

# NARRATIVE REVIEW OF KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS OBESITY

Badr Alharbi<sup>1</sup>, Saud Alharbi<sup>2</sup>, Wael AlSehli<sup>3</sup>, Hamdan AlFuraidi<sup>4</sup>, Muhammed H. AlJabri<sup>5</sup>, Mansour Awad<sup>6</sup> and \*Muhamad AlMutairi<sup>7</sup> <sup>1,2,3,5,6</sup>Commitment Administration, General Directorate of Health Affairs, Medina, Saudi Arabia <sup>4</sup>Laboratories Administration, General Directorate of Health Affairs, Medina, Saudi Arabia <sup>7</sup>General Directorate of Health Affairs, (MOH), Medina, Saudi Arabia

# ABSTRACT

A narrative review involves the process of reviewing publications that discuss what is rightfully regarded as the state of science of a specific theme from a contextual and methodological perspective (Plaza *et al.*, 2019). Normally the review articles are not involved in listing the methodological and databases that were used in conducting the review. There are few advantages that are seen in narrative reviews. One of them is the fact that they are informative in the sense that they are usually up-to-date, and hence the themes discussed are quite educative. Another advantage comes about where the reviews save time and costs that would be used on meta-analysis. The disadvantage is found in the fact they are judgmental and standardized to suit specific needs. However, the paper introduces the topic of research that involves obesity as a global problem and the knowledge gap. It is evident that the issue of obesity is becoming an issue of concern around the world as it escalates to becoming a major global problem. According to World Health Organization – WHO (2022) since 1975 globally obesity has tripled, in 2019, an estimated 38.2 million children under the age of 5 years were obese. The research question is also introduced that includes who will take responsibility for obesity? The paper then provides a summary of the research capturing all the key points that have been explored.

Keywords: Body mass index, global problem, health, medical condition, diseases, knowledge gap, perception.

# INTRODUCTION

The paper introduces the topic of research that involves obesity as a global problem as the knowledge gap. Based on earlier published studies the fundamental cause of overweight and obesity is an energy imbalance between calories consumed and calories expended (WHO, 2022).

The research question is also introduced that includes who will take responsibility for obesity? The issue of obesity is becoming an issue of concern around the world as it escalates to becoming a major global problem. More than ever before, the total number of obese people in the world constitutes a large percentage. Reports indicated that almost 30% of the total world population is either overweight or obese translating to 2.1 billion people (Dunham, 2014).

Such figures are indeed a worrying cause of concern as the world ponders what to do next. From the United States of America to the UK and all the way to New Zealand and Australia, countries are being confronted with a health issue that does not seem to abate anytime soon. There are health ramifications that arise from obesity where it should worry policy makers. Australia is among the countries that are being confronted with high obesity cases that are rising at an alarming rate. Therefore, the question to ask is who is supposed to take responsibility for obesity? This study seeks to answer that question in using the country as an example of why obesity cases are rising and who exactly is supposed to take responsibility in other parts of the world.

The literature review explores the research objective where the incorporation of facts on obesity and theoretical concepts are explored. The world status of obesity is explored, followed by the obesity in Australia. Obesity has been defined in detail where the causes and effects have been explored. The research then seeks to answer the research question; who will take responsibility for obesity in Australia? Towards this end, the incorporation of other studies on the same issue has been explored, in seeking to find evidence of developing a hypothesis. Finally, the inference of the research has been stated, and a hypothesis developed that answers the research question. Before delving into the issue of obesity in Australia and other parts of the world including the underlying factors, it is important to look at some of the obesity facts around the world. First of all, since 1980, obesity around the world has more than doubled. As of 2014, the total number of people

<sup>\*</sup>Corresponding author e-mail: nomasss@hotmail.com

who were obese stood at over 600 million or 13% of the total world (World Health Organization, 2020). On the same breath, 42 million aged five and below are obese around the world. Obesity is one of the leading causes of death that is preventable around the world. Adults over 18 years that were found to be obese comprised 39% of the total world population. As per the 2014 report, obesity has been stable in a few countries such as Spain, Canada, Korea England, the United States of America and Italy. However, in France, Mexico, Switzerland, and Australia the cases have increased by 2-3% (World Health Organization, 2020).

