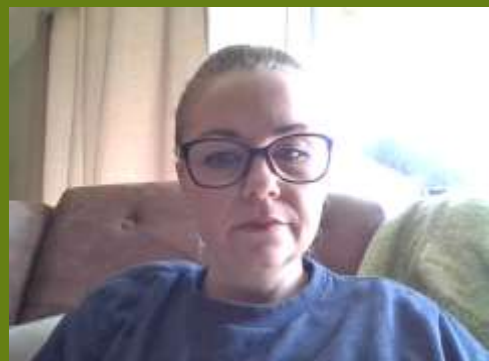
OBESITY AND COVID-19

THE HEALTH BELIEF MODEL



AIMS OF PRESENTATION

An introduction to some of the most common models of Health Behaviors

Obesity and the Health Belief Model

Better Health- A Government Campaign

Obesity and the Covid 19 Pandemic

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MODELS OF BEHAVIORAL CHANGE

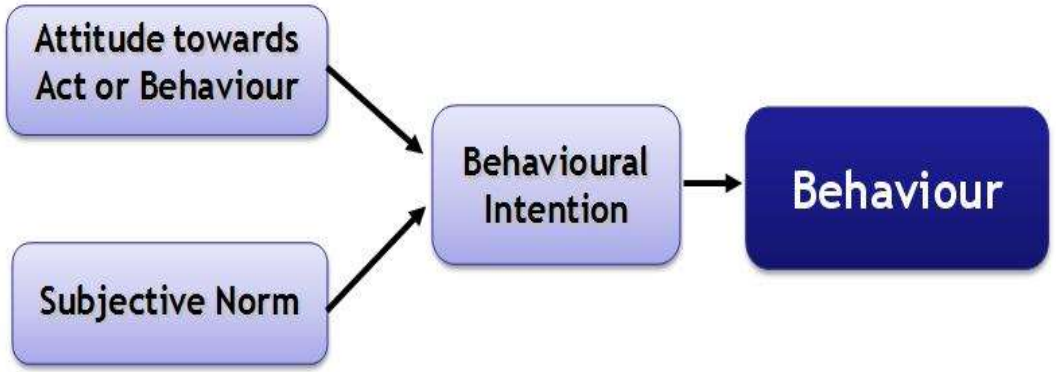
These models are often used to explain why a person adopts or does not adopt a specific behaviour. The 3 most commonly used theories are;

1. **Health Belief Model (HBM)-** Used to predict a wide range of health related behaviours (Ogden, 2000) It assumes the likelihood that people will engage in a particular behaviour by assessing what risks are involved in adopting a behaviour, their perception of the consequences and the barriers they may face through the process. Mass-Media campaigns can increase the likelihood that the desired action will be adopted. Ogionwo (1973) found that a radio, film and poster campaign was successful in attempts to prevent cholera

2. **Theory of Planned Behaviour (TPB)-** Aims to change people's attitudes, perceptions and social norms by firstly understanding what they are, then proceeding to change them to adopt a particular behaviour. It is important that the person feels confident that they currently have the tools to achieve their desired behaviour and overcome barriers. (Ajzen, 1991)

3. **Trans Theoretical Model (TTM)-** Has 5 stages which a person works through in order to change their behaviour, these are; Pre-contemplation, Contemplation, Preparation, Action and Maintenance. (Prochaska et al., 1993)

THE HEALTH BELIEF MODEL



The (HBM) focuses on 2 elements of a person's perception of their health and their behaviour;

1. Threat Perception
2. Behavioural Evaluation

- The person assesses whether their current state of health poses a greater risk of illness and what consequences they may face
- The person weighs up the perceived benefits and what they believe could be barriers (Janz and Becker 1984)

THE HEALTH BELIEF MODEL AND OBESITY

- The HBM covers most of the relevant factors in determining whether or not a person engages in a particular behaviour including demographic variables for example age and gender, furthermore a person's psychological characteristics such as how an individual copes with stress, stubbornness etc. Forshaw (2002)
- Perceived susceptibility - This refers to a person's subjective perception of the risks of being overweight has on their health (Janz and Becker 1984)
- Perceived severity - This refers to a person's feelings on the seriousness of contracting an illness associated with being overweight, e.g. heart disease, effects of Covid-19 if contracted
- Perceived benefits - This refers to a person's perception of the effectiveness of various actions available to reduce the likelihood of becoming seriously ill due to being overweight
- Perceived barriers - This refers to a person's feelings on the obstacles associated with loosing weight e.g. expense, time consuming. Dunn. (2007)

