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Physiological and emotional well-being in relation to obesity among women during reproductive age in Al Dawadmi, Saudi Arabia

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To determine the prevalence of physiological and emotional well-being in respect to obesity among Saudis females, during reproductive age. This study is descriptive cross-sectional study was conducted in Aldawadmi governorate, by examining sample the age group of 18-55 years included 500 women from the general public. 304 (60.8%) study subjects fell within the 20–40-year age range. The rate of obesity is 38%, first class estimated 53% of obesity while class 3 estimated 4%. Diabetes mellites distributes as 1.8% in normal weight women compared to 17.8% in obese women. Then hypertension distributes as 0.5 % in normal weight women compared to 10.5 % in obese women. Also 7.1 %, 7.9% suffering from asthma in overweight and obese women respectively compared to no one in normal weight women. Some emotional problems as sadness 5.9%, 4.8% in overweight and obese compared to no one in normal weight, also according to depression with statistically significant differences. As regard anxiety 1.4% in normal weight compared to 5.8% in obese women. According gestational diabetes represents 5.9 %, 5.8% in overweight and obese women respectively compared to 0.5% in normal weight women. As regards caesarian section site infection there were 2.3%, 4.7% in overweight and obese women respectively compared to 1.4% in normal weight women with statistically significant differences. Obesity is considered as one of the most common health issues in different parts of the world. The obesity prevalence in Aldawadmi city, KSA were 38% and overweight representing 17%.

Keywords: Obesity, overweight, physiological and emotional well-being, Body mass index Saudi, Guideline.

INTRODUCTION

Obesity is considered as a medical problem that fat ratio has accumulated to the extent that it might negatively affect well-being, leading to reduced life expectancy and/or increased health problems (Al Nozha MM, et al., 2005). Western nations, the Obesity defined when their body mass index, an estimation acquired by partitioning a human's weight by the square of the human's length, if the result more than 30 kg/m², and

overweight from the 25 to 30 kg/m². (Al Othaimen A, et al., 2007). Obesity is an unwanted result of changing the way of life and practices. It is additionally a reversible related factor for the improvement of several debilitating diseases. (Haslam DW, and James. WP, 2005).

Saudi Arabia is experiencing a rising epidemic of Obesity, it is possible that the importance of proper nutrition would be successfully counseled by physicians taking healthy diets themselves. (Le

Fevre, M L 2014). (WHO, 2014)

General well-being experts agree that overweight and Obesity have arrived at epidemic proportions in right now. General well-being authorities state physical latency and poor diet, also tobacco as a critical danger to well-being. (Al Qwaidhi A, et al., 2014).

Obesity in Saudi Arabia two significant medical issues were propelled in the Kingdom around diabetes and hypertension. (Al Hazzaa HM, Abahussain NA, 2014). (Yanovski SZ and Yanovski JA, 2014).

Obesity is the reason for constant ailments, for example, diabetes, hypertension, and coronary illness and is related with elevated levels of possibly avoidable human services costs (De Nicola, et al., 2015). (Elbadawi AS, et al., 2015).

There is association among obesity and physical health, the effect of obesity is very much reported, with it being commonly recognized that morbidity risk and reduces lifespan. (Saad Salman M. Alqarni, 2016), (Memish ZA, et al., 2014). A few studies have seen obesity to be as identified with quality of life and mental well-being, surveyed both utilizing conventional measure (EL Nashar DE, et al., 2016).and obesity-specific measures (Al sheheri A, et al., 2018). Moreover, weight loss has been found to be related to improvement in psychological well-being (Yosipovitch G, et al., 2007). Obese subjects have also been shown to possess even poorer psychological profiles than other chronically ill people. (Sabra AA, 2014). and their BMI has been found to be positively correlated with reports of self-harm additionally as borderline personality symptomatology). (Al Zahrani AA, et al., 2016).

