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University of Canberra

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FACULTY OF HEALTH

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TITLE OF ASSIGNMENT/ESSAY: Obesity in Australia
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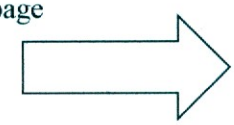

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Obesity in Australia

Daniel J. Baxter (u116054)

University of Canberra

Public Health Systems and Policy 1: Public Health Interventions Essay

Word Count: 2651

Obesity in Australia

The rise in obesity is one of the least understood public health issues in Australia. With around one in four adult Australians obese (Australian Bureau of Statistics, 2013), and the obesity rate continuing to rise, it seems that past policy in this area has failed. Nevertheless, future policy directions related to obesity issues are difficult to determine. Why the issue is prevalent and how to effectively deal with it using policy are questions that are difficult to answer. The estimated annual costs in Australia directly attributed to obesity related non-communicable disease is AUD21 billion (King, Grunseit, O'Hara & Bauman, 2013). There seems to be a lack of effective treatments available, and a lack of effective drugs, such as hunger suppressant medication. Overridingly there is a lack of effective policy. Policy often points to the individual, however individual behaviour is unable to explain the rise in obesity prevalence. The main policy approach centres its focus on mass-media campaigns designed to elicit change in behaviour. This approach with its strengths, weaknesses, benefits and failures will be discussed in this essay.

There is a need for strong policy in the public health issue of obesity. The public are ill-equipped to handle the issue on an individual basis, as there is much misinformation that circulates. Some of this misinformation is outdated science, for example many people perceive cholesterol as being inherently bad for them (Saladin, 2012). Strong policy would follow the key scientific findings in this area. The World Health Organization (2014) described added sugars as "obesogenic" and released a draft guideline in March 2014 which recommended reducing the amount of daily recommended sugar intake by half. Also, the public often turn to the diet industry which by now has shown itself to be unable to correct the problem. For example, the reader may remember when Magda Szubanski was a spokesperson for Jenny Craig, but after

losing 36 kilograms Szubanski regained the weight and was dropped by the company (Women's Weekly, 2014). This approach clearly blames the consumer and not the product, however it is now established that hardly any obese people are able to ever return to a healthy weight and maintain it on their own, as they experience a "terrible hunger" following weight loss (ABC News, 2014; Enriori, Evans, Sinnayah & Cowley, 2006; Proietto, 2011).

What is obesity and is it a disease? It may surprise the reader to know that there is not a precise definition of obesity. Obesity was first proposed by the World Health Organisation (WHO) to be a disease in its own right in 1948 (James, 2008). It is now recognised by WHO and the American Medical Association as a disease in its own right (American Medical Association, 2013; James, 2008). In Australia, the House of Representatives Standing Committee on Health and Ageing (2009; i.e. 'the Committee') recommended obesity be listed as a chronic disease and placed on the Medicare Benefits Schedule. The recommendation was not adopted into policy and so neither the Australian Government, nor the Australian Medical Association classify obesity as a disease (ABC News, 2014). Brown (2013) notes there is general agreement that while the definition of obesity is imprecise, it is associated with an increase in adipose (i.e. fat cell) tissue, and especially concerned with abnormal amounts of abdominal adipose tissue. The Committee note that obesity can be crudely measured by BMI (Body-Mass Index) and somewhat more accurately by waist circumference.

Reversing obesity is very difficult, and there is general agreement among experts on obesity that non-medical intervention (i.e. diets and diet products) does not work to reverse obesity long-term (ABC News, 2014; Enriori, Evans, Sinnayah & Cowley, 2006; Proietto, 2011).

There are public awareness campaigns designed to combat obesity and these are funded and promoted by the Federal, State and Territory Australian Governments. The "Measure-Up"

campaign was launched in 2008 by the Australian Better Health Initiative (ABHI), and its goal was to reduce the risk of chronic disease caused by obesity by prompting behaviour change. ABHI was established in 2006 as a collaboration of the Council of Australian Governments (Lupton, 2014). It was the first mass-marketing campaign designed specifically to address obesity in Australia (King, Grunseit, O'Hara & Bauman, 2013). Similar mass-marketing campaigns have been run for other areas of public health, including tobacco, alcohol, sunburn and melanoma, cancer screening, and nutrition in general. Some of these campaigns have been shown to elicit behaviour change (King et al., 2013). Measure-Up was run for four years at a total cost of AUD30 million (King et al., 2013). The TV commercials were considered innovative, taking a fresh and original approach to the obesity problem, focused on prevention (King et al., 2013). The first wave of advertisements featured a young man who walks towards the camera and progressively ages and gains weight. The advertisement also featured a voiceover explaining some of the risk factors for chronic disease. The primary target audience was 25 to 50 year olds with families and centred upon individual responsibility for weight (General Practice Queensland, 2009; King et al., 2013).

