Journal of Positive Psychology & Wellbeing
2022, Vol. 6, No. 4, 167 – 171
http://journalppw.com
ISSN 2587-0130

Evaluating the Extent of the Relationship between Chronic Diseases and Obesity in Humans

Amal.A.Banjer[1], Madiha.S.Almalayo[2], Aisha.K.Alansari[3],Nouf.S.Alqurashi[3], Mona.S.Alharbi[3], Sarah.F.Orayf[4], Amna.K.Alansari[5], Fatin.S.Alahmadi[6], Mada.A.Awam[6], Muroj.W.Mukhtar[7], Aisha.H.Mahmoodi[8], Afaf.A.Alotaibi[9], Alanoud.A.Sulaimani[10], Jawaher.M.Housa[10], Mona.S.Alfahmi[10], Jameela.E.Allhyeani[11], Amal.H.Allhyanei[12], Habiba.A.Altayeb[13], Dana.J.Alsulami[14], Yusra.M.Housa[15], Abeer.A.Hasabullah[16]

Consultant neurologist at king abdulaziz hospital[1]
Senior nurse specialist at king abdulaziz hospital[2]
Senior nurse specialist at Mecca health care cluster[3]
Nursing technician at primary healthcare center in Hadda[4]
Nursing specialist at king abdulaziz hospital[5]
Nursing specialist at Jeddah first health care cluster[6]
Nursing specialist at king abdulaziz hospital[7]
Nursing specialist at Bahra'a PHC[8]
Nursing technician at Abi Shuaib PHC[9]
Nursing technician at king abdulaziz hospital[10]
Nursing technician at Alrayan PHC[11]
Nursing technician at Alnawaryah PHC[12]
Nursing technician at Maternity and children hospital[13]
Nursing technician at Jurana PHC[14]
Dental technician at Almalawi PHC[15]
Dermatologist registrar at king Abdulaziz hospital[16]

Abstract

The current study aims to examine, the importance of the relationship between chronic diseases and obesity, what are the complications of obesity, and what is the impact of chronic diseases on human health. A questionnaire was prepared via Google Drive and distributed to the population between the ages of 25-55 years, men and women, in the city of Mecca. As for the questionnaire, it was distributed via the social networking program (WhatsApp), where 500 questionnaires were distributed, and 480 responses were obtained via email.

Keywords: *Evaluating ,the extent , relationship, chronic diseases, obesity.*

1. Introduction

We can realize fatness as an extravagant or abnormal cumulation of fat that hurts a person's health. The major reason of weight gain and obesity is an energy imbalance between the calories that enter the body and the calories it burns. Body Mass proportion (BMI): It is an index to measure high body fat and thus to assort overweight or obesity by: calculating the ratio of a person's weight in kilograms to the square of his height in meters (kg/m2). A high portion can be an indicator of a high percentage of body fat (1). Obesity is a health concern in Saudi Arabia, as health reports mark that obesity is one of the leading sources of fate in Saudi Arabia. According to Forbes magazine, Saudi Arabia ranks 29th as the most obese

