

## Mini Review

# Obesity and Body Image Perception among the Community in Saudi Arabia: A Mini Literature Review

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**Background:** Obesity is a risk factor for several deadly diseases that have a substantial adverse influence on health. The early onset of diabetes, polycystic ovaries, hypertension, and other disorders are among the recent error number of problems that are a tracking factor for health. Individual obesity is the root cause of all these issues, particularly among young people.

**Aim:** Based on current publications, this study aims to ascertain the prevalence rate of obesity and related risk factors among Saudi Arabian students.

**Method:** A qualitative review of the literature was carried out by operationalizing the internet search engines Pub Med, Science Direct, Google Scholar, and Research Gate. Studies combine all the relevant information from 10 publications on obesity and students' body perceptions. All primary studies were carried out in English between 2017 and 2021.

**Conclusion:** Obesity and body image perception are the most influential factors in a student's social life. These issues have an impact on the academic period as well. The study found that students' perceptions of body image and obesity influenced their participation in academic and extracurricular activities and various school management programs regarding expertise, performance, and selection criteria. It should be noted that school-age children should keep their diet and eating habits to protect themselves from the outside world, including social interaction, pathogens, and others.

**Keywords:** Obesity; Overweight; Students; Article review; Young student; School-age saudi arabia

## Introduction

Around the world, there has been severe worry about how quickly obesity is becoming more prevalent among young kids. The World Health Organization (WHO) views abnormal or excessive weight gain as a risk factor for health issues, regardless of height or weight. Diabetes and hypertension are two conditions that can have significant health repercussions and are more prone to develop in obese people. According to its definition, obesity is a significant health issue brought on by a variety of variables, such as a person's behavior and genetics, physical activity or inactivity, dietary preferences, drug use, and other potential causes that could be looked into. The environment in which one eats and exercises, education and skill set, and food marketing and advertising significantly impact one's general health. Obesity is a severe problem that has a detrimental impact on mental health and lowers the quality of life. According to research done domestically and abroad, it is connected to some of the most common killers globally.

Obesity and overweight have become more common over the past few decades, and women frequently have greater prevalence rates than men. Although it is commonly recognized that obesity has adverse effects on young adults' health, body image issues are also far more prevalent. Obese or overweight people can develop mental distress and depressive symptoms. People who are overweight

or obese do not generally enjoy their company. Unfavorable preconceptions about weight, including the notion that overweight or obese persons lack self-discipline, are weak-willed, ineffective, and dull, are lethargic, and do not stick with weight-loss programs, have been the subject of numerous research. Thus, heart disease, type 2 diabetes, high blood pressure, fatty liver, apnea, metabolic syndrome, hypercholesterolemia, gallbladder problems, lung problems, and osteoarthritis are all associated with obesity.

Over time, society's perception of obesity has evolved. It used to signify male success and wealth and female health and fertility, but it is now seen as a health issue and a risk factor for many diseases. Over the world, the risk of obesity is higher for women, the impoverished, and the elderly. In the Middle East, women are more likely than men to be obese, and the Gulf region has one of the highest rates of obesity worldwide. However, in other high-income counties, there are no appreciable differences between genders in obesity prevalence at the national level. In addition, Saudi Arabia's eating and living practices have changed significantly throughout time due to the nation's increasing westernization. These changes will be anticipated to alter how common chronic diseases are in society, notably obesity. By 2025, the World Health Organization predicts that 70 million young children will be overweight or obese globally. Hence, people who are obese are stigmatized as being frail, lazy, lacking in self-worth, and unwilling to change their habits for the sake of their health. Contrary

to widespread assumption, overeating and inactivity are not the primary causes of obesity. A manageable risk factor for obesity, the only illness with no symptoms, is weight reduction. The study aims to determine the prevalence of obesity and associated risk factors among Saudi Arabian students.

## Methodology

### Database Searching

A qualitative research review was conducted by operationalizing the internet search engines Pub Med, Science Direct, Google Scholar, and Research Gate. The studies contain all the necessary information regarding overweight and young students' body views.