Different studies, be that as it may, haven't found any relationship among BMI and mental unsettling influences, discovering little distinction among corpulent and non-obese people as far as scores on standard mental tests (Azzam Al, et al., 2018). also, a few investigations have discovered changes in weight to not be identified with changes in psychosocial working(Horabi GB, et al., 2005).

MATERIALS AND METHODS

Research Objectives:

To determine the prevalence of physiological and emotional well-being in respect to Obesity among Saudis females, during reproductive age.

Methodology:

This study is descriptive cross-sectional study was conducted in Aldawadmi city by examining Saudi women in the age group of 18-55 years. The study included 500 women from the general public of Aldawadmi city Riyadh, Saudi Arabia, in urban and rural areas. Who were selected by convenient sampling at a female a public sector and were given questionnaires regarding the details of their emotional well-being patterns, Stepwise approach to non-communicable diseases, Data collection instruments included a questionnaire, which consisted of different types of questions, including multiple choices, open-ended, and closed questions, Most of the questions are presented in multiple-choice answers, which may be quickly answered by ticking the appropriate boxes. The researches make some changes in the appendix. Obtain opinions of five expertise in nursing practice to check the validity of questionnaires and the effectiveness of achieving aims of the study. A pilot study was carried out

Data are collected by the researcher from dispensary, Shaqra university campus, a female teacher in schools and hospital, prior to distribution of the questionnaire, conduct by examining Saudi women during reproductive age group of 18-55 years Aldawadmi, KSA. The Body Mass Index (BMI) investigated and analyzed to determine the prevalence of overweight (BMI = 25to29.9 kg / m²), obesity (BMI > / =30 kg / m²) and severe (gross) obesity (BMI > / =40 kg / m²) in KSA.

Statistical analysis:

Women's data were analyzed by SPSS version 20. The information taken was coded, analyzed, and arranged. Descriptive analysis was done in this research, including frequencies and rate, additionally utilizing the mean, standard deviation, t-tests.

Ethical considerations:

Before directing this research, ethical clearance was taken from an institutional review board, Shaqra research unit, there were no risks can affect the women during the application of the study. Informed consent was acquired, and the women were resting assured of namelessness and confidentiality. All women shared voluntarily after being briefed in full.

RESULTS

A total of 500 females were included in the

study, including women of the general public from all walks of life as well as Shaqra university, students, schools' teachers, dispensaries (west, south, east, and Almalik Fahd) and Aldawadmi hospital in the same area. All of the study subjects were Saudi nationals with reasonable qualification levels (minimum illiterate to University or above level). Their ages ranged from 18-55 years, 304 (60.8%) study subjects fell within the 20–40-year age range. Also, most women's lengths between 150 cm to 160 cm comprised (13.8%), and employees comprised 64.6% of the total population, as shown in Table 1, which lists

demographic details relevant to the study. Figure 1: Including women of the general public from all walks of life as well as shaqra university, students, schools' teachers, dispensary and Aldawadmi hospital in the same area. 22% from the sample were in Almalik fahd dispensary the same East dispensary. As shown in table 2 there were (17.4%) from women were nulligravida and (49 %) had more than 5 pregnancy. Also, 58.6 % had normal vaginal delivery comprised (63.8%) had caesarean-section delivery. While abortion was more than 5 time comprised (7 %).