country in the world, with about 68.3% of Saudis complaining from being overweight (body mass signal > 25) according to the list issued in 2007 (2). What rise the trouble is that, according to the presentation presented at the third International Obesity Conference in February 2014, obesity-linked surgeries are not contain in the framework of health care in Saudi Arabia (3). A report by Okaz newspaper in 2018 stated that the Saudi Shura Council is discussing approving laws that supply health care for those suffering from obesity (4). A study by the Executive Office of the Gulf Ministry of Health Council stated that the number of deaths due to obesity in Saudi Arabia is approximately 20 thousand cases annually (5), and its reason expenditure of about 19 billion annually (6). The report stated that the Ministry of Health is planning to perform 10 initiatives that it developed within the health strategy, most notably decrease obesity rates and enhancing the level of public health, so that the Kingdom is among the twenty most advanced countries (7). In mid-2016, the Saudi Ministry of Health issued statistics stating that 40% of Saudi males complain obesity, while about 62% of Saudi women suffer from it. Thus, Saudi Arabia grades third in the world in the percentage of women suffering from obesity, as a study conducted by the obesity research Chair in "King Saud University": Three quarters of Saudi society are obese, with a rate of 70% for men and 75% for women. Statistics show that more than 80% of cases of type 2 diabetes in Saudi Arabia are related to obesity. According to the World Health Organization, Saudi Arabia is seen one of the ten countries in the world with the highest rates of obesity, as about 65% of adults in Saudi Arabia currently suffer from overweight, and 28% complain from obesity, and this drive to these people mostly suffering from illness linked to excess weight, Such as type 2 diabetes, high blood pressure, in addition to the emotional disturbance and anxiety connected with obesity (8). Okaz newspaper specified in 2018 that there are more than 3 million Saudi children complaining from obesity, and that more than 36% of the Saudi population is suffering from the fatal obesity illness (9). In December 2018, it was declared during the "Riyadh Obesity Forum," which was held in the "Sultan Bin Abdulaziz Humanitarian Services City," that the obesity rate in Saudi Arabia was approaching 40%. The head of the Saudi Society for Obesity Medicine and Surgery, Adnan Mufti, certain that the Eastern Province leads the infection rate due to "lifestyle, dietary behavior and the nature of the atmosphere there." It has also been noted that the infection rate of women is higher than that of men (10). Substantial literature indicates that overweight and obese individuals have a grow risk of developing a number of chronic illness, which can lead to further morbidity and mortality (11-13), with morbidity having a more pronounced impact (14). Such chronic illness contains type 2 diabetes, cardiovascular illness (CVD) and cardiovascular risk factors, respiratory diseases such as asthma, musculoskeletal disorders such as osteoarthritis and low back pain, several cancers, and depression (15,16,17). The high prevalence of overweight and obesity in Ireland, 36% and 14% respectively (18), based on self-reported data, is likely to be contributing to an increase in the overall burden of chronic disease. At present, the cumulative burden of prevalent chronic disease associated with overweight and obesity is not well quantified. The most important reason of obesity: Who has a family history of illness. The nature of the dietary pattern of the individual or family. Absence or lack of exercise. Some diseases, such as: Cushing's syndrome, underactive thyroid, and Prader-Willi syndrome, and some medical problems can lead to lack of movement, such as: arthritis, which may outcome in weight gain. Some drugs, such as: antidepressants, some diabetes medications, some epilepsy medications, as well as some contraceptives, may lead to weight gain. Sleep disorder: not getting enough sleep, or vice versa, can purpose changes in hormones that increase appetite. Getting older. Pregnancy. Diagnosis: Health history: Your doctor may review your history of weight and efforts to lose it, exercise habits, eating patterns and other conditions you have, as well as medications, stress levels and other issues related to your health. Your doctor may also review your family health history. Initial diagnosis: weight, height, high blood pressure, heart rate and temperature. Body mass percentage (BMI). Measure waist circumference. Blood tests: include blood cholesterol tests, liver function tests, thyroid tests, and others. Your doctor may also recommend certain heart tests, such as an EKG. Weight loss medications: These medications must be used under the supervision of a doctor

and dispensed with a prescription. Examples: Liraglutide and Semaglutide. Approved uses of these medications: Treatment for diabetics. It helps people lose weight (people who suffer from obesity, or those who suffer from chronic diseases) (1).

