



Changing Health Behaviour: Obesity and Overweight Issues

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Abstract: Scotland has some of the highest rates of obesity and diet-related diseases (e.g. heart disease) worldwide. This briefing overviews research on the causes, consequences, prevention and methods for intervention to enhance our understanding of this public health issue.

Keywords: *Behaviour Change – Health Promotion – Obesity – Being Overweight – Public Health*

Being Overweight and Health

Obesity occurs when energy intake from food and drink consumption is bigger than energy requirements of the body's metabolism over a prolonged period, resulting in the accumulation of excess body fat (1). A healthy diet and physical activity are lifestyle factors that influence one's weight and are important factors in the obesity issue. People with a Body Mass Index (BMI) of 25 to 30 can be categorised as moderately overweight and people with a BMI over 30 as seriously overweight or obese. According to the Scottish Health Survey of 2015 (2), about 65 percent of the adults (16 years and older) in Scotland are overweight, of which 29 percent are obese. These levels of overweight and obesity in Scotland are a serious concern and require drastic changes.

The Scottish diet contains too many calories and too much fat, salt and sugar, although 75 percent of adults think their diet is healthy (3). The consumption of

Key Points:

- Obesity and being overweight are severe public health issues that call for effective prevention and behaviour change.
- Obesity and being overweight not only have negative effects on the physical health of the individual but are also associated with prejudice and discrimination.
- Changing lifestyles and habits is challenging and research on successful methods is needed.
- Besides individual interventions, it is necessary to reshape our living environment from one that promotes weight gain to one that supports healthy choices.
- Development of a national strategy and policy focused on behaviour change and environmental change to address the issue of overweight and obesity is needed.

fruit and vegetables along with the lack of exercise have not changed in the past few years.

It is well-known that being overweight increases the risk of long-term health conditions like diabetes,

hypertension, heart disease, and reduces the quality of life and wellbeing of the individual (1). However, most individuals are not aware that there is evidence showing that carrying too much weight also increases the risk of developing cancers, contributing to more than 18,000 cases of cancer each year in the UK (4).

In this briefing, we will review the effects of being overweight or obese, and possible ways to promote a healthy lifestyle by changing behaviour and environment. Intervention techniques that have been implemented will also be discussed.

Prejudice and Discrimination

Being overweight not only causes serious health problems, among which are increased risk of diabetes type 2 and cardiovascular diseases, it also has an effect on the psychological well-being of the individual. Discrimination against overweight and obese individuals has increased dramatically (5). Norms about fat-as-bad and fat-as-unhealthy are spreading globally and cultural diversity in conceptions of ideal or acceptable body size appears to be in decline (6). Those who are overweight are stigmatized: seen as lazy, weak-willed, and self-indulgent (7, 8). Furthermore, obese persons have less career and educational access, lower pay, and worse health care service, and they are significantly more likely to be fired, bullied, teased, and romantically rejected (5, 9). This stigmatization can have serious consequences for the psychological and physical well-being of overweight individuals. It has been associated with an increased vulnerability to depression and maladaptive eating behaviours, low self-esteem, poor body image, and avoidance of physical activity (5, 10).

Psychological Theory of Eating: The Goal-Conflict Model

The physical and psychological consequences of being obese or overweight make this an important public health issue. Preventing obesity and promoting healthy behaviour are key points in changing the health of the people in Scotland.

Genetic factors do play an important role in developing obesity and gaining weight, but the individual and the society is not powerless to change it. The extent to which one is physically active and the daily calorie intake are both important influences. One's weight is unlikely to change unless we change our lifestyle, and maintain it.

According to the Goal-Conflict model of eating (11, 12), restrained eaters experience difficulty in resisting the attraction of tasty food due to a conflict between two goals. Namely, eating palatable food (enjoyment) versus weight control. This self-control dilemma makes it hard for the restrained eater to not violate their diet. Thoughts about food in restrained eaters make the mental representation of their dieting goal temporarily less accessible (12).

Prevention and Interventions

So how can we change our lifestyle for the better, reduce our weight and promote our health? Numerous studies have looked at factors that are associated with weight loss (13, 14, 15, 16, 17). These studies confirm that self-efficacy (the belief that you can change), empowerment, physical activity, healthy diet, intrinsic motivation and positive coping strategies are important variables that influence weight loss and sustaining this weight loss.

Common behaviour change techniques used in intervention for improving healthy eating and physical activity are providing information (knowledge), prompting intention formation and barrier identification, goal setting, self-monitoring, giving feedback, social support, stress management and motivational interviewing (18). However, changing one's lifestyle and habits is difficult and relapses are not uncommon.

The cause of the rise in obesity is not simply a result of a lack of willpower. Studies have shown that the so-called 'obesogenic environments' have a major influence on the decisions people make about their lifestyle and behaviour. These environments, like TV, desk jobs, high-calorie food, and clever food marketing encourage unhealthy eating and inactivity (19).

An analysis of 44 interventions on obesity found that education and personal responsibility are critical elements of any intervention program that aims to reduce obesity, but they are not sufficient on their own. Interventions should not rely on the individuals alone, but also on changes to the environment and societal norms. These include reducing default portion sizes, changing marketing practices, and restructuring urban and education environments to facilitate physical activities (20). Other suggested interventions focusing on environmental change are: the restriction of the sale of soft drinks, healthy food in schools, sugar tax, supermarkets promoting healthy food, development of parks and public sports activities (11)

The Scottish Government aims to focus on the following preventive strategies to reduce overweight issues and obesity (21, 22):

- Energy consumption: controlling the exposure to, demand for and consumption of excessive quantities of high caloric foods and drinks.
- Energy expenditure: increasing opportunities for and uptake of walking, cycling and other physical activity in our daily lives and minimizing sedentary behaviour.
- Early years: establishing lifelong habits and skills for positive health behaviour through early-life interventions.
- Working lives: increasing the responsibility of organisations for the health and wellbeing of their employees.

Conclusion

This review highlights a number of challenges for the development of more effective, evidence-informed strategies aimed at prevention of obesity and the promotion of a healthy weight. Reversing the obesity trend will require a major shift in thinking, not just by the individuals, but also by the government, families and society in general. For government and businesses, it means creating an environment that encourages healthier eating and physical activity. For individuals and families, it means eating less and moving more. At the moment, no country in the world has a long-term, comprehensive and successful strategy to deal with the challenges posed by obesity.

There are no quick fixes or easy solutions when it comes to changing one's behaviour and individuals do need to take ownership of their own health. Losing weight is about adopting a whole new lifestyle for long-term.

Limitations and Recommendations

This research briefing has mainly focused on published articles published in English and government

research reports. It is worthy to review literature outside the scope of this article to gain further insight into this complex public health issue. More research on prevention and intervention methods is needed to effectively find ways to change and promote healthy behaviour.

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