### Inclusion and Exclusion Criteria

All primary studies were carried out in English between 2017 and 2021. Because this article focuses on those that significantly affect obesity, we have included every research that has explored these traits. Most of our investigations were done within the last two years because we also considered research and articles no more than five years old. The last study we are looking at is from Saudi Arabia.

### Study Characteristics

The inclusion of peer-reviewed journal papers, which are thought to be the most appropriate and efficient in terms of their authenticity, dependability, and validity, make the current literature review study astounding.

### Assessment of Risk of Bias

Research has been done on the relationship between obesity and how young college students see their bodies. In adolescence and adulthood, there is an increase in body image protection. Researchers from other contexts, particularly from the United States and numerous other parts of the world, influence the research regarding context, religion, methodology, and personal matters.

### Aim of Review

Based on current publications, this study aims to ascertain the prevalence rate of obesity and related risk factors among Saudi Arabian students.

## Review Discussion

### The Prevalence Rate of Obesity in Young Society

Several studies have provided information on the prevalence of obesity in Saudi Arabia, including the population's prevalence of overweight and obesity. It is nonetheless noteworthy since it shows that either no preventative efforts were made or they were insufficient. Minor gender disparities existed in these connections. However, the risk of prediabetes, diabetes, dyslipidemia, and hypertension was found to be inversely correlated with Body Mass Index (BMI) [7]. According to the study conducted by [4], which might be further explored, there is a significant variation in the prevalence rate from one location to another. Even though obesity rates are dropping, about 25% of study participants were overweight or obese. Today, obesity is linked to several health problems, each of which has the potential to lower a person's quality of life, increase the burden on the nation's healthcare system, and complicate efforts to manage the economy. The results show that Saudi Arabia has to pay more attention to the problem of obesity. Overall, 63.6% of Hail's population

was found to be obese. In addition, the sample population of the poll showed that women outnumbered men by a ratio of 71% to 56.2% [3]. The study by Al-Qahtani [6] revealed a significant incidence of overweight and obesity, which should be treated as a public health issue and addressed with targeted community-level interventions and interdisciplinary activities starting in early infancy as a fundamental prevention program.

**Consequences of obesity in increasing risk factors.** There is little discussion of the several variables contributing to obesity in Saudi Arabia. Parental traits and knowledge of the harmful effects of fat are risk factors. Childhood overweight and obesity in this age group are behavioral traits influenced by habits, including excessive snacking, screen usage, and physical activity. The study by Aljassim & Jradi from [3] suggests that the early identification and confrontation of risk factors should be the main focus. Long-term problems frequently erode exceptional accomplishments. Clinicians admonish patients to get Bariatric surgery to avoid developing additional health issues such as type 2 diabetes, cardiovascular disease, hypertension, and coronary artery disease. Patients must decide on the optimum technique under the doctors' guidance based on their body weight, personal medical history, and family medical history. Nevertheless, patients must go through postoperative monitoring to contact surgeons [5].

Children's levels of physical activity, nutrition knowledge, and nutrition-related behavior all significantly impact the prevalence of childhood overweight and obesity [4]. According to research by Al-Hanawi et al [2], watching television for long periods is linked to higher BMI levels. The link was also demonstrated to be minor in the middle of the BMI distribution and, more important, at the low and high BMI extremes [2]. The data also indicated a difference in BMI levels between the sexes, with women more likely than men to have higher BMI numbers [2]. Aldossari et al. [1] examined the relationship between mental illness and obesity or over-weights. Few findings emerged from their research. This study aimed to evaluate Saudi nationals' psychological health in Al-Kharj, Saudi Arabia. There was a significant difference in each individual's mental health among those who were not obese, those who were overweight, those who were class 1 obese, and those who were class II/III obese. A statistically significant link was found among the study subjects in Al Kharj, Saudi Arabia, between the frequency of obesity and depressive symptoms. Medical providers considered the combined or overlapping effects of both disorders when treating a depressed patient who also had obesity in a mental health environment. The study focuses on the detrimental consequences of psychological distress on general health in Al-Kharj, Saudi Arabia. It was demonstrated by Alshahrani1 et al. 2021 that the 0.33-kilogram weight gain that our study participants experienced was meaningful. According to their BMI during the study, 10% of the population was deemed overweight or obese. This occurred because 4.8% of adults with a normal BMI before 2020 shifted into either the overweight or obese class in 2020, while 5.1% of people who were already overweight moved up to the obese group.

