

Attitudes of General Practitioners toward Management of Adult Overweight And Obesity at Tabuk Military Hospital

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ABSTRACT

Background: As the prevalence of overweight and obesity increases with age and considering that the majority of Saudi populations are less than 30 years old at the present time, then, one would expect the magnitude of obesity to be even bigger in the near future.

Objectives: To assess the attitudes of general practitioners toward management of adult overweight and obesity in Tabuk military hospital, Saudi Arabia.

Subjects and Methods: A cross-sectional survey has been conducted at Tabuk Military Hospital family medicine department, Air Base clinic, and peripheral clinics in Tabuk city, Kingdom of Saudi Arabia. It included all general practitioners except those who are on leave at specific time working (n=77 physicians). A questionnaire modified from studies of international literature in overweight and obesity management in primary care has been developed for data collection.

Results: Of the 77 questionnaire distributed, 67 were returned complete with response rate of 87%. Majority (80%) of GPs were aged 30-49 years old, 55(82%) were males. The prevalence of overweight among GPs (37.3%) was close to that of Saudi populations (36%) and prevalence of obesity (35.8%) is comparable obesity prevalence among populations of Saudi Arabia (35.6%). Less than one half (42%) of the GPs consider their eating habits to be unhealthy. Less than one half (45%) had some sort of exercise weekly at least weekly. Counseling about nutrition was ranked as very important in (35.8%) and as quite important by (56.7%), followed closely by

the physical activities (32.8%) as very important. Most GPs (61.2%) view drugs as quite important but only (17.9%) views as very important. Barriers to management of overweight and obesity were considering the patients unable to maintain weight loss as an important barrier to a great extent as ranked 1 (64%) followed by patient inability to make lifestyle changes (52%), time constraints/time consuming (43%).

Conclusion: Many barriers may face GPs affecting their attitudes. GPs views of the of little usefulness to different modalities used in the treatment of overweight and obese patients, they consider counseling about nutrition, physical activity advices as superior to behavioral therapy, drug treatment and surgical management.

Keywords: Obesity, General Practitioners, Attitude.

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INTRODUCTION

The pandemic of overweight and obesity in developed and developing countries presents a challenge to public health and requires medical intervention, modifications of individual behavior, and environmental changes.¹

It is a significant health problem in the United States and across the world .It is the second leading cause of preventable death in the US.² The National Health and Nutrition Examination Survey shows the rate of obesity among adults in the United States is 30.5% in 2000. The percentage of overweight is 64.5.³

In Saudi Arabia the prevalence shows the rate of obesity among adults remained steady at 22.1% (males 17.8 % and females

26.6%) in 1990 and 1993.⁴ and increased thereafter to 35.6% (Females 44% and males 26.4%) in 1995 and 2000.⁵ This trend can also be seen in overweight Saudis as the percentage of overweight adults in the Saudi Arabia increased from 31.2% (33.1% for males and 29.4% for females) to 36.9% (42.4% of males and 31.8% of females) in the same time period.^{4,5}

The increase in obesity has been well documented and can be attributed to a range of factors such as changes in eating behavior and exercise patterns, shifts in food production, and an increasingly obesogenic environment designed to encourage overeating and a sedentary lifestyle.⁶

Obesity is an independent risk factor for many diseases, and a large number of adults are at an increased risk of morbidity and mortality because of being overweight or obese.⁷ Obesity has been associated with coronary heart disease, left ventricular hypertrophy, congestive heart failure, arrhythmia, and sudden death.⁸ Overweight and obesity are coexisting risk factors amongst hypertensive and diabetic adult patients.⁹ Prevalence of hypertriglyceridemia is higher among obese groups.¹⁰ The American Cancer Society found that overweight men had increased rates of colorectal and prostate cancers, and overweight women had higher rates of endometrial, cervical, ovarian, and breast cancers.¹¹ There are also psychosocial problems associated with being overweight or obese. Many overweight people also have a negative self-image.¹² Although there are a multitude of negative consequences associated with excess weight, many may be reversible with weight loss. The U.S. Preventive Services Task Force has concluded that these improvements in intermediate outcomes provide indirect evidence of the health benefits achievable with modest weight reduction.¹³ The prevention and treatment of excess weight is critical for the health of both individuals and the society. Primary health care services should play the dominant role for obesity management. General practitioners (GPs) have a significant role to play in preventing and diagnosing weight problems and in providing initial counseling.¹⁴ Obesity management is significantly influenced in the first instance by low levels of obesity identification¹⁵ and reluctance to manage weight when there are no comorbidities,¹⁶ or when the patient is overweight as opposed to obese.¹⁷ Furthermore, health professionals, including GPs, hold negative attitudes toward their overweight and obese patients. It has been suggested that such attitudes can significantly impede the practitioner's levels of involvement and interaction.¹⁸ Other studies have shown that GPs see their low levels of relevant knowledge and skills as an impediment to more effective weight management practice,^{16 17} and Cade and O'Connell¹⁸ found that a range of predictors of improved treatment success did feature poorly in GPs' practice. It is also interesting to note that levels of nutrition knowledge in GPs is low¹⁹ and that current practice in the promotion of exercise is significantly different from desirable