# DISCUSSION

#### Obesity as a global issue

The research paper sought to concentrate on the Australia knowledge gap because it is one of the countries that have recorded an increase in obesity cases with reports indicating that it is the leading country as far as an increase in obesity cases is concerned. In fact, there are reports of a crisis on the issue as the government ponders on how best to approach and deal with it. Between 2014 and 2015 reports indicate that Australia has 64% if its population being overweight (Campbell and Campbell, 2016). That translates to mean that two in three adults in Australia is overweight. Of this, 28% are obese (Australian National Preventive Health Agency, 2014). As of 1995, obesity and those overweight stood at around 56.3% meaning that it is increasing at an alarming rate Campbell and Campbell, 2016). The results also mean that the country is now at par with the United States of America. The county now stands at position four among the OECD countries behind New Zealand, the USA and Mexico in no specific order. It is projected that Australia will have 75 and 83% being overweight by 2025 if the current trend continues without intervention (World Health Organization, 2020).

### An overview of obesity

Since the 1970s obesity prevalence has dramatically increased. According to the National Health and Nutrition Examination Survey (Flegal et al., 2010) obesity prevalence in 2007-2008 was 33.8%, representing a 100% increase from 1976 - 1980 and a 50% increase from 1988 -1994 (CDC. Health US, 2004; Flegal et al., 2010). There is no doubt that obesity is a major health issue around the world and continues to pose challenges in its control but what is obesity? Obesity is defined as a medical condition where the excess body fat gets to accumulate to such an extent that it can lead to adverse health effects in an individual. The Body Mass Index (BMI) is used to estimate the level of obesity where an evaluation is done "in terms of fat distribution via the waist-hip ratio and total cardiovascular risk factors" (World Health Organization, 2020). Medically Body Mass Index scores break down as follows (WHO, 2022a):

BMI under 18.5 = underweight BMI 18.5 to <25 = healthy BMI 25 to <30 = overweight BMI 30 to <35 = obese (class 1) BMI 35 to <40 = obese (class 2) BMI 40 or higher = obese (class 3 - morbid)

There are three categories that are used to determine the intensity of obesity. The World Health Organization has put certain values that define severe obesity, morbid obesity, and super obesity. For someone with a BMI of 35 or 40 kg/m<sup>2</sup>, they are deemed to have severe obesity. Those with a BMI of 35 kg/m<sup>2</sup> and are reporting obesity-related health issues are said to have morbid obesity. For those with a BMI of 45 or 50 kg/m<sup>2</sup>, they are deemed to have super obesity (World Health Organization, 2020). Table 1 shows world top 10 countries with the highest obesity rates.

Table 1. Top 10 countries with the highest obesity rates (WHO, 2022b).

S. No.	Country	% of obesity rate
1	Nauru	61.00
2	Cook Islands	55.90
3	Palau	55.30
4	Marshall	52.90
5	Tuvalu	51.60
6	Niue	50.00
7	Tonga	48.20
8	Samoa	47.30
9	Kiribati	46.00
10	Micronesia	45.80

# Health Effects of Obesity

Obesity is not just a health issue that can be ignored meaning that it is quite significant to the well-being of the citizens in any country. As stated earlier, it is one of the leading causes of death that is preventable around the world. A BMI that is higher leads to several effects besides limiting a person to certain tasks and movements. It leads to cardiovascular diseases such as stroke and heart diseases that in 2012 ranked as among the leading cause of death. Obesity can also cause musculoskeletal disorders with the most likely one being osteoarthritis. There are also reported cases of obesity causing some cancers such as endometrial, colon and breast cancer. Childhood obesity is especially worse as it can lead to disability in childhood and premature death (Australian National Preventive Health Agency, 2014). There also many other risks that include breathing difficulties, hypertension, and insulin resistance among others.

