experiences of patients being overweight, as well as visions and attitudes to working with lifestyle issues: a qualitative interview study. Submitted

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### Abstract

**Background:** Primary Healthcare (PHC) is often the first point of contact for patients and thus considered the ideal place to address obesity and lifestyle issues. A weight reduction programme was developed to gain a better understanding of what those who are overweight or obese need in order to improve their health, weight reduction and weight maintenance.

**Aim:** The overall aim was to describe and evaluate disease prevention and health promotion strategies in PHC for overweight persons related to weight, lifestyle, health and risk factors.

**Methods:** Study II had a comparative cross-sectional design, while Study III had a prospective two-armed RCT-design. Studies I and IV had a descriptive design with qualitative content analysis and an inductive approach. In Study I, 19 participants answered five written open questions about their experiences of the programme. In Study II, 286 participants were included in the intervention group, while the two reference groups from studies performed by the National Health Survey (HLV) comprised 747 participants from Halland and 4,855 from Sweden as a whole. The data were collected by means of HLV questionnaires and analysed using descriptive statistics. In Study III, 286 women and men aged 40-65 years with a BMI of 28-35 were included. The participants were randomized to high or low-intensity groups. Blood samples, physical measurements as well as GHQ-12, HLV, SOC-13 and EQ5-D were analysed by means of analytical statistics. In Study IV, 13 PHC nurses participated in individual, semi-structured, face-to-face interviews about their experiences of working with patients burdened by overweight and lifestyle issues.

**Results:** The participants in Study I appreciated the face-to-face meetings with the nurse because they felt seen and listened to. They believed that their life situation and self-discipline had an impact on how well they managed to follow the programme. Dietary advice on prescription (DaP) was deemed helpful for achieving behavioural change. People who succeeded in losing weight and sustaining the weight loss described the importance of support from partners and close friends. In Study II, the participants in the weight reduction programme were mostly women. They had a higher educational level, experienced worse general health than the overweight population and visited PHC more frequently than either of the two reference groups. They also felt more stressed, humiliated, reported more bodily pain and smoked less compared to the general population. They did not exercise less or have a lower fruit and vegetable intake than either of the two reference populations. In Study III, 182 (64%) participants allocated to a high or a low-intensity programme completed the 2-year follow up, leading to a significant overall weight reduction. No significant differences pertaining to weight were found between the groups. Anxiety/depression, self-rated health and sense of coherence improved in the whole group. Anxiety/depression, pain/discomfort and visits to the nurse decreased in the high intensity group and usual activities, fruit and vegetable intake increased. The PHC nurses in Study IV had a desire and a willingness to devote more time to overweight and lifestyle issues than was currently possible due to a lack of prioritization, resources, time and training. They felt that society should do more to stop the development of overweight. Structuring the conversations, tailoring them to each individual, without pointers, were crucial for weight management and strengthening the patients' motivation to change. The nurses reported a lack of clarity about how to use and implement guidelines. They also pointed out the need for a Swedish national forum for nurses working with overweight and lifestyle issues that would provide lectures about the latest research in the area.

**Conclusion:** To achieve and maintain weight reduction, it is important to individualize the programme in order to address each person's life situation and unique difficulties. The total study population lost weight, although the high and low-intensity programmes did not result in significant differences in terms of weight. The high-intensity programme reported health benefits linked to lower levels of anxiety and depression, increased activity and intake of fruit and vegetables, as well as a reduction in the number of visits to nurses. The nurses considered overweight to be a complex condition that requires a holistic approach with individualized care. The development of a multidisciplinary team to care for this patient group was the nurses' wishes.

**Implications:** Despite only a small weight reduction, a weight reduction programme can contribute to improved health in the form of a better quality of life, reduced anxiety and a healthier lifestyle. The programme needs to be individualized with a range of dietary behaviour interventions, e.g. stress management, in order to achieve better compliance. The nurses' dream scenario was a multidisciplinary team with allocated resources working together for a more holistic approach.

**Keywords:** experiences, health, lifestyle, obesity, overweight, primary health care, quality of life, weight reduction programme