practice. The U.S. Preventive Services Task Force recommends that clinicians screen patients for obesity and offer intensive counseling and behavioral interventions.¹³

Family physicians need to assess the patient's readiness to enter weight loss therapy and take appropriate steps for motivation. Weight loss and weight maintenance therapy should employ the combination of low caloric diet, increased physical activity, and behavioral therapy.²⁰ Strenuous physical activity should be encouraged as strategy directed towards weight reduction in obese as well as prevention of obesity in Saudi high and lowlanders.²¹

Weight loss drugs may be used as part of comprehensive weight loss program. Weight loss surgery is an option for carefully selected patients with severe obesity (BMI > 40). After successful weight loss, a program consisting of dietary therapy, physical activity, and behavioral therapy, which should be continued indefinitely, enhances the likelihood of weight loss maintenance.²⁰ This study aimed to assess the attitudes of general practitioners toward management of adult overweight and obesity in Tabuk military hospital, Saudi Arabia.

SUBJECTS AND METHODS

A cross-sectional survey has been conducted at Tabuk Military Hospital family medicine department, Air Base clinic, and peripheral clinics in Tabuk city, Kingdom of Saudi Arabia. It included all general practitioners except those who are on leave at specific time working (n=77 physicians). A questionnaire modified from studies of international literature in overweight and obesity management in primary care^{20,23} has been developed for data collection. It assessed personal and professional characteristics and physicians attitudes. Questionnaires were distributed to all physicians by interoffice mail. Those who don't return the questionnaire within one week are contacted directly to ensure their participation. It took approximately 10 minutes to complete. Permission is sought from the department administration to conduct the research. All questionnaires were dealt with strict confidentiality. By using SPSS program version 25, statistical analysis was performed using X² test and p-value <0.05 was considered for statistical significance.

Table 1: Socio demographic characteristics of GPs who participated in the survey

Variable	Response		
	(n)	(%)	
Age (years)	<30	7	10.4
	30-<40	32	47.8
	40-<50	22	32.8
	50 or above	6	9.0
Gender	Male	55	82.1
	Female	12	17.9
Nationality	Saudi	17	25.4
	Arab	39	58.2
	Non-Arab	11	16.4
Qualification	MBBS	22	32.8
	Diploma, Master	23	34.3
	PhD, Board	22	32.8
Experiences in GP (years)	<5	11	16.4
	5-9	18	26.9
	10-14	14	20.9
	15-20	12	17.9
	>20	12	17.9