#### Causes of Obesity

Several factors can contribute to excess weight gain and obesity including level of physical activity, eating patterns, and daily sleep routines. The question in Australia that is on the minds of policymakers is what could be causing the high increase rate of obesity in the country. Normally, the main cause or contributing factor is the lack of balance between the calories that are being consumed and those that are being expended. On the global stage, the leading causes of obesity include the high consumption of energydense foods that are usually high in fat content (World Health Organization, 2020). There is also the case of inactivity of people that has increased in recent times probably due to the advances in technology and nature of work. Some of the people in Australia attribute the high levels to increase in the fast food industry the advertisements of similar foods in the media and other outlets.

# Obesity and responsibility

The one million dollar question that comes to mind and is the focus of this paper is who should actually take responsibility for obesity worldwide. It is worth noting that in answering this question, it will represent the overall view of many other countries such as France, Mexico, Switzerland, and Australia that have also recorded a significant increase in recent times. In essence, the global increase in obesity over the years must have raised serious questions although there also efforts by some of these countries to control it. It is not a problem that is confined to Australia alone. In England for example, there was a recent report that was asking the same question of who should take responsibility. The 2006 report was categorical that the government was not doing enough to rectify the situation, and the food industry was not helping either.

The people in England were also calling for the government to increase its efforts in regulating the food industry that was on the receiving end in perpetuating obesity (Legler *et al.*, 2015). Another study, Stanton (2009) asked the same question on who is supped to take responsibility for the rise in obesity worldwide. He espoused that obesity was the result of commercial success marketing cheap foods and drinks that were energy-dense including labor-saving devices such as cars. He also placed those who should take responsibility in preventing obesity on many players including the government, individuals, and the food industry. Kim *et al.* (2015) investigation reported that sought to find out the factors influencing general practitioners to refer patients for surgical interventions in managing obesity.

The findings indicated that they were reluctant and preferred calling for lifestyle interventions even though the reason for reluctance was more about their doubts about patient's ability to pay and other reasons. In essence, medical practitioners were willing to help in intervention cases even though the drive to do so was devoid the much-needed enthusiasm. Another earlier study, Wellard *et al.* (2014) reported that significant issue sought to find out the role of parents in selecting fast food for their children and

the various underlying factors. The findings indicated that parents played a huge role in their children's food selection where they admitted to being responsible when sharing the selection role. However, when the children were given the liberty to choose they opted for fast food meals high in energy content. What can be drawn here is that parents squarely had the responsibility of instilling values of responsible intake of foods that were healthy. The penetration of ultra-processed foods within our food systems have been hypothesized as an important contributor to the increasing in overweight and obesity (UNICEF, 2019).

In another case, Boswell (2014) interrogates interesting topic about the role of policy makers in the UK and Australia and how they interpret the reports of obesity. Some view the issue as a crisis that needs urgent attention while others view it as an issue that is exaggerated and personal. The clashing of narratives can hamper the efforts to control obesity, but there is common ground that is found in evidence. In essence, the citizens should be included in deliberating on the issue while using evidence as a ground for constructive debate.

# Inference/Hypothesis

Based on the above perspectives, it is clear that the responsibility of obesity worldwide cuts across all the major players. From the medical practitioners, government, parents and policy makers to the players in the fast food and media industry, it would be hard to single out a single player who should take all the blame for obesity in the world. The players in the health care industry have the role of sensitizing the citizens about the danger of these foods and living healthier lifestyles. Except on the part of children, parents also have the responsibility of instilling values to their children on healthy eating habits, but it is quite unfortunate that they are also part of the statistics meaning something somewhere is wrong. Players in the fast food and media industry are in business, and it would be difficult in regulating themselves. Individuals, on the other hand, have the ultimate power of making the right choices about their life, but it seems they have neglected, ignored, or let cravings of these foods control their decisions. However, amidst all these, the one player who would shoulder the most blame is the government and its policy makers. It has the powers of regulating the fast food industry or even the advertisement of unhealthy foods by the media but has failed to crack the whip quite appropriately. In that case, when asked who will take responsibility for obesity in Australia, there is no single group that can be singled out but the government and its policymakers shoulder the most blame since it wields the power of regulating the industry. It also wields the resources to sensitize the citizens about healthy eating habits.