OBESITY IN THE UK

- According to UK Government figures, In the year to November 2019, 62.3% of adults (people aged 18 and over) were overweight or obese (Department of Health & Social Care, 2020)
- Obesity related illnesses cost the NHS £6 Billion a year
- People who are overweight are at greater risk of serious illness or death from COVID-19
- Nearly 8% of critically ill patients with COVID-19 in intensive care units have been morbidly obese, compared with 2.9% of the general population. (Department of Health & Social Care, 2020)

Obesity is associated with reduced life expectancy. It is a risk factor for a range of chronic diseases, including heart disease, type 2 diabetes, at least 12 kinds of cancer, liver and respiratory disease, furthermore obesity can impact on mental health. Guh et al., (2009)

The Government intends to ban online and television advertisements of foods that are high in fat, sugar and salt before 9pm, where children are more likely to see them

Ending 'Buy One Get One Free' (BOGOF) promotions and restricting the placement of high fat, sugar and salt foods in prominent places in stores such as entrances and at tills. Shops will be encouraged to promote healthy eating and discount fruit and vegetables

Calorie labelling in large restaurants, cafes and takeaways will be required by law as eating out is becoming increasingly more common and research suggests people consume around 200 more calories than they would have at home. Department of Health & Social Care. (2020)

BETTER HEALTH- GOVERNMENT CAMPAIGN

In response to the previous figures the Government has introduced a new health campaign called

Better Health

Better Health - NHS (v

OBESITY AND COVID-19

- COVID-19 is an infectious disease, which is caused by a novel coronavirus. Many people infected with COVID-19 can suffer a range of symptoms, such as high temperature, a persistent cough and sore throat. Many can also be symptomless. However, for some people COVID-19 will cause more severe symptoms, and it can adversely affect the lungs and many other body systems and can cause death. World Health Organization (2020)

- patients living above a healthy weight (BMI ≥25kg/m2), are at a progressively increased risk of being hospitalised compared with patients with a healthy BMI
- there is potentially a higher risk of COVID-19 related death with increasing BMI
- However it is important to note, there are a number of limitations in the evidence to date, including sampling and testing strategies, unequal exposure to COVID-19, sample sizes and limited number of COVID-19 infections. More research is needed. Public Health England. (2020)

BMI Range	BMI Category
Less than 18.5kg/m2	Underweight
18.5 to <25kg/m2	Healthy weight
25 to <30kg/m2	Overweight
30 to <40kg/m2	Obesity
40kg/m2 or more	Severe obesity

EVALUATION OF THE HEALTH BELIEF MODEL ON OBESITY AND COVID-19

ADVANTAGES

- HBM is the only model which lends itself exclusively to health behaviours
- There is extensive evidence supporting the HBM's predictions with regards to a wide range of health behaviours. (Becker and Rosenstock (1984)
- Is a useful tool for disease prevention programs- therefore could lend itself successfully in the battle against Covid-19 and obesity- if a person is at greater risk of complications of the disease if overweight then it may motivate people to loose weight

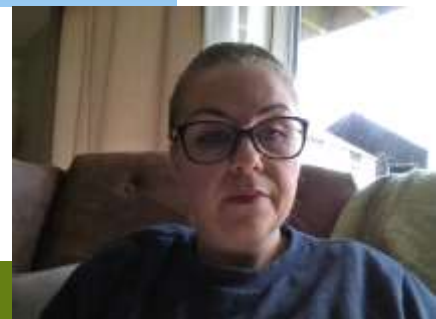
LIMITATIONS

- Does not take into account some people's perceptions of themselves, if a person does not believe that they are at risk of a disease, i.e. Covid-19, they will not seek to change their behaviour in order to prevent it
- Subject to bias, as individuals can have a tendency to exaggerate their responses in studies to present a socially desirable picture of themselves rather than what is factual. Orbell and Sheeran (1998)

CONCLUSION

The HBM has been used in many successful studies for predicting health behaviours and could be useful in the battle against Covid-19 and obesity, however, for a more comprehensive and effective change in health behaviour, it would perhaps be more beneficial to use a variety of health behaviour models together in order to achieve successful desired results, as the use of one model alone cannot satisfactorily guarantee favourable outcomes. (Harris and Middleton, 1995)

Individuals are of course very different to one another, and what might work for one person, may not be successful for another, therefore a blended approach to the use of health models may be necessary



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