

Nutritional Status of Emirati Women in Al-Ain City, United Arab Emirates

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The aim of this study was to determine the proportion of obesity among national Emirati women who were attending out-patient clinics in Al-Ain City, United Arab Emirates. Of women studied, 9.2%, 29.8% and 38.4% respectively were underweight, overweight and obese. The findings of this study are consistent with other studies in UAE, that obesity is a problem of concern among women.

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Measuring of nutritional status is one of the important steps to understanding the health situation of the people. Anthropometric measurements are widely used to determine the nutritional status, with weight and height the most common measures used. The National Nutrition Survey in the United Arab Emirates (UAE)¹ showed that 3.9% of Emirati women were underweight, 33.8% overweight and 38.4% obese, based on body mass index. El-Mugamer et al² found that 27.4% of women of Bedouin origin in the UAE were obese. The present paper aims to find out the proportion of underweight and overweight among Emirati women in Al-Ain City, UAE.

METHODS

Data of this study were obtained from women attending the out-patient clinics in Tawam Hospital, the main and the university hospital in Al-Ain City. Women who attended the out-patient clinics during the periods 8 a.m. to 12 p.m. and 2 p.m. to 5 p.m. for one week were the target group in this study. Only Emirati women and those who agreed to participate in the study were included. Non-response was not reported.

Women were interviewed by nutritionists using a questionnaire containing information on several aspects of health and nutrition. Weight was obtained using Seca scales with an accuracy of 0.1 kg. Height was obtained to the nearest 0.1 cm using a stadiometer attached to the scale. For the purpose of this short report, only data on weight and height were included. The nutritional status of the women was determined using Body Mass Index [weight (kg)/Height (cm)²]. Women were classified according to nutritional status into four groups underweight (BMI<20), normal (BMI 20-24.9), overweight (BMI 25-29.9) and obese (BMI≥30)³.

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RESULTS AND DISCUSSION

The classification of Emirati women according to nutritional status and age is presented in Table 1. The percentage of underweight declined steeply between the ages of 20 and 40 years. At age 20-29 years, the percentage of underweight was 17.1% and declined to 3% at age 30-39 years. At the same time, the proportion of obesity increased markedly during the same period, and continued to increase slowly after age 40 years. The percentage of obesity was 25% at age 20-29 years, and increased to 48% and 52.8% at ages 30-39 and ≥ 40 years, respectively. The association between the nutritional status and age of women was highly statistically significant ($p < 0.0001$).

Table 1. Nutritional Status of Emirati women in Al-Ain City by their ages

Nutritional Status	Age (years)						Total	
	20-29		30-39		40+		No.	%
	No.	%	No.	%	No.	%		
Underweight	28	17.1	3	3.0	1	1.2	32	9.2
Normal	55	33.5	10	10.0	14	16.5	79	22.6
Overweight	40	24.4	39	39.0	25	29.4	104	29.8
Obese	41	25.0	48	48.0	45	52.9	134	38.4
Total	164	.0100	100	100.0	85	.0100	349	.0100

The high increase in obesity with age, especially at age 30-39 years can be attributed to multiple- pregnancies, inactivity and high intake of foods rich in calories. Studies in the region demonstrated that the risk of obesity increased with age until age 50 years and then declined gradually^{4,5}. Parity was also reported as a risk factor for obesity among women in the Gulf⁶.

The findings of this study supported that of El-Mugamer² and Musaiger¹ in the UAE, as well as studies in other Arab Gulf countries^{5,6}, as obesity is highly prevalent among women. More emphasis, therefore, should be put on health prevention programme to include activities to overcome obesity in this region.

REFERENCES

1. Musaiger AO. Results of National Nutrition Survey. Ministry of Health, Abu-Dhabi:1992.
2. El-Mugamer IT, Al-Zayat AS, Hossain MM, et al. Diabetes, obesity and hypertension in urban and rural people of Bedouin origin in the United Arab

- Emirates.
3. Garrow JS. Indices of adiposity. Nutrition Abstract Reviews Series A 1983;53:697-708.
 4. Musaiger AO, Al-Awadi A, Al-Mannai MA. Lifestyle and social factors associated with obesity among the Bahraini adult population. Ecol Food Nutr 2000;39:121-33.
 5. Khashoggi RH, Madani KA, Ghaznawy HI, et al. Socioeconomic factors affecting the prevalence of obesity among patients attending primary health centers in Jeddah, Saudi Arabia. Ecol Food Nutr 1994;31:277-83.
 6. Al-Shammari SA, Khoja TA, Al-Maatouq MA, et al. High prevalence of clinical obesity among Saudi females: a prospective, cross-sectional study in the Riyadh region. J Trop Med Hygiene,1994;97:183-88.