King, Grunseit, O'Hara and Bauman (2013) studied the Measure-Up campaign, using a cohort of 1006 people across New South Wales (NSW), who were interviewed both before and after the campaign. The researchers (King et al., 2009) noted the innovative use of the waistline measurement as a risk factor. Measure-Up achieved a very high level of public awareness, around 90% (General Practice Queensland, 2009; King et al., 2013). It was also found to be very effective in communicating the risk factors (General Practice Queensland, 2009; King et al., 2013). However one of the faults identified by the researchers in the approach was its lack of recognition of the social and physical environments which contribute to the risk factors. Another

criticism put forward by the researchers was that the approach could lead to "victim blaming". The researchers found that while the campaign was successful in communicating its message it failed to produce any change in behaviour (that is physical activity or eating habits). They recommended that Measure-Up be considered as a first step that provided a foundation of awareness that could be built upon.

The importance of preventative measures for obesity cannot be understated, as recent research shows that non-medical intervention is unable to cure obesity. While policy often uses common-sense arguments, science can actually be quite counterintuitive. Contrary to what may seem intuitive, the human body's energy intake from food is controlled by a homeostatic process that keeps the intake and expenditure of energy from food in equilibrium. Like the way that secretion of the glucagon and insulin hormones are used to regulate blood glucose, secretion of the ghrelin and leptin hormones are used to physiologically control how much energy a person consumes from food. Speaking on ABC News (2014), Joe Proietto of the University of Melbourne put it this way "we now know body weight is very vigorously defended by the brain. In that following weight loss the hormones that control hunger (that circulate in our blood) change in a direction to make people more hungry. And hence making it very difficult to maintain weight loss." Hormone imbalance in obesity has been experimentally observed with rats (Levin, Dunn-Meynell, Ricci, & Cummings, 2003), and has also been observed to exist in humans (Vendrell et al., 2004). Multiple researchers have found there is a decreased effectiveness of the leptin hormone in individuals with obesity (Enriori, Evans, Sinnayah & Cowley, 2006; Martin, Qasim & Reilly, 2008; Tomiyama et al., 2012). "In common obesity, leptin loses the ability to inhibit energy intake and increase energy expenditure; this is termed

leptin resistance." (Enriori et al., 2006, p. 1). Put simply, how much a person eats is directly controlled by a biochemical process and not lifestyle choices.

Perhaps paradoxically, although lifestyle choices do not play a direct role in controlling the amount of food a person eats, specific diet factors (i.e. specific foods) do have a meaningful effect on the quantity of energy consumed. A twenty year study done by Mozaffarian, Hao, Rimm, Willett and Hu (2011) in the United States proved that individual diet and lifestyle factors have long term effects on weight-gain. In the study, over 120,000 non-obese participants in three cohorts were assessed four times each over a period of 20 years. The average age of participants at the beginning of the study was between 37.5 and 50.8 (depending on the cohorts). The average weight gain was 0.38 kilograms per year. The researchers found that specific lifestyle and diet factors were linked with long-term weight change (gain or loss). While lifestyle factors such as sleep duration and hours spent watching TV had effects on long-term weight gain, they found that it was specific diet factors (e.g. whether a person ate potatoes) that had the strongest association with weight change. For example, consumption of potatoes was associated with a weight gain of 0.58 kg per four years. Whilst not a lot on its own, the researchers found the diet factors to be cumulative. This study highlights the need to communicate the need for long term permanent lifestyle changes to combat obesity.

The Measure-Up campaign was followed by the "Swap It, Don't Stop It" campaign that was run for two years from March 2011 to March 2013 (Western Australia Department of Health and Heart Foundation, n.d.). Swap It had its focus on simple lifestyle changes, promoting "swapping" as a way to improve health. Swap It was then followed up by the "Shape Up Australia" campaign, launched in February 2013 by the Federal Government (Western Australia Department of Health and Heart Foundation, n.d.). Shape Up continues to focus on waistline as a

risk factor for chronic disease. Luptin (2014) criticised these campaigns (Measure-Up and Swap It) for ignoring the more complicated science.

Other mass marketing campaigns have also been run and supported by the State and Territory Governments. One campaign is called “LiveLighter”, designed by the Heart Foundation WA and Cancer Council of WA, it was founded by the WA Health Department (LiveLighter, 2014). The campaign was launched in 2012 in WA, and in 2014 was extended to Victoria and ACT (it was launched in the ACT on 19 October 2014). It is designed as a three year campaign with a budgeted cost to the WA Government of AUD7.5 million (Fraser, 2013). It featured graphic advertisements of what it termed “toxic fat” (i.e. visceral fat), as well as fact sheets on their website. Since this is currently an ongoing campaign, there is not yet any published data to examine the impact that it has achieved. Tony Stubbs of the Heart Foundation ACT noted the importance of running the campaign saying “the campaigns we've had and the communication we've had around weight in the past hasn't worked: 63 per cent of Canberra adults are overweight or obese” (Hogan, 2014).

