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Table of contents

Introduction

Background

Methods

Results

Discussion

Conclusion

References

Interventions for supporting Adults living with Obesity in the UK

1. Introduction

This research is focusing on a systematic literature review of Intervention for Adults living with Obesity in the UK and it will be conducted on secondary research.

Definition of the main concepts

There are two recognised words for an anomalous or overly deposit health-harming amounts of fat: overweight and obesity. The body mass index (BMI) is used to categorise overweight and obesity which ranges from 25 to 30. (WHO, 2023).

In the UK, one in four adults is thought to be obese. Body mass index (BMI) is the most used way for determining your healthy weight. You can find out what weight is healthy for your height based on your BMI. To calculate your BMI, use the NHS BMI healthy weight calculator. Most adults are regarded to be underweight if their BMI is 18.5 or below, healthy if their BMI is 18.5 to 24.9, overweight or obese if their BMI is 25 to 29.9, or both if their BMI is 30 to 39.9. People that are significantly obese are at least 40 years old. (NHS, 2023).

Rationale of the research

According to the Health Survey for England 2021, there are 25.9% of adults in England who are obese, and another 37.9% who are overweight but not obese. A body mass index (BMI) of 30 or more is typically regarded as obese. The poll, which was conducted in December 2022 and released, found that men were more likely than women to be overweight or obese (68.6% of men vs. 59.0% of women). The majority of obese or overweight persons are between the ages of 45 and 74. (House of Commons, 2023).

Along with the apparent physical changes it can bring about, obesity can also cause a number of deadly, severe disorders like heart disease, type 2 diabetes, and a few malignancies, including breast and bowel cancer and stroke. In addition to lowering your quality of life and increasing your risk for psychological issues like depression and low self-esteem, obesity has other negative health effects that are detailed below. (NHS 24, 2023).

Aim

Obesity prevention aims to promote achieving and maintaining a healthy weight among individuals and the whole community through deliberate cultural change. This goal emphasises the need of primary prevention, or preventing obesity before it develops. The main goal of primary prevention is to increase the likelihood that all people, especially at-risk individuals and groups, can reorient their eating habits, exercise routines, and weight management towards energy balance. Primary prevention, according to this article, is crucial for preventing the transfer of extra weight from a healthy weight to being overweight, being overweight to being obese, and going from mild to severe obesity.

Objectives

To define the main concept of Obesity. For me to achieve this aim, am going to explore some data, policy and services in the UK. Am going to conduct secondary research and lastly, I will provide recommendations on how to improve the lives of people living with Obesity in the society.

2. Background

Contextual information

In the 1990s, obesity rates increased dramatically worldwide. Between 1980 and 1991, the frequency of obesity increased in Britain, and it is still increasing. The NHS spends approximately 700 euros (\$500 million) on medical treatment even though there are 30 000 fatalities each year in England alone. Additionally, there has been a significant rise in childhood obesity over the previous 20 years. Similar to adult obesity, adolescent obesity increases endothelial dysfunction, hypertension, hyperinsulinemia, and dyslipidemia. Over half of all newly diagnosed cases of diabetes in youth in North America are now of the type 2 variety, which was previously largely non-existent in adolescence. Type 1 diabetes has nearly disappeared in puberty, and the "insulin resistance syndrome" has been discovered in kids as young as 5. This is concerning considering type 2 diabetes's

repercussions on the macro- and micro-vascular levels, including blindness, renal failure, and neurological issues.

When extra weight is eliminated, maintaining "normal" weight over the long term is very impossible due to the difficulty of treating obesity. A meta-analysis of 29 studies that looked at five-year weight loss maintenance found that obese persons only lost 3 kg throughout this time (indicating a slower rate of 3% below baseline body weight). Because weight loss programmes have a poor success rate, it is necessary to develop policies and programmes that concentrate on preventing obesity. The following list of potential policy and control techniques includes some advice. This post makes some choices and aims to provoke discussion rather than come to any firm conclusions (BMJ Publishing Group Ltd & British Association of Sport and Exercise Medicine, 2023).

3. Methods

This is secondary research. It is a systematic literature review on three journal articles not more than ten years on the Interventions for supporting Adults living with Obesity in the UK. It will be a Thematic analysis.

A systematic review is a type of review that uses repeatable methods to find, select, and synthesise all pertinent evidence. It provides a comprehensive response to a precisely specified research question and describes the steps required to get the conclusion. (Turney, 2022).

The results of several primary research that are connected to one another are synthesised through systematic review, which uses procedures to reduce biases and random errors. (Gopalakrishnan, 2013).

Analysing data using themes is one method for evaluating qualitative information. Typically, it alludes to a grouping of texts, such an interview or transcript. In order to identify recurrent themes, subjects, concepts, and patterns of meaning, the researcher painstakingly evaluates the data. (Caulfield, 2022).

For this research I used different websites like Google search engine, the University Library and National Library of Medicine.

The keywords I used to search are:

- Obesity intervention of adults in the UK
- Obesity Prevention
- Obesity Support for Adults
- Adults with Obesity.