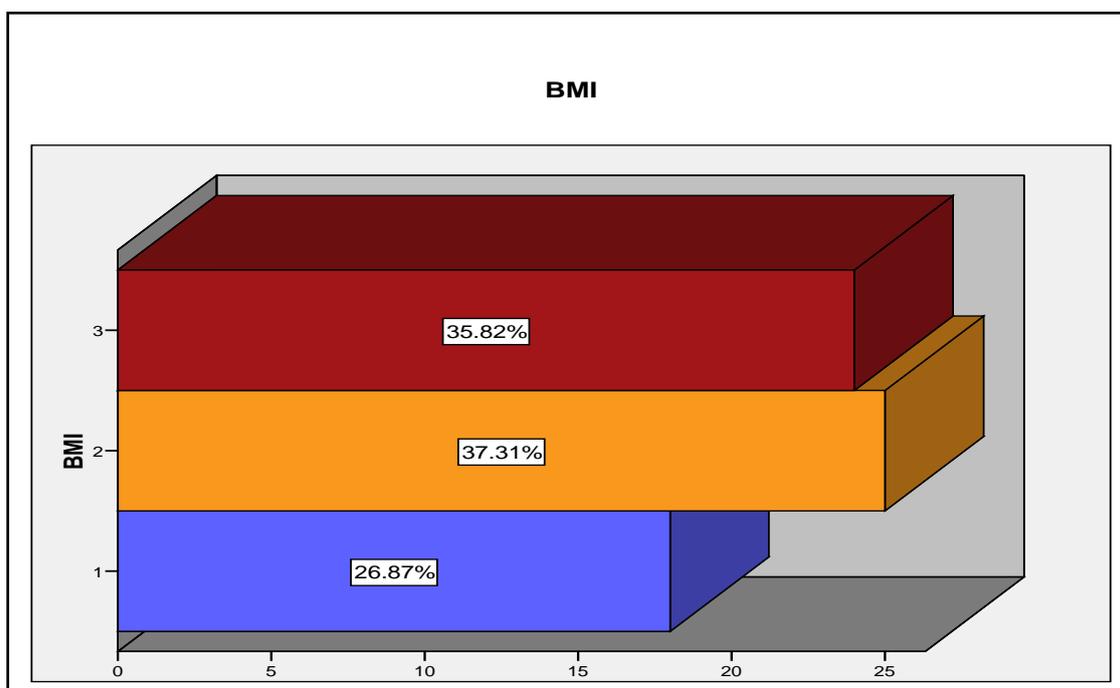


Figure 1: Body mass index of the participants

Table 2: Physicians habits and knowledge of prevalence and guidelines of overweight and obesity management

Variable	Response	
	(n)	(%)
Physicians BMI	<25	18 26.9
	25-29.9	25 37.3
	30 or more	24 35.8
Physicians considering their eating habits to be healthy	Yes	28 41.8
	No	39 58.2
Physicians having regular exercise	Yes	30 44.8
	No	37 55.2
Knowledge of obesity and overweight prevalence	Yes	31 46.3
	No	21 31.3
	Not sure	15 22.4
Knowledge of obesity and overweight guidelines	Yes	40 59.7
	No	15 22.4
	Not sure	12 17.9

Table 3: Opinion of GP about obesity and overweight and their management

Variable	Agree		Not sure		Disagree	
	(n)	(%)	(n)	(%)	(n)	(%)
If obesity is a disease	64	95.5	3	4.5	0	0
GPs' time would be best spent in this area by preventing overweight in the first instance.	30	44.8	15	22.4	22	32.8
I would only offer advice regarding weight control when a patient requests it.	7	10.4	17	25.4	43	64.2
Obese people are lazier and more self-indulgent than normal weight people	26	38.8	14	20.9	27	40.3
A small weight loss can produce health benefits	53	79.1	2	3.0	12	17.9
Only obese patients should be treated for weight loss	17	25.4	9	13.4	41	61.2
GPs' role is to refer overweight and obese patients to other professionals	8	11.9	11	16.4	48	71.6
I feel well prepared to manage overweight and obese patients	43	64.2	16	23.9	8	11.9
Only a small percentage of overweight and obese people can lose weight and maintain this loss	43	64.2	15	22.4	9	13.4

RESULTS

Of the 77 questionnaire distributed, 67 were returned complete with response rate of 87%. Table 1 shows socio demographic characteristics of GPs who participated in the survey. Majority (80%) of GPs were aged 30-49 years old, 55 (82%) were males. Most of the participants were non-Saudi 50 (75%). Two-thirds (67%) of them were holding specialty degree and 43% have experiences of less than 10 years.

The prevalence of overweight among GPs (37.3%) was close to that of Saudi populations (36%) and prevalence of obesity (35.8%) is comparable obesity prevalence among populations of Saudi Arabia (35.6%). (Figure 1)

Less than one half (42%) of the GPs consider their eating habits to be unhealthy. Less than one half (45%) had some sort of exercise weekly at least weekly.

