

Obesity among females in Al-Sader city Baghdad, Iraq, 2017.

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Abstract:

Background: obesity is a serious public health problem. Literatures in Iraq explained that obesity due to change in economy and Lifestyles.

Objective: To report on prevalence of obesity among women in Al- sader City, Baghdad. 2017.

Method: A total of 440 females were included in this study. They were Selected randomly from relatives to patients accompanied them In attending to primary health care centers. BMI (body mass index) to assess the Weight. Demo-graphic data were requested too.

Result: The prevalence of obesity was 35.2%. Age , education, divorced Widows were determinants of obesity. Employment and crowding Index (socioeconomic status) were not obvious determinants of obesity.

Conclusion: High prevalence of obesity was observed.

Keywords: obesity, Al-sader city, Iraq.

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Introduction:

Obesity is a serious public health problem. In Iraq, the prevalence of overweight and obesity were 61.1% and 76% 1,2. These high figures were explained by Economic development, urbanization and improved living conditions have led to greater consumption of food and it was accompanied by sedentary life. The change in this situation led to obesity 3, 4. Al –Sader city is one of the most densely packed communities in the Middle East with low socioeconomic status5. Crowding index is a reflection to socioeconomic status6. Low quality diets (energy dense diets that are poor nutrient) consumed by persons of lower socioeconomic status7. This study was carried to estimate the prevalence of obesity among females in AL-Sader city during 2017.

Materials &Methods:

Total 440 females aged, were included in the study. They were selected randomly from AL-Sader city for the period August-December/2016. They were apparently healthy attending Primary Health Care Center (PHCC), accompanied their children or relatives attending Antenatal Care (ANC) services in PHCC. Requested data including demographic data (age, education, marital status, occupation) and crowding index⁸. These high figures were explained by Excess of body fat was measured using Body Mass Index (BMI). It is calculated by weight in (K.g) divided by height in squared meters. The participant females were weighed using electronic scale, bare foot and dressed in lightest clothes as possible. The height was measured by standard tape measure (cm) fixed to the wall. Variables were analyzed Using Chi –square test to examine the association

Between dependent variable (obesity) and independent variables (age, marital status, education, and crowding index). P value < 0.05 was considered significant.

Results:

High rates of overweight and obesity were noticed in 18 (30.5%) and 9 (15.3%), respectively, among those aged ≤ 20 years. Among those aged > 20 years, overweight was found in 134 (35.2%) and obesity in 146 (38.3%). Age was significantly associated with overweight and obesity ($\chi^2= 21$, df=1, p=0.001). Out of the single females, 12 (27.3%) and 14 (31.8%) were overweight and obese. Among the married women, 123 (35.1%) and 117 (33.4%) were overweight and obese. Overweight and obesity among divorced were found in 24 (52.2%) for both. Marital status was significantly affect the weight of the women ($\chi^2= 12.5$, df=4, p=0.01). Out of illiterate women, 50 (34.2%) and 57 (39%) were overweight and obese, respectively. Overweight among those with primary and secondary education were 56 (31.3%) and 29 (43.3%), respectively, and the obesity were 73 (40.6%) and 16 (23.9%), respectively. There was significantly difference in weight between different educational levels ($\chi^2=14.3$, df= 6, p=0.02). Overweight and obesity among housewives were 137 (35.3%) and 144 (37.1%) respectively. Among the employed women overweight and obesity were 13(39.4%) and 8(42.1%). The working status was not associated with the weight ($\chi^2=2.6$, df=4, p=0.6). In women living in houses with low crowding index ≤ 2, the overweight and obesity were 19 (32.2%) and 16 (27.1%), respectively and in those living in houses with high crowding index > 2, the overweight and obesity were 133 (34.9%) and 139 (36.5%). There was no significant differences in overweight and obesity in women and those lived in low and high crowding index ($\chi^2=3.8$, df=2, p=0.1).

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Table 1: Sociodemographic characteristics of studied group.

Variables	N	%	
Age(years)	≥ 20	59	13.4
	< 20	381	86.6
Education	illiterate	146	33.2
	primary	180	40.9
	secondary	67	15.2
	university	47	10.7
Marital status	Single	44	10
	married	350	79.5
	Divorced&widowed	46	10.5
Occupation	Housewife	388	88.2
	Employed	33	7.5
	Student	19	4.3
Crowding	≤ 2	59	13.4
	>2	381	86.6

Table 2: The association between obesity of participants and variables.