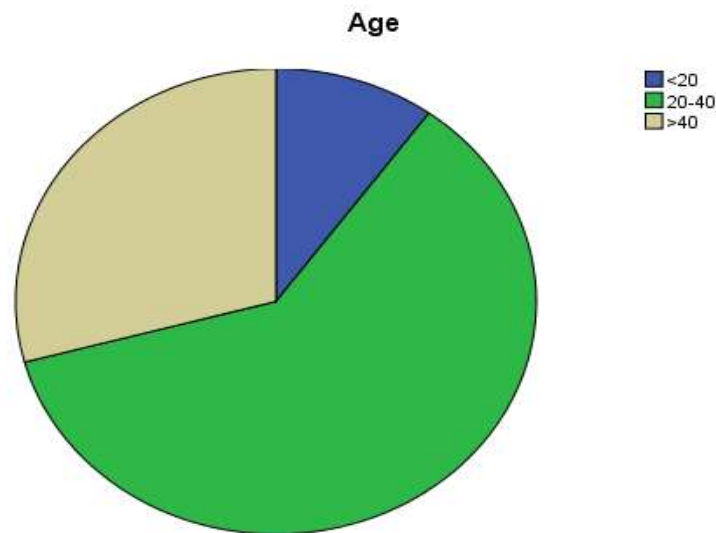


Figure 1: Distribution of the sample according to their age

Table 1: Classification of body mass index BMI (kg / m) 2 among the study subjects (n=500).

Variable	Estimated results
body mass index BMI	
Underweight <18.5	11(2.2%)
Normal range 18.5-24.9	214 (42.8%)
Overweight 25.0-29.9	84(16.8%)
Obese> 30.0	191(38.2%)
Classification of Obese n =500	
First class 30.0--34.9	101 (20.2%)
Class II 35.0--39.9	82 (16.4%)
Class III> 40.0	8 (1.6 %)

Table 2: The relation between physiological state and emotional well-being regards obesity

Women physiological and emotional problems	Classification of obesity n= 500									
	Underweight N=11		Normal range N=214		Overweight N=84		Obese N=191		Total	
	No	%	No	%	No	%	No	%	No	%
Diabetes	0	0	4	1.8	8	9.5	34	17.8	46	9.2
Hypertension	0	0	1	0.5	5	5.9	20	10.5	26	5.2
Asthma	0	0	0	0	6	7.1	15	7.9	21	4.2
CSSI	0	0	3	1.4	2	2.3	9	4.7	14	2.8
Gestational hypertension	0	0	1	0.5	5	5.9	11	5.8	13	2.6
Gestational diabetes	0	0	3	1.4	3	3.6	9	4.7	15	3
Heart disease	0	0	1	1.8	1	0.5	11	5.8	13	2.6
GIT Symptoms	0	0	2	2.4	2	0.9	9	4.7	13	2.6
Anxiety	0	0	3	1.4	3	3.6	11	5.8	17	3.4
Sadness	0	0	0	0	5	5.9	8	4.8	13	2.6
depression	0	0	0	0	5	2.3	8	4.8	13	2.6
No complains	11	100	182	85	70	83.3	74	38.7	337	67.4
P - value	0.000									

Table 1 we show the obesity prevalence in Aldawadmi city, KSA. According to the statistics, rate of obesity is 38% and overweight represent 17%. Also, the prevalence of Obesity, Aldawadmi, KSA. According to the statistics, first class estimated 53% of obesity while class 3 estimated 4%.

Table 2 illustrated the relations between the BMI with the physiological and emotional well-being and the presence of obesity and overweight were found to be highly statistically significant. Many physiological problems statistically significant differences regard obesity as diabetes mellites distributes as 1.8% in normal weight women compared to 17.8% in obese women. then hypertension distributes as 0.5 % in normal weight women compared to 10.5 % in obese women. Also 7.1 %, 7.9% suffering from asthma in overweight and obese women respectively compared to no one in normal weight women. Some emotional problems as sadness 5.9%, 4.8% in overweight and obese compared to no one in normal weight, also according to depression with statistically significant differences. As regard anxiety 1.4% in normal weight compared to 5.8% in obese women.

According to reproductive health problems, gestational diabetes represents 5.9 %, 5.8% in overweight and obese women respectively compared to 0.5% in normal weight women. As regards caesarian section site infection there were 2.3%, 4.7% in overweight and obese women

respectively compared to 1.4% in normal weight women with statistically significant differences.

