

Knowledge of Primary Health Care Centers Physician's about Obesity in Adult in
Baghdad/Alkarkh

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Abstract:

Introduction: Primary health care is still underutilized for obesity counseling and adequate training may increase physician involvement in overweight prevention and treatment, exploring physicians' awareness is important for the design of special training programs to manage deficiencies in knowledge and practices. **Objectives** To assess the knowledge of Primary Health Care Centers' physicians about obesity.

Methodology A cross sectional descriptive study was carried out for period of 4 months: a Convenient sample of (129) primary health care physicians were included, assessment of knowledge consisted of (15) questions, and their answers may be one of 3 ("Yes", "No" or "I don't know") according to knowledge of participants.. For knowledge assessment; if a participant had 7 or less correct answers it was considered poor knowledge, and if more than 8 correct answers out of the 15 questions the it considered adequate knowledge.

Results: From the 129 study sample, only 11 had training in obesity courses, There were (82.9%) of participants identify obesity as a disease, and (75.2%) agreed that Primary Health Care physicians playing a dominant role in assessing and managing obesity, In the current study 98.4% of participants answered correctly about obesity relation to chronic conditions, (40.3%) of physicians had incorrect information about low social class can predispose to obesity, In this study only (50.4 %) of physicians used BMI for obesity classification in all health conditions.

Conclusions In general most of the physicians who were involved in the study had an adequate knowledge about obesity 92.2%.

Key Words: obesity, BMI, knowledge of physician.

Introduction:

Obesity can be defined as a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health, leading to reduced life expectancy and /or increased health problems, overweight: technically refer to an excess of body weight. ⁽¹⁾

Primary health care is still underutilized for obesity counseling and its capacity is usually restrained by a number of limitations, such as short consultation time, patients' low motivation and non-compliance, inadequate teaching materials, low level of physicians' confidence and a shortage of dietitians. ^(2,3)

Adequate training may increase physician involvement in overweight prevention and treatment, exploring physicians' awareness is important for the design of special training programs to manage deficiencies in knowledge and practices. ^(4,5)

Aim of the study:

To assess the knowledge of Primary Health Care Centers physicians about obesity

Subjects and methods

Study Design and duration:

A cross sectional descriptive study was carried out for period of 4 months, from First of February to the end of May 2017, at a primary health care centers in Baghdad city/Al-Karkh, for two days per week Data was collected from sixteen primary health care centers in Baghdad city/Al Karkh and were chosen conveniently include:- (ALZahraa, ALmansoor, ALSalam, ALTadriby, AL ADEL, AL dakilia, AL Yarmook, AL Jawadeen, AL Hurea, AL Salam, ALSakaani, ALShaheed saif zaki, AL Iraq

ALjadeed, AL kedraa, AL Washash, Hateen, ALSabeeat, and AL Jammea)

Study subjects: Convenient sample of (129) primary health care physicians, who were willing to participate in this study, and were working at the primary health care center at time of data collection, who included physicians from both sex.

Tool for data collection:-

Data were collected via a questionnaire which were derived from European guideline recommendations on obesity ⁽⁶⁾, assessment of knowledge consisted of (15) questions, and their answers may be one of 3 ("Yes", "No" or "I don't know") according to knowledge of participants.

Statistical Analysis:

The data of physicians were analyzed by application of Microsoft excel program and Statistical Package for Social Sciences (SPSS) version 23.. For knowledge assessment; if a participant had 7 or less correct answers it was considered poor knowledge, and if more than 8 correct answers out of the 15 questions the it considered adequate knowledge.

Results:-

A total of 150 primary health care center physicians (PHCCPs) were included in this study with mean age of 43.5 ± 8.6 years; 35.3% of them were less than 40 years age, 34.7% of them were in age group 40-49 years, 28% of them were in age group 50-59 years and 2% of them were more than an equal 60 years of age. Females were more than males with female to male ratio as 2.6:1.

The highest qualifications of participants were distributed as followings; 62.3% Bachelors, 30.0% Board, 6.0% Diploma and 0.7% Master. Mean a post-graduation year was 18 ± 8.4 years, 44.0% more

and equal 20 years, 36.7% 10-19 years, and 19.3% of them have experience less than 10 years.

Only 11 PHCCPs were included in obesity management training; two physicians in nutrition training, two physicians in obesity training, two physicians in obesity & nutrition training course, etc. All these findings were shown in table (1).

The correct answers for Q1: "is obesity a disease?", were 107 (82.9%) and the remaining 22(17.1%) participants answered incorrectly or didn't know the right answer, For Q2: "Waist circumference >40 inch(102 cm) in men and 35 inch (88cm)in women indicate increase risk of obesity co-morbidities", 84(65.1%) participants answered correctly, while 45(34.9%) didn't. For Q3: "Obesity is defined as BMI is equal or more than 30 Kg/m²", the correct answers were 114(88.4%) and only 15(11.6%) didn't answer correctly. Regarding Q4: "Is obesity considered a leading cause of preventable death in developed countries? less than half of participant 63 (48.8%) knew the correct answer. For Q5: "Are PHC physicians playing a dominant role in assessing and managing obesity?", the correct answers were 97(75.2%) and the incorrect and unknown were 32(24.8%). All these findings were shown in table (2).