2. Material and Methods:

The study began in (the city of Mecca in the Kingdom of Saudi Arabia), and began writing the research and then recording the questionnaire in January 2022, and the study ended with writing the data collection in June 2022. The researcher used descriptive analysis, an approach that uses quantitative or qualitative description of the social phenomenon (Evaluating the extent of the relationship between chronic diseases and obesity in humans) and the variable. The independent variable (the percentage of chronic diseases and obesity rates globally) and the dependent variable (the percentage of chronic diseases and obesity rates in Mecca). This type of study is characterized by analysis, reason, objectivity, and reality. It is also concerned with individuals and societies, as it studies the variables and their impact on the health of the individual, society, and the consumer, and the spread of diseases and their relationship. For demographic variables such as age, gender, nationality, and marital status. Status and occupation (19), and use the Excel 2010 Office suite pie chart to sort the results (20). The questionnaire is a wonderful and useful tool for collecting a huge amount of data, but the researchers were not able to conduct personal interviews with the participants in the online survey, due to social distancing rules at the time to prevent infection between participants and researchers and vice versa (Coronavirus sharing has not completely disappeared. of the community), and the questionnaire was only answered electronically, because the questionnaire consists of eighteen questions, all of which are closed-ended. The electronic approach has also been used to generate valid samples in similar studies in the Kingdom of Saudi Arabia and elsewhere (21).

3. Results and discussion:

The approval rate for participation in the scientific paper questionnaire was 99.7%, while the rejection rate was 0.3%. As for the percentage of participants' ages, it was as follows: 25-34: it was 34.9%, and from the ages of 35-44% it was 35.1%, and from the age of 45 -55 years old, the percentage was 30%. As for the gender of the participants in the questionnaire, it was noted that the percentage of females was high, reaching 78.2%, while males were 21.8%. As for their nationalities, the percentage of Saudi men and women was high at 77.8%, and non-Saudis and men were 22.2%. As for their marital status, it was as follows: married 67.5%, single 22.5%, divorced 6%, and widowed 4%. As for their educational status: illiterate (cannot read or write) 0%, primary and intermediate certificates (equal) 2%, secondary school certificate holders 17.7%, university degree holders 64%, postgraduate and doctoral studies 14%, and as for their professions, it was as follows: The percentage The highest percentage was for government employees It was as follows: The highest percentage was for government employees at 59.7%, while the percentage of private sector employees was 8%, retirees 9%, freelancers 2%, and students 5.1%. When moving to answer the questionnaire questions, the answers were as follows: The first question: Are chronic diseases (diabetes, blood pressure) related to obesity in humans? Yes 86.8% and no 13.2%. The second question is: Is obesity defined as an excessive or abnormal accumulation of fat that harms an individual's health? Yes 96.8% and No 3.2%. The third question: Do you suffer from chronic diseases (diabetes, blood pressure)? Yes, 25% and no, 75%. The fourth question: Do you suffer from excess body weight? Yes 45.4% and no 54.6%. The fifth question: Do you have a family history of chronic diseases and obesity? Yes 53.7% and no 46.3%. The sixth question: Do you follow a beneficial diet to lose weight? Yes 46.2% and no 53.8%. The seventh question: Are you a practitioner of sports? Yes 46.2% and no 53.8%. The eighth question: Do you have some diseases, such as: Cushing's syndrome, an underactive thyroid gland, and Prader-Willi syndrome, which can lead to some medical problems such as lack of movement, and arthritis, which may result in weight gain? Yes 14.1% and no 85.9%. The ninth question: Do you use some medications, such as: antidepressants, some diabetes medications, and some epilepsy medications that may prevent you from moving? Yes, 13.1%, and no,

86.9%. The tenth question: Do you use some medications, such as: antidepressants, some diabetes medications, and some epilepsy medications that may prevent you from moving? Yes 11.7% and no 88.3%. The eleventh question: Are you a smoker? Yes 16.8% and no 83.2%. The twelfth question: Are you accustomed to drinking soft drinks and energy drinks? Yes 37.9% and no 62.1%. The thirteenth question: Are you accustomed to eating fast food? Yes 48.7% and no 51.3%. The fourteenth question: Do you have a sleep disorder: not getting enough sleep or vice versa, which can cause changes in hormones that increase appetite? Yes 51.6% and no 48.4%. The fifteenth question: Are you an elderly person (age 60 and above)? Yes 7.9% and no 92.1%. The sixteenth question: Are you pregnant and giving birth? Yes 5.5% and no 94.5%. The seventeenth question: Do you suffer from severe muscle pain that prevents you from moving? Yes 17.2% and no 82.8%. The last question about: Have you recently had a blood test, blood sugar, kidney and liver function, blood cholesterol, or EKG? Yes 52.6% and no 47.7%. (figure.No.1) (figure No.2)(figure No.3).