# CONCLUSION

It is evident that the issue of obesity is becoming an issue of concern around the world as it escalates to becoming a major global problem. The figures around the world do not make up for a good reading with 13% of the world population having obesity. In the recent reports, some of the world countries appear to have stabilized in obesity cases increase, while others record significant increase. It has health effects that include cardiovascular diseases, musculoskeletal disorders, and some cancers. It is caused by the lack of balance between the calories that are being consumed and those that are being expended. The findings indicate that all players are responsible, but the government shoulders most of the blame. Finally, we would also think that we should not dwell more on the blame game but take personal initiatives towards reducing the cases and together help the government towards these efforts of national importance.

# ACKNOWLEDGEMENT

The authors declare no conflict of interest in preparing this article, authors thank the referee for constructive comments.

# REFERENCES

Australian National Preventive Health Agency. 2014. Obesity: prevalence trends in Australia. Promoting a Healthy Australia.

Boswell, J. 2014. 'Hoisted with our own petard': evidence and democratic deliberation on obesity. Policy Sciences. 47(4):345-365.

Campbell, TC., Campbell, TM., II. 2016. The China Study: Revised and Expanded Edition: The Most Comprehensive Study of Nutrition Ever Conducted and the Startling Implications for Diet, Weight Loss, and Long-Term Health; BenBella Books, Inc.: Dallas, TX, USA.

CDC. Health, U.S. 2004. With chartbook on trends in the health of Americans. National Center for Health Statistics. DHHS, September 2004. DHHS Publication No. 2004-1232. www.cdc.gov/nchs/data/ hus/hus04trend.pdf#069.

Dunham, W. 2014. Weight of the World: 2.1 billion people obese or overweight. 2014-05-28)[2014-07-01]. http://www. reuters. com/article/2014/05/28/us-healthobesity-idUSKBN0E8 HX 20140528.

Flegal, KM., Carroll, MD., Ogden, CL. and Curtin, LR. 2010. Prevalence and trends in obesity among U.S. adults, 1999-2008. JAMA. 303(3):235-41.

Kim, KK., Yeong, LL., Caterson, ID. and Harris, MF. 2015. Analysis of factors influencing general practitioners' decision to refer obese patients in Australia: a qualitative study. BMC Family Practice. 16(1):1-8.

Legler, J., Fletcher, T., Govarts, E., Porta, M., Blumberg, B., Heindel, JJ. and Trasande, L. 2015. Obesity, diabetes, and associated costs of exposure to endocrine-disrupting chemicals in the European Union. The Journal of Clinical Endocrinology and Metabolism. 100(4):1278-1288.

Plaza, AG., Delarue, J. and Saulais, L. 2019. The pursuit ofecologicalvaliditythroughcontextualmethodologies. Food Quality and Preference. 73:226-247.

Stanton, R. 2009. Who will take responsibility for obesity in Australia? Public Health. 123(3):280-282.

Wellard, L., Chapman, K., Wolfenden, L., Dodds, P., Hughes, C. and Wiggers, J. 2014. Who is responsible for selecting children's fast food meals, and what impact does this have on energy content of the selected meals? Nutrition and Dietetics. 71(3):172-177.

World Health Organization - WHO. 2020. Obesity. Internet Source. Available from :http://www.who.int/en/

World Health Organization - WHO. 2022<sup>a</sup>. Obesity and overweight. https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight. Accessed on May 7, 2022.

World Health Organization -WHO. 2022<sup>b</sup>. Mean body mass index trends among adults, age-standardized (kg/m<sup>2</sup>) by country. World Population Review 2022. https://worldpopulationreview.com/country-rankings/obesity-rates-by-country. Accessed on May 7,

2022.

Received: April 19, 2022; Accepted: May 9, 2022

Copyright@2022, AlMutairi et al. This is an open access article distributed under the Creative Commons Attribution Non Commercial License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