Regarding Q6: "Is weight reduction indicated when BMI less than 30 even in the absence of cardiovascular risk factors?", only 24(18.6%) knew the right answer, and the majority 105(81.4%) answered incorrectly. For Q7: "Is obesity risk factor for

chronic disease?", almost all participants answered correctly 127(98.4%), which was similar to answers for Q8: "Are genetic predispose obesity?", as 120(93.0%) had right answers, also Q9: "Are hormonal abnormalities predispose obesity?", showed a 128(99.2%) correct answers. For Q10: "Is obesity has relation to psychological status?", 124(96.1%) of participants answered correctly. All these findings were shown in table (3)

Regarding Q11: "Is low socioeconomic class can predispose to obesity?", the correct answers were 77(59.7%). For Q12: "Is diet for weight loss should be high in carbohydrate and low fat?", 97. answered correctly while 32 had wrong or didn't know the answer. Regarding Q13: "Did you think that 5% to 15% weight loss can significantly reduce the complication associated with obesity?", 73(56.6%) answered correctly. Regarding Q14: "Do you belief that PHC physicians must be model and maintain normal weight?", most participant had correct answers forming 112(86.8%). For Q15: "Is BMI measurement are accurate for obesity classification in all health status?", approximately half of participants answered correctly 65(50.4%). All these findings were shown in table (4).

Participants with poor knowledge regarding obesity were 10 (7.8%), while the remaining 119 (92.2%) participants showed adequate knowledge with varying number of correct answers as shown in Table (5).

Table (1): Distribution of participants according to training in obesity courses .

Variable	No.	%
Did you have training in obesity?		
Yes	11	8.5
No	118	91.5
Total	129	100.0
If yes, mention the course title		
Dyslipidemia	1	9.1
School children nutrition	1	9.1
Management of obesity	1	9.1
Nutrition	2	18.2
Developmental index	1	9.1
Obesity	2	18.2
Obesity & Nutrition	2	18.2
Body scale	1	9.1
Total	11	100.0

Table (2): Knowledge of participants regarding obesity.

Variable	No.	%
Q1: Is obesity a disease?		
Correct	107	82.9
Incorrect	22	17.1
Total	129	100.0
Q2: Waist circumference >40 inch(102 cm) in men and 35 inch (88cm)in women indicate increase risk of obesity co -morbidity		
Correct	84	65.1
Incorrect	45	34.9
Total	129	100.0
Q3: Obesity is defined as BMI is equal or more than 30 Kg/m²		
Correct	114	88.4
Incorrect	15	11.6
Total	129	100.0
Q4: Is obesity considered a leading cause of preventable death in developed countries ?		
Correct	63	48.8
Incorrect	66	51.2
Total	129	100.0
Q5: Are PHC physicians playing a dominant role in assessing and managing obesity?		
Correct	97	75.2
Incorrect	32	24.8
Total	129	100.0

Table (3): Knowledge of participants regarding obesity

Variable	No.	%
Q6: Is weight reduction indicated when BMI less than 30 even in the absence of cardio vascular risk factors?		
Correct	24	18.6
Incorrect	105	81.4
Total	129	100.0
Q7: Is obesity risk factor for chronic disease?		
Correct	127	98.4
Incorrect	2	1.6
Total	129	100.0
Q8: Are genetic predispose obesity?		
Correct	120	93.0
Incorrect	9	7.0
Total	129	100.0
Q9: Are hormonal abnormalities predispose obesity?		
Correct	128	99.2
Incorrect	1	0.8
Total	129	100.0
Q10: Is obesity has relation to psychological status?		
Correct	124	96.1
Incorrect	5	3.9
Total	129	100.0

Table(4): Knowledge of participants regarding obesity.

Variable	No.	%
Q11: Is low socioeconomic class can predispose to obesity?		
Correct	77	59.7
Incorrect	52	40.3
Total	129	100.0
Q12: Is diet for weight loss should be high in carbohydrate and low fat?		
Correct	97	75.2
Incorrect	32	24.8
Total	129	100.0
Q13: Did you think that 5% to 15% weight loss can significantly reduce the complication associated with obesity?		
Correct	73	56.6
Incorrect	56	43.4
Total	129	100.0
Q14: Do you belief that PHC physicians must be model and maintain normal weight?		
Correct	112	86.8
Incorrect	17	13.2
Total	129	100.0
Q15: Is BMI measurement are accurate for obesity classification in all health status?		
Correct	65	50.4
Incorrect	64	49.6
Total	129	100.0

Table (5): Number of correct answers corresponding to participants.