Furthermore, 23.1% of people acquired at least 5% more weight than in 2020, whereas 17% dropped at least 5% of that weight. The likelihood of experiencing a gain of at least 5% was nearly three times higher for younger people than for older people. Women had a 24% higher risk than males did of putting on at least 5% of their pre-2020 weight by 2020. Diabetes patients had a 27% lower chance than non-

Table: Research Matrix.

Author, Year	Aim of research	Methodology	Sample	Findings	Conclusion
Al-Raddadi, Suhad M. Bahijri, Hanan A. Jambi, Gordon Ferns and Jaakko Tuomilehto, 2019	To determine the prevalence of obesity and overweight in Saudi Arabia. To determine demographics associated with obesity.	door-to-door cross-sectional study.	1419 individuals, 667 men and 752 women, with a complete set of data, derived from 390 families, were included in the study	Participants with BMIs fewer than 25 had higher odds of developing hypertension in men and prediabetes, diabetes, and dyslipidemia in women.	The high incidence of overweight and obesity in Saudi society suggests that preventive interventions are either ineffective or nonexistent.
Nora A. Althumiri, Mada H. Basyouni, Norah AIMousa, Mohammed F. AlJuwaysim, Rasha A. Almubark, Nasser F. BinDhim, Zaiid Alkhamaali and Saleh A. Alqahtani, (2021).	What is the Obesity in Saudi Arabia in 2020: Prevalence, Distribution, and Its Current Association with Various Health Conditions	a nationwide cross-sectional survey conducted over phone interviews in June 2020.	6239 participants stratified by age and gender, across the 13 regions of Saudi Arabia. almost one-quarter of this study's sample were obese.	The country of Saudi Arabia's recent obesity prevalence. Additionally, it demonstrates the regional variation in prevalence rates, which should be studied further. Even if there is a downward trend in obesity, about 25% of the study populations were obese.	Obesity is currently linked to a wide range of illnesses that can impact a person's quality of life, place strain on the healthcare system, and harm the nation's economy. This data shows that more has to be done to combat obesity in Saudi Arabia.
Hanan Aljassim and Hoda Jradi, 2021	Is obesity currently associated with many health conditions that can affect the individuals' quality of life, impose stress on the healthcare system and impose an economic burden on the country? This evidence highlights the need for action to focus more on obesity in Saudi Arabia.	case-control study	492 school children	Among the conditions chosen were the presence of an overweight or obese father, inaccurate parental perceptions of the child's weight status, cesarean sections, frequent eating, and use of screens for more than two hours per day outside of school.	The early identification and confrontation of risk factors should be the main focus of efforts to avoid juvenile overweight and obesity in this population. Parental qualities, parental knowledge of the severity of the burden obesity poses, and behavioral patterns, including frequent snacking, screen time use, and physical exercise are some examples of these risk factors.
May Salem Al-Nbaheen, 2020	What is the impact of weight loss predictors in severe-morbid obesity patients in the Saudi population?	case-control study		Saudi Arabia has demonstrated the potential for long-term issues concerning a child's morbid obesity in the future.	Surgery that effectively and safely reduces body fat in Saudi citizens. Postoperative monitoring is necessary for follow-up, nevertheless.
Naif Saleh Almutairi, Sharyn Burns, Linda Portsmouth, 2021	What are the identifying factors associated with overweight and obesity among intermediate school students aged 12–15 years in school settings: mixed methodology protocol	mixed-methods study	the total estimated sample size will be 1200 students (600 males and 600 females)	A unique opportunity to inform school-based interventions in KSA	Be presented as aggregate, and there will be no identification of individuals
Mohammed Khaled Al-HanawiD, Gowokani Chijere ChirwaID, Laeticia Amiss Pemba, Ameerah M. N. Qattan, 2020	What Does prolonged television viewing affect Body Mass Index? A case of the Kingdom of Saudi Arabia	Qualitative	A total of 10,735 individuals aged over 15 were interviewed out of 12,000 households originally contacted, giving a response rate of about 90%. sample of the KSA population and performed both descriptive and econometric analyses.	Prolonged television watching sessions are linked to higher BMI values. Additionally, it was discovered that the relationship was minor in the middle of the BMI distribution and was larger toward the lower and upper tails of the BMI range.	To decrease the amount of time people spend watching television, more proactive recreational programs that can serve as replacements for television viewing should be developed. Additionally, it is advised that these interventions focus on enhancing girls' levels of physical activity.
Khaled K. Aldossari, Mamdouh M. Shubair, Sameer Al-Ghamdi, Jamaican Al-Zahrani, Mansour AlAjmi, Saeed Mastour Alshahrani, Majid Alsalamah, Badr F. Al-Khateeb, Salwa Bahkali, Ashraf El-Metwally, 2020	What is the association between overweight/obesity and psychological distress: A population-based cross-sectional study in Saudi Arabia	Cross-sectional research design	total of 1019 participants (638 females and 381 males) were included in the study. From the previous published research we know that the prevalence of obesity in Saudi Arabia was 28.7	Higher psychological discomfort was associated with diabetes, smoking, and sociodemographic factors being controlled for. was connected to a higher BMI i.e., in more people who are overweight and obese). Females were more likely than males to have higher levels of psychological anguish. Being employed or a "civilian," a worker in the government, was significantly linked to greater psychological suffering. Psychological anguish is 1.6 times more likely in those with diabetes.	The study emphasizes the psychological effects of obesity and overweight on Saudi Arabian citizens' public health. The temporality of this association should be investigated in future longitudinal research.