DISCUSSION

A total of 500 females were included in the study, including women of the general public from all walks of life as well a Shaqra university, students, schools' teachers, dispensaries (west, south, east, and Almalik Fahd) and Aldawadmi hospital in the same area, 22% of the sample from almalikfahd dispensary as the same east. Their ages ranged from 18-55 years, 304 (60.8%) study subjects fell within the 20–40-year age range. Also, most women's lengths between 150 cm to 160 cm comprised (13.8%), and employees comprised 64.6% of the total population. According to Azzam et al., 2018. The majority (48.3%) had a university-level education, 386 (59.8%) study subjects fell within the 20–40-year age range and students comprised 39.2% of the total population.

According to the findings of the study, as shown there were (17.4%) from women were nulligravida and (49 %) had more than 5 pregnancy. Also, 58.6 % had normal vaginal delivery comprised (63.8%) had caesarean-section delivery. While abortion was more than 5 time comprised (7 %).

According to study findings the obesity prevalence in Aldawadmi city were 38% and overweight represent 17%. This finding adjective unanimous with study done by Azzam et al., 2018 found that the BMIs of 39.3%. Also, Saad Salman

M. Alqarni, 2016, shows that Saudi Arabia has a relatively high rate of overall obesity and overweight and considered 15th most obese country, with an overall obesity rate of 33.7%. According to the Al-Mohaimed et al., found that childhood obesity in KSA is increasing consistently, the prevalence of obesity was 34.3%.

According to the prevalence of obesity, Aldawadmi city, KSA, we found that the first class estimated 53% of obesity while obesity class 3 estimated 4%. Agreement with Al-Nozha MM1, et al. 2005 shown that The prevalence of overweight was 35.5% in KSA with an overall prevalence of 35.6% ,while severe (gross) obesity was 3.2%. Adjective unanimous with study done by Al-Quwaidhi et al.,and Baig et al.,2015. Examine prevalence of obesity in Jeddah, KSA, among university students and find that 7.9% of the students are severely obese, 10.7% are moderately obese, and 29.8% are overweight.

According to the relations between the BMI with the physiological, emotional well-being, reproductive problems and the presence of obesity and overweight were found to be highly statistically significant, as diabetes mellites distributes as 1.8% in normal weight women compared to 17.8% in obese women. then hypertension distributes as 0.5 % in normal weight women compared to 10.5 % in obese women, these findings are in contrast with El Nashar D E, et al., 2016. Also, agreement with Azzam, 2018. Also 7.1 %, 7.9% suffering from asthma in overweight and obese women respectively compared to no one in normal weight women. Some emotional problems as sadness 5.9%, 4.8% in overweight and obese compared to no one in normal weight, also according to depression with statistically significant differences. As regard anxiety 1.4% in normal weight compared to 5.8% in obese women. These findings are in contrast with Azzam, 2018. According to reproductive health problems, gestational diabetes represents 5.9 %, 5.8% in overweight and obese women respectively compared to 0.5% in normal weight women. As regards caesarian section site infection there were 2.3%, 4.7% in overweight and obese women respectively compared to 1.4% in normal weight women with statistically significant differences, these findings are in contrast with El Nashar D E, et al., 2016. Also, agreement with Al Mohaimed A et al., 2015.

CONCLUSION

There is an increasing in the prevalence of obesity and overweight in Saudi. The obesity prevalence in Aldawadmi city were 38% and overweight represent 17%. , also the prevalence of the first class obesity was estimated 53% of obesity while obesity class 3 estimated 4%. Many physiological and emotional problems as diabetes mellites, hypertension, asthma present in overweight and obese women respectively compared to no one in normal weight women. Some emotional problems as sadness, depression and anxiety present more in obese women. Also, gestational diabetes, gestational hypertension and caesarian section site infection presents more in overweight and obese women respectively compared to 1.4% in normal weight women with statistically significant differences.

CONFLICT OF INTEREST

The authors declared that present study was performed in absence of any conflict of interest.

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AUTHOR CONTRIBUTIONS

Entesar , Attalah and Madiha designed and performed the experiments and also wrote the manuscript. Entesar and Attalah performed data analysis. and reviewed the manuscript. All authors read and approved the final version.

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