Other areas of policy have been recently proposed to the Federal Government by the House of Representatives Standing Committee on Health and Ageing (2009; i.e. ‘the Committee’), which came up with twenty one policy recommendations. These included classifying obesity as a disease and putting it on the Medicare Benefits Schedule, adopting food labelling recommendation using the Food Standards Australia New Zealand food labelling review (as cited by the Committee), and developing a new healthy eating guide better tailored to Australian conditions. The Committee also recommended clamping down on the diet industry by requiring weight loss products to be healthy and effective.

The Committee's recommendation to provide a more tailored guide to healthy eating is perhaps a particularly important one for Indigenous people. There is still a 10-year life expectancy at birth gap between Indigenous and non-indigenous people in Australia (Australian Institute of Health and Welfare, 2014). AIHW (2014) notes that chronic diseases are the most significant factor for this difference, and that metabolic and nutritional disorders account for 21% of chronic diseases in Indigenous people.

There is presently no specific dietary recommendations given by the Department of Health for Indigenous people. The Australian Guide to Healthy Eating (or food pyramid) published by Department of Health (n.d.) is very similar to other countries, for example Japan's "Spinning Top" food guide. The number of recommended servings of each of the five food groups (i.e. grains, vegetables, fruit, meat, and dairy) is also very similar. However, as noted by House of Representatives Standing Committee on Health and Ageing (2009) there is a need to be able to communicate the dietary recommendations in such a way that it caters to individual people's nutritional requirements. Historically speaking, Indigenous Australians ate some seeds, but their traditional diet had a diet quite different to the agricultural-based diets. They did not traditionally eat soy, most grains, or dairy. Most Indigenous people also lack the lactose-persistence gene (allowing them to digest the lactose in diary). The present food guide doesn't acknowledge or cater to cultural dietary requirements. But there is a need to do so, because it seems introducing people who are not familiar to the cereal-based diet to it is problematic. Cordain (1999) found that there was substantial evidence to show that whenever agricultural based diets had been first adopted across the world, it was associated with a range of negative public health consequences (pp. 5-6).

Food package labelling is also a key area of concern to health professionals, and one which is presently self-regulated. Policy recommendations have been made to the Federal Government to adopt guidelines by both House of Representatives Standing Committee on Health and Ageing (2009; i.e. 'the Committee') and Blewett, Goddard, Pettigrew, Reynolds and Yeatman (2013; i.e. 'the Panel'), most of which have not been adopted. These recommendations included adding warnings to alcohol, displaying the energy (kilojoule) content on alcohol, providing more accurate information on food and nutrition content as well as appropriate allergen warnings, and providing more accurate claims. The food labelling recommendations made were not specific to obesity, but policies could be adopted to target obesity prevention.

It is clear that obesity is an important public health matter, and that presently it is one that is getting worse rather than better in Australia. It is driven by physiological factors (Enriori, Evans, Sinnayah & Cowley, 2006; Martin, Qasim & Reilly, 2008; Tomiyama et al., 2012) which are influenced by social activity and environment (House of Representatives Standing Committee on Health and Ageing, 2009). The average adult male in Australia in 2012 weighed approximately 3.6kg more than in 1995, and the average adult female weighed 4.0kg more (Australian Bureau of Statistics, 2013).

The State, Territory, and Federal Governments focused their obesity efforts on mass-marketing campaigns as a public health intervention. Although they have not yet had the desired effect, they are effectively communicating some of the risk factors with the public (General Practice Queensland, 2009; King et al., 2013), and with further well-planned campaigns that follow the ongoing research in obesity, this could lead to behavioural change in the future. As discussed, the messages communicated continued to focus on individual behaviour, rather than social attitudes and environment.

Whilst the State, Territory, and Federal Governments do have policies specific to obesity, they are not strong policies. The Federal Government continues to oppose legislating on food package labelling, despite recommendations made by the independent committees set up to provide policy recommendations. The Federal Government also opposes the classification of obesity as a disease (ABC News; 2014) thereby disallowing access to bariatric surgery through the Medicare Benefits Schedule. Joe Proietto speaking on ABC News (2014) said "unless obesity is defined as a disease we will never be able to have subsidised pharmacotherapy to supress hunger and maintain the weight loss". This is in stark contrast to the "world-leading" tobacco policies, and one might even describe the policy as denying the science; with health experts agreeing that diets and diet products do not work to reverse obesity long-term, and citing the need for medical intervention to treat obesity (ABC News, 2014; Enriori, Evans, Sinnayah & Cowley, 2006; Proietto, 2011).

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