Variables	Overweight		Obesity			
	Total	N	%	N	%	
Age (years)	≤ 20	59	18	30.5	9	15.3
	> 20	381	134	35.2	146	38.3
		$\chi^2=21.03$		df= 2	p=0.000	
Marital st.	Total	N	%	N	%	
	Single	44	12	27.3	14	31.8
Married	350	123	35.1	117	33.4	
	Divorced&widowed	46	24	52.2	24	52.2
		$\chi^2=12.53$		df=4	p=0.01	
Education	Total	N	%	N	%	
	Illiterate	146	50	34.2	57	39
Primary	180	56	31.3	73	40.6	
Secondary	67	29	43.3	16	23.9	
Univercity	47	17	36.2	9	19.1	
		$\chi^2=14.29$		df=6	P=0.02	
Working	Total	N	%	N	%	
	Housewives	388	137	35.3	144	37.1
employed	33	13	39.4	8	24.2	
student	19	6	31.6	8	42.1	
		$\chi^2=2.65$		df=4	P=0.61	
Crowdingindex	Total	N	%	N	%	
	≤ 2	59	19	32.2	16	27.1
> 2	381	133	34.9	139	36.5	
		$\chi^2= 3.84$		df=2	p=0.14	

Discussion:

The prevalence of overweight and obesity were 34.5% and 35.2% respectively, both of them 69.7%). Similar figure (76%) 1 was reported in Baghdad previously. Recently, high figure reported in southern Iraq (Hilla) (80.5%) 9. The observed figure of overweight and obesity (34.5% and 35.2%, respectively) were almost similar to the reported national figures (31.4% and 38.2%, respectively). It was documented that the prevalence of overweight and obesity in Arabic countries were increased to alarming rates during the last decades 3. Studies in East Mediterranean countries showed an alarming level among both children and adults11. World Health Organization warned the escalating epidemic of obesity could put the population in many countries at risk of developing non- communicable diseases (NCD) 12. The high prevalence of overweight and obesity in Iraq was explained by consumption of high caloric food, and social habits1. Recently, it was reported that the type of dressing affect the body

weight of females by multiple mechanisms13. Consumption of high caloric diet in Iraq explained by the fact of economic improvement and redistribution of wealth after the last political events (i.e. change of regime). Festivals, gathering in restaurants might play a role in this phenomenon. High prevalence of overweight and obesity observed in this study might be attributed to nutritional transition. The last was described after demographic and epidemiologic transition16. It was documented that nutritional transition is striking to low income countries too. The study, revealed a significant association between age and obesity. This finding is consistent with other studies17, 18. The weight of married, divorced and widowed women were significantly higher than single females (p= 0.01). This finding might be explained by social norms. This finding is in the line of that Arabian countries17. Single females are more concern about their appearance (slim, nice looking.. etc)19-21. It was noticed that overweight and obesity were highly prevalent among lower educated women (p=0.02). It is in line with that reported in Basrah (southern Iraq)2, Jordan22, and England23. But in contrast with that in African countries 24, 25. The difference might be attributed to the fact that the high educated women usually had jobs which in turn means high income, and using fast food which in turn enhance increasing body weight 26. Sedentary life is another factor for increase in body weight among the high educational women27. In the line of that other studies28. Occupation was playing no role on overweight and obesity. This study showed that overweight and obesity were not affected by crowding index (p=0.1). It is in contrast with that reported in other studies 29. This finding might be attributed to the fact that majority of the sample (86.6%) were living in high crowded houses i.e.> 2. It was mentioned that AL- Sader city is one of densely packed communities in the middle east5.

Conclusion:

High prevalence of overweight and obesity were noticed in AL-Sader city.

Authors' Contributions:

Hadeel M. Jasim: collection, analysis of data. Sharing in writing the Manuscript.

Hassan M. Abdul hussein: entering the data to the computer and editing Manuscript.

Eman A. Al- Kaseer: Suggesting the problem, design of the study, sharing the manuscript.

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