Number of correct answers	Number of participants	%
6	1	0.8
7	9	7.0
8	9	7.0
9	20	15.5
10	24	18.6
11	28	21.7
12	21	16.3
13	14	10.9
14	1	0.8
15	2	1.6
Total	129	100.0

Discussion:

This study showed that 82.7% of participant had answered correctly according to that obesity one of non-communicable disease with worldwide distribution, this result was similar to AL-Gawi A et al (2009) in Bahrain⁽⁴⁾, Al-Shammari (2014) in Saudi Arabia⁽⁷⁾

and with Sack, et al (2009) in USA⁽⁸⁾ this meant that physician were aware of the impact of obesity as a non-communicable disease, but their feeling that physicians had low effectiveness towards may be due to low level of interest in management or their perception that impact on patients was low^{(9) (10)}

The current study showed that 65.1% of physicians had answered correctly about waist circumference in male and female, this agreed with Sebiany, (2013) in Saudi Arabia⁽¹¹⁾, it seemed low percentage, as it's easier to measure waist sometimes rather than calculating BMI, so this impaired a problem because not knowing ideal waist circumference will hinder identification of obese or overweight subjects.

Most of physicians in this study had a correct answer about obesity definition (88.4%), and this goes with Sebiany AM, (2013) in Saudi Arabia⁽¹¹⁾, Sack, et al (2009)⁽⁸⁾, Park et al 2005 in Korea⁽¹²⁾, all physicians must know correct obesity definition to be able to diagnose and manage this disease.

In this study nearly two third of physicians (75.2%) had answered correctly about their role in assessing and managing obesity, this agreed with AL-Gawi and Uauy (2009) in Bahrain⁽⁴⁾, as primary health care physicians are in the front line in combating and preventing the disease, so the first encounter of an obese patients is usually them, and they must have all the solutions to this problem⁽⁷⁾

In the current study 98.4% of participants answered correctly about obesity relation to chronic conditions and this was similar to participates in Sebiany, (2013)⁽¹¹⁾, Foster, Wadden, et al (2003)⁽⁹⁾, and Sack, et al (2009)⁽⁸⁾, and primary health care physicians should not only be able to identify obesity but play a critical role in treating this endemic disease.^{(13) (14)}

Obese patients could have predisposing factors for example (genetic, hormonal and psychological), so physicians in this study had good knowledge 93.0%, 99.2% and 96.1% respectively and this agreed with Al-Shammari (2014)⁽⁷⁾ and Sack, et al (2009)⁽⁸⁾

Low social class can predispose to obesity, but (40.3%) of physicians had incorrect information, this agree with Sebiany (2013)⁽¹¹⁾, Burkert, et al (2013)⁽¹⁵⁾ showed that a low socio-economic state has a significant negative impact on obese individuals' health.

The current study showed that, (75.2%) of physicians believed that food for weight reduction must be low-fat and low-carbohydrate, this agreed with Foster and Wadden (2003)⁽⁹⁾, because such food can increase insulin resistance, cardiovascular disease and other problems.

This study showed that (56.6%) of participants knew that decreasing weight by 5% to 15%, reduced complications and this agreed with, it was lower compared to the results shown by Foster GE and Wadden of, (2003)⁽⁹⁾ who showed that (75%) knew that point, also lower than the results of Sack, et al (2009)⁽⁸⁾, as it was (93.9%), if physicians are aware of the fact that mild weight reduction is beneficial, they tend to use less aggressive treatment options, like medication or bariatric surgery, encouraging the patients and put more confidence in their ability to change their life style should be the first option^(16,17).

The present study showed that (86.8%) of physicians believed that they must be model and maintain weight in accordance to some previous studies, Sebiany (2013)⁽¹¹⁾ and Epling et al 2011⁽¹⁸⁾, as the patients usually lose their trust if the physician advising them to lose weight and providing methods of that, is in fact obese and didn't apply that methods on himself.

In this study (50.4 %) of physicians used BMI for obesity classification in all health conditions, this agreed with Al-Shammari, 2014⁽⁷⁾, although BMI is the most widely used method for classifying obesity, it had certain limitations, first it's not a direct method for measuring obesity, second the body fat is not accurately measured by BMI, for example, a female might have the same weight and height as a male, but females have more body fat than males⁽¹⁹⁾.

In conclusions, in general most of the physicians who were involved in the study had an adequate knowledge about obesity 92.2%, Less than 50% of our subjects answered incorrectly on two questions, Less than 60% of our subjects answered incorrectly on three questions, The rest ten questions were correctly answered with a percent ranges between 75% to 98% except one with a 65%. The importance of more training courses about obesity and how to deal with obese patient physically and psychotically at the primary health care centers

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