Database(s)

Thematic analysis

Inclusion Criteria

Date of Publication: Published between 2013 and 2023

Language: English

Type of Source: Literature Journals

Geography/Location: UK

Any other: Adults only

4. Results

Based on the research methods, the following three articles were found:

Table 1: Shows selected studies.

The original citation	Study's purpose	Techniques and sample size	Overview of the key findings
Booth, (2023)	To investigate access weight reduction interventions for overweight	36,319 Patients. Clinical Practice Research Datalink.	Antiobesity drugs Prescriptions. Dieticians.
Rassy et al, (2023)	To investigate the relationship between healthy lifestyle characteristics and the prevalence of serious illnesses associated with obesity in people who are obese as compared to those who are normal weight.	UK Biobank participants. 438 583 Adult participants.	A healthy way of life was linked to a lower risk of many obesity-related disorders; however, this correlation was small in obese individuals. Although leading a healthy lifestyle seems to be advantageous, the health risks linked to obesity are still present.
Simpson et al, (2020)	To create and evaluate the viability and acceptability of a social support, web, and	GP practices patient databases. Inclusion/exclusion criteria. SPCRN stands for Scottish Primary	Major changes in one's life. character qualities. Mood and social expectations. Lack of available

	application (app) based intervention for helping obese persons achieve their weight loss objectives.	Care Research Network. 109 people took part.	support. Having trouble asking friends and family for help
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The found Themes:

Theme 1:

Adults with obesity were more likely to develop a number of diseases than individuals who remained in this cohort study of 438 583 UK Biobank participants with a healthy body weight and style of life.

Themes 2

In obese persons, a reduced chance of developing heart disease, kidney disease, gout, sleep issues, and mood disorders was associated with regular exercise, stopping smoking, drinking alcohol in moderation or not at all, and maintaining a balanced diet.

Themes 3

HelpMeDolt was available to the intervention group for a full calendar year. They were inspired to do things like create goals, track their progress, and use social support by asking their current social network for "helpers" as well as to use social support in general. For the control group, a pamphlet on leading a healthy lifestyle was provided.

Themes 4

Interventions for managing body weight, such as counselling, referring patients, and writing prescriptions for weight-loss medications, were assessed.

5. Discussion

Weight management therapies were infrequently used to treat overweight and obesity between 2005 and 2012, according to an analysis of primary care electronic health data. The BMI category showed a high correlation with the chance of intervention. However, higher proportions were observed in lower BMI categories, with severe obesity affecting 58% of women and 60% of males having no history of undergoing weight management in primary care. There were significant differences in how general practitioners managed obesity, with many of them not documenting any interventions. These findings may stem from inadequate documenting of the advice given, but they may also point to a lack of patient access to body weight management therapies that are effective in primary care as a result of clinicians' lack of knowledge or comfort in managing obesity.

Some research suggested that antiobesity medications were used more frequently in individuals fell into higher categories of obesity, and that obese people were more likely to get advice. Age, socioeconomic disadvantage, female gender, and comorbidities all tended to be associated with greater use of weight management treatments, even though the BMI category was the best predictor, with rates for morbid obesity being around three times greater than for overweight.

In order to help participants reach their weight loss objectives, this study evaluated the viability and acceptability of a theory-informed web and app intervention. In phase 1, we worked with potential users to design the app and website. We finished a feasibility trial in phase 2. The conditions for progression and associated feasibility measures are the main subjects of the study questions. Diet, physical activity, and BMI were evaluated as potential primary outcomes though, in order to conduct a full evaluation. Among the other results were alcohol usage, smoking, alcohol waist size, self-efficacy, motivation, social support, mental health, and capability well-being. As part of a process evaluation, information on resource consumption, participant-borne costs, and intervention costs was acquired. The evaluation method and the programme theory were also examined.

All British household income and body mass index (BMI) categories may consume less energy overall if the price of high sugar snacks rises by 20%. In the first year,

the estimated reduction in obesity prevalence at the population level was 2.7 percentage points.

Additionally, according to our findings, a 20% tax on high-sugar snacks may aid in reducing health disparities brought on by dietary-related illnesses since families with obese children (BMI 30) and low incomes (£20,000 per year) have the greatest capacity to limit their sugar intake. After a year, it was predicted that weight change based on a price increase for high-sugar foods and beverages combined, the weight gain in low-income families categorised as obese and middle-income households classified as overweight would be around 2 kg. The anticipated effects were minimised in middle- and high-income households due to differences in own and cross price elasticity of demand (PEDs), as well as the increased number of high-sugar snacks and beverages bought by low-income families classified as obese.

Strengths and Limitations

The method used in the large population-based sample used in this study, which was drawn from many UK regions, was an advantage. However, it's conceivable that not all weight-control methods, particularly advice on living a healthy lifestyle, were recorded in the electronic health record. Clinicians may offer patients brief instructions without recording them, which could have caused the intervention rates to be underestimated.

Referrals and medication prescription are less likely to be affected by this.

Additionally, the patients who made up this sample were chosen because their BMI records showed that they were overweight or obese. Given that these patients have been diagnosed by a clinician as having a weight problem, this may have created a selection bias.