Saeed Mastour Alshahrani, Abdullah F. Alghannam, Nada Taha, Shurouq Saeed Alqahtani, Abrar Al-Mutairi, Nouf Al-Saud and Suliman Alghnam, 2022	What is The Impact of COVID-19 Pandemic on Weight and Body Mass Index in Saudi Arabia: A Longitudinal Study	cross-sectional study	A total of 165,279 subjects were included in the study; of which, 43.2% aged 26–45, 61.3% were females, 68.8% were married, 57.2% resided in the Central region, 33% were diabetics, 26% were hypertensive, 34.3% had dyslipidemia, 1.7% had a history of stroke, and 5.3% had a previous COVID-19 infection	In our study, we found a significant weight gain of 0.33 kg (95% CI: 0.29-0.36). As 4.8% of people with normal BMI pre-2020 had switched to overweight or obese classes in post-2020, about 10% of the population had changed to either overweight or obese BMI classes over the study period.	Insights into how COVID-19 affects population health and weight. In such situations, such as lockdowns caused by illness waves or novel variations, additional investment in weight management measures is necessary.
Awad Mohammed Al-Qahtani, 2019	What is the Prevalence and Predictors of Obesity and Overweight among Adults Visiting Primary Care Settings in the Southwestern Region, Saudi Arabia	cross-sectional study	The present study included 1681 adults (949 males and 732 females). The majority of the studied population was Saudi (79.2%). More than half of them were married (57%) and were educated up to primary level (52.2%)	Smoking did not significantly affect the relationship between obesity and hypertension, which did.	High rates of overweight and obesity should be seen as a public health concern that calls for community-level multidisciplinary treatments starting in childhood as a primary preventative program.

diabetics of losing 5% or more of their body weight. Following Al-Qahtani M. [6] survey, overweight and obesity are prevalent. This should be treated as a matter of public health, and there should be particular community-level interventions with interdisciplinary activities starting in infancy as a core prevention program.

## Summary and Conclusion

The study results indicate that obesity is the medical issue that people should be most concerned about, particularly young children. This affected their social and physical wellness and made their lives harder, even though obesity is now associated with ailments that might reduce a person's quality of life and burden the country financially. More needs to be done in Saudi Arabia to battle obesity. The guidance has been created to lessen childhood obesity and enhance kids' social lives, regardless of how they feel about their physical appearance.

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