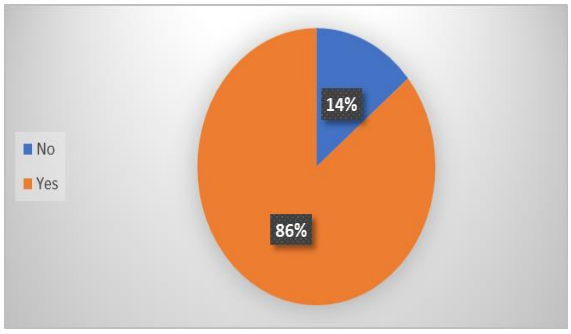

Figure No. 1: Opinions and trends of residents of Mecca regarding the relationship between chronic diseases and obesity

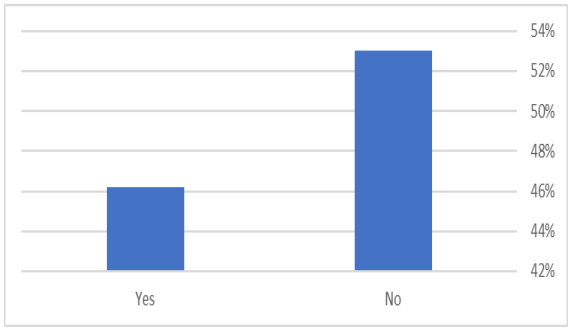

Figure No.2: The importance of exercising to avoid chronic diseases and obesity

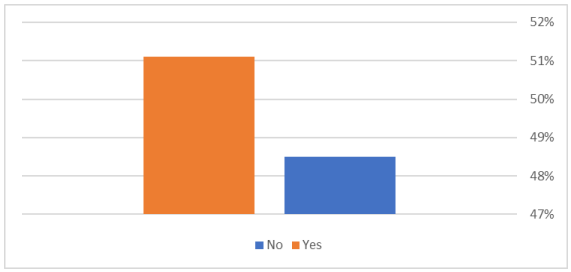

Figure No.3: Sleep disorder is one of the causes of chronic diseases and obesity (according to participants' opinions)

4. Conclusion:

Through the results of data analysis (opinions of participants in the questionnaire), we find that most people believe that there is a significant relationship between chronic diseases and obesity at a rate of 85.8%, and that family history of chronic diseases and obesity has a major role in the disease at a rate of 54.1%, and that the In the sleep system: Not getting enough sleep or vice versa, which can cause changes in hormones that increase appetite, according to the opinions of the participants by 50.9%, and that the habit of eating fast food also has a role in the relationship between chronic diseases and obesity (according to the opinions of the participants) By 47.6%, and therefore we advise avoiding all of these things in society, for a healthy society free from all chronic diseases, and exercising on a daily basis. A 2014 Kearns study is helpful, there is a positive relationship between overweight and obesity, and a number of chronic diseases. Overweight and obesity are major contributors to Burden of chronic disease in the Irish population (22).

Acknowledgment:

To start with, I would like to Praise God and thank the researchers whose help me to complete this study, and who make the project come to light.

Reference

[1] https://www.moh.gov.sa/awarenessplateform/ChronicDisease/Pages/Obesity.aspx

[2] Lauren Streib (February 8, 2007). "World's Fattest Countries". Forbes. Archived from the original Forbes on 12/11/2019. Viewed on 02-12-2009. {{Web Cite}}: Check.