Patients getting different weight management strategies from those who have been diagnosed with obesity include those who are obese but do not have a record of their weight status in their medical records. They examined the impact of price increases on a range of high-sugar foods.

The numbers were compiled using a few top-notch databases that contained accurate information on food purchases, consumption, and BMI for a representative national sample of the UK population.

When compared to the official, UK government-collected statistics for household spending, the Living Cost and Food Survey, the Kantar FMCG (fast moving consumer goods) panel data has shown to give equal estimates of budget and budget proportions. Due to the panel's data representing baseline purchases across all food groups and our projected elasticity estimates, this is the case. The poor engagement of assistance via the app was a major flaw in the study. Despite how frustrating that was, the qualitative data showed that the intervention's programme theory had been implemented because the app had made it easier for users to interact with assistants outside of the app.

Several users lost interest in the intervention and maybe the experiment as a result of technical problems with the app during the early stages of the trial. For this reason, some users and helpers decided to communicate outside of the app.

Another drawback is that only residents of Greater Glasgow and Clyde were used in the study. This is a sizable area including both urban and rural areas, as well as a variety of populations. However, it has worse health than other UK regions with comparable degrees of deprivation, which may affect how generalizable the study approach is.

A total of 25% of the households were left out of the analysis because there was insufficient data on their income or BMI. Such gaps in knowledge are unlikely to be caused by price elasticity or purchasing patterns.

Since we present stratum-specific data, it was predicted that missing data would have little to no effect on group-specific estimates; nonetheless, it is possible that the pooled values across groups were affected.

The sample average for the basic daily energy purchase estimates figures that don't account for the potential differences in energy needs across household members based on sex or age. Since we lacked information on these traits for household members, we were unable to account for these factors.

Recommendations for health and social care policy and practise in the future

Exercise and food are the first lines of therapy for obesity. Numerous dietary alternatives, including the Paleo diet, low-fat and low-carb diets, the Mediterranean diet, can be advised (Alookaran et al, 2023).

Users will be given the opportunity to investigate the possibility of receiving instruction through the app rather than a website. We would make sure there was a testing phase after refining before allowing access to participants in order to work out any bugs in the technology before the app was made available in the app store. Several conclusions drawn from the qualitative data will contribute to raising participant and helper engagement in the intervention. One important recommendation is to download the app while the field worker is there so that participants can be instructed on how to use it and any potential problems may be resolved then. Additionally, we'll try to offer more advice on how participants and helpers interact, such as how to approach them and how to offer and receive assistance most successfully. We would strive to improve the helper nomination process, which may be made more efficient. Based on the results of our process review, we could also offer advice on how to choose a suitable assistant. Another idea was to let participants in the intervention arm help one another among themselves. This might help with the problem where a tiny percentage of participants had trouble asking for aid or had no one to suggest. It might also imply that by providing more possibilities for social support, the intervention's impact could be strengthened. Importance of the findings for health and social care.

As recommended by a GP or a dietitian who specialises in weight loss management, consume a nutritious, calorie-restricted diet. Make a commitment to engaging in 150–300 minutes (2.5–5 hours) of exercise each week through activities like jogging, swimming, tennis, or quick walking. It may be good to sign up for a local weight-management programme with group sessions or online support. You can learn about these from your doctor. You can receive advice and counselling from a competent healthcare professional to help you better understand your relationship with food and create new eating habits. If you have obesity and changing your lifestyle and behaviours alone hasn't helped you lose weight, a medication called orlistat may be recommended. When used as prescribed, this drug decreases the amount of fat your

body absorbs during digestion. If orlistat is a good fit for you, your doctor will let you know. Your doctor might suggest liraglutide if orlistat hasn't worked for you or if you're unable to take it. It functions by making you feel fuller and less hungry. A medical expert might advise weight-loss surgery for some fat patients. (NHS, 2023).

Choosing healthier healthy foods and beverages (whole grains, fruits, vegetables, healthy fats, and protein sources) and avoiding unhealthy ones (red meat, processed meat, potatoes, refined cereals, and sweets) are all positive steps to take. Other beneficial measures include increasing physical activity, reducing screen time and other "sit time", getting more rest, and reducing stress. (Harvard T.H. Chan, 2023)

6. Conclusion

The quick obsolescence of apps is a major obstacle for anyone working in the digital health industry. The main concern is what the platform is offering, even though technology is constantly improving and the platform itself may change.

When compared to equivalent price increases for sugar-sweetened beverages, a 20% price rise on high-sugar snacks could result in energy intake and BMI reductions that are more than twice as low. However, there would be a substantial difference depending on family income and BMI categories.

Anyone can be afflicted by the obesity pandemic. Having a dangerous lifestyle is the primary contributor to the issue, notwithstanding the influence of genetics and other physical variables. By altering our lifestyles, we can take control of our health. We would be able to eliminate obesity from our lives if we adopted a healthy lifestyle. The improper diet precludes the use of any medication. A healthy diet can eliminate the need for medication.

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