

Introduction

Obesity is an advanced stage of overweight. According to “100 million health” survey, in Egypt (2019) which screened 49.7 million adult Egyptians (≥ 18 years old), 39.8% of adult Egyptians suffered from obesity ($BMI \geq 30$ kg/m²).

Weight bias is the negative attitudes towards and beliefs about others because of their weight. Moreover, obesity stigma involves actions against people with obesity that cause marginalization and leads to inequities in health care services. Obesity bias among health care providers can also affect the quality of care for patients with obesity and compromise the patients’ compliance to treatment leading to poor health outcomes and increasing risk of mortality.

A prerequisite to improve knowledge and attitude is to assess it first. Medical students are future doctors whose knowledge and attitude towards patients affect the health care they provide and the consequent outcome of the patient.

Aim of the Work

The present study explores the problem of obesity bias through assessment of knowledge and attitude among medical students and evaluating the role of medical study in combating this problem through comparing between first and sixth year medical students as regards their knowledge and attitudes towards obese persons.

Subjects and Methods

A cross sectional survey was conducted on first and sixth year medical students of the academic year 2019/2020 at Alexandria Faculty of Medicine. Two groups out of 16 groups (sections) of the first year students (220 students) and one group out of eight groups (rounds) of the sixth year students (190 students) were randomly selected and included in the study. The overall response rate was 95.1%.

Data were collected using A self-administered questionnaire adapted from The Obesity Risk Knowledge scale (ORK-10) and Attitudes Towards Obese Persons scale (ATOP).

Results

Table 1: Comparison between the studied groups according to level of knowledge

Knowledge score	Study year		Test of sig.	p
	First year (n =205)	Sixth year (n =185)		
Level of knowledge				
Poor knowledge (<50)	42 (20.5%)	29 (15.7%)	c ² =2.781	0.249
Moderate knowledge (50 – 75)	152 (74.1%)	140 (75.7%)		
Good knowledge (>75)	11 (5.4%)	16 (8.6%)		
Total score of knowledge				
Min. – Max.	2.0 – 10.0	1.0 – 10.0	U= 17745.0	0.261
Mean ± SD.	5.64 ± 1.34	5.77 ± 1.51		
Median (IQR)	6.0 (5.0 – 7.0)	6.0 (5.0 – 7.0)		
% score of knowledge				
Min. – Max.	20.0 – 100.0	10.0 – 100.0	U= 17745.0	0.261
Mean ± SD.	56.44 ± 13.45	57.73 ± 15.12		
Median (IQR)	60.0 (50 – 70)	60.0 (50 – 70)		

U: Mann Whitney test
IQR: Inter Quartile Range
p: p value for comparing between First year and Sixth year

χ²: Chi square test
SD: Standard deviation

Table 2: Comparison between the studied groups according to the total attitudes towards obese persons scale "ATOP" score

Total Attitudes Towards Obese Persons scale "ATOP" score	Study year		U	p
	First year (n =205)	Sixth year (n =185)		
Min. – Max.	-5.0 – 72.0	-6.0 – 73.0	17233.0	0.120
Mean ± SD.	31.03 ± 13.77	33.61 ± 14.80		
Median (IQR)	30.0 (24.0 – 39.0)	31.0 (25.0 – 42.0)		

U: Mann Whitney test
p: p value for comparing between First year and Sixth year

Conclusion

The study highlighted a knowledgegap of medical students towards obesity. Moreover, medical students displayed negative attitudes towards individuals with obesity. The study underscores the urgent need for medical education programs to address these issues. Comprehensive training on obesity should be integrated into the curriculum, focusing on fostering empathy and combating obesity stigma. By addressing these concerns, medical students can play a crucial role in reducing obesity stigma and improving patient outcomes in the long run.