[3] Khan, Fouzia (February 17, 2014). "70% of Saudis are obese, says study." Arab News. Archived from the original on 12/16/2017. Viewed on 10/27/2014

[4] 8 things that lead to the spread of "obesity" in Saudi Arabia. arabic.sputniknews.com. Archived from the original on 02/03/2019. Accessed on 01/02/2020.

[5] Al-Youm newspaper: 10 initiatives to reduce "obesity" rates in the Kingdom." web.archive.org. October 21, 2017. Archived from the original on 10-21-2017. Accessed on 01-02-2020.

[6] Obes" is the third largest kingdom in the world... 20 thousand deaths annually - Saudi News | Okaz Newspaper. web.archive.org. February 7, 2018. Archived from the original on 02/07/2018. Accessed on 01/02/2020.

[7] Al-Youm newspaper: 10 initiatives to reduce "obesity" rates in the Kingdom." web.archive.org. October 21, 2017. Archived from the original on 10-21-2017. Accessed on 01-02-2020.

[8] Obesity in Saudi Arabia...the phenomenon is turning into a disaster with 20,000 deaths annually - Sasa Post. web.archive.org. January 2, 2020. Archived from the original on 01/02/2020. Retrieved on 01/02/2020.

[9] 8 things that lead to the spread of "obesity" in Saudi Arabia. arabic.sputniknews.com. Archived from the original on 02/03/2019. Accessed on 01/02/2020

[10] 40% obesity rate in Saudi Arabia...and this is the most affected area." Sabq electronic newspaper. Archived from the original on 01/02/2020. Accessed on 01/02/2020.

[11] Ezzati M, Lopez AD, Rodgers A, Murray CJ: Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors. Geneva, Switzerland: World Health Organization; 2004.

[12] Anis AH, Zhang W, Bansback N, Guh D, Amarsi Z, Birmingham C: Obesity and overweight in Canada: an updated cost-of-illness study. Obes Rev 2010, 11:31–40.

[13] Costa-Font J, Gil J: Obesity and the incidence of chronic diseases in Spain: a seemingly unrelated probit approach. Econ Hum Biol 2005, 3:188–214

[14] Visscher TL, Seidell JC: The public health impact of obesity. Ann Rev Publ Health 2001, 22:355–375.

[15] World Health Organization: WHO Factsheet No. 311, March 2011. [http://www.who.int/mediacentre/factsheets/fs311/en/].

[16] World Health Organization: The world health report 2002: reducing risks, promoting healthy life. In World Health Organization. Geneva: WHO; 2002.

[17] Zhao G, Ford E, Dhingra S, Li C, Strine T, Mokdad A: Depression and anxiety among US adults: associations with body mass index. Int J Obes 2009, 33:257–266.

[18] Morgan K, McGee H, Watson D, Perry I, Barry M, Shelley E, Harrington J, Molcho M, Layte R, Tully N, et al: SLAN 2007: Survey of Lifestyle, Attitudes & Nutrition in Ireland: main report. In Department of Health and Children. Dublin: The Stationery Office; 2008 [http://www.dohc.ie/publications/slan07_report.html].

[19] Alserahy, Hassan Awad, et al (2008), The thinking and scientific research, Scientific Publishing Center, King Abdul-Aziz University in Jeddah, the first edition

[20] Al Zoghbi, Muhammad and AlTalvah, Abas (2000), Statistical system understanding and analysis of statistical data, first edition, Jordon- Amman.

[21] Kadasah, N.A.; Chirwa, G.C.; et al. Knowledge, Attitude, and Practice Toward COVID-19 Among the Public in the Kingdom of Saudi Arabia: A Cross-Sectional Study. Front. Public Health 2020, 8, 217.

[22] Kearns; Karen, Dee; Anne, P Fitzgerald; Anthony, Doherty. Edel and J Perry. Ivan: Chronic disease burden associated with overweight and obesity in Ireland: the effects of a small BMI reduction at population level: http://www.biomedcentral.com/1471-2458/14/143, BMC Public Health 2014, 14:143.