As shown in table 2 Less than half of GPs 46% knew the prevalence of obesity and overweight among Saudi populations. GPs themselves feel they know the guidelines of overweight and obesity management as 60% of them answered 'yes' to this question. Opinion of GP about obesity and overweight and their management are shown in table 3. Almost all GPs (96%) regarded obesity as a disease and 72% of them feel it is their role is to see these patients not to refer them to other specialties. 64% of the GPs feel well prepared to manage overweight and obese patients and 40% of GPs feel that obese patients are lazier and more self-indulgent than normal weight people. The same percentage feels the opposite. Only 11% would offer advice regarding weight control when a patient request it were as 64% will not. Almost two-thirds (64%) believe that only a small percentage of overweight and obese people can lose weight and maintain this loss. Only obese patients should be treated for weight loss is agreed by 25% and 45% agreed that they best spend their time in area of preventing overweight in the first instance. Most of GPs (79%) agreed that a small weight loss can produce health benefits. The

opinion of treating only obese patients for weight loss was agreed by 25% of the participants.

Perception of the usefulness of different modalities in management of overweight and obesity are shown in table 4. Counseling about nutrition was ranked as very important in (35.8%) and as quite important by (56.7%), followed closely by the physical activities (32.8%) as very important. Most GPs (61.2%) view drugs as quite important but only (17.9%) views as very important. While surgical management was labeled as very important by (16.4%). Behavioral therapy was labeled as not important in (31.3%)

Barriers to management of overweight and obesity are shown in table 5. GPs considering the Patients unable to maintain weight loss as an important barrier to a great extent as ranked 1 (64%) followed by patient Inability to make lifestyle changes (52%), time constraints/time consuming (43%). availability of resources were considered as important to great extent by 31%. The least importance was Lack of knowledge or training (as marked by 67% as of little importance).

Table 4: Perception of the usefulness of different modalities in management of overweight and obesity

Variable	Very important		Quite important		Not important	
	(n)	(%)	(n)	(%)	(n)	(%)
Counseling about nutrition	24	35.8	38	56.7	5	7.5
Physical activities	22	32.8	35	52.2	10	14.9
Behavioral therapy	20	29.9	26	38.8	21	31.3
Drug treatment	12	17.9	41	61.2	14	20.9
Surgery	11	16.4	38	56.7	18	26.9

Table 5: barriers to management of overweight and obesity

Variable	To great extent		To some extent		To little extent	
	(n)	(%)	(n)	(%)	(n)	(%)
Inability to make lifestyle changes	35	52.2	23	34.3	9	13.4
Patients unable to maintain weight loss	43	64.2	16	23.9	8	11.9
Time constraints/time consuming	29	43.3	25	37.3	13	19.4
Lack of knowledge or training	3	4.5	19	28.4	45	67.2
Availability of resources	21	31.3	21	31.3	25	37.3

Table 6: Association between physician`s experience and opinion that feeling ready to manage overweight and obese patients

Opinion		GPs Experiences in years					p value
		<5	5-<10	10-<15	15-<20	20 or >	
		n(%)	n(%)	n(%)	n(%)	n(%)	
Feeling ready to manage overweight and obese patients	Agree	4(36.4)	8(44.4)	10(71.4)	10(83.3)	11(91.7)	.026
	Not sure	6(54.5)	7(38.9)	2(14.3)	0(0)	1(8.3)	
	Disagree	1(9.1)	3(16.7)	2(14.3)	2(16.7)	0(0)	

Table 7: Association between physician`s experience and opinion that patients unable to lose weight or maintain weight loss

Opinion		GPs Experiences in years					p value
		<5	5-<10	10-<15	15-<20	20 or >	
		n(%)	n(%)	n(%)	n(%)	n(%)	
Patients unable to lose weight or maintain weight loss	Agree	3(27.3)	9(50)	10(71.4)	10(83.3)	11(91.7)	.041
	Not sure	6(54.5)	6(33.3)	2(14.3)	1(8.3)	0(0)	
	Disagree	2(18.2)	3(16.7)	2(14.3)	1(8.3)	1(8.3)	

Table 8: Association b/w physician`s experience & opinion that obese patients are lazier & more self-indulgent than normal people

Opinion		GPs Experiences in years					p value
		<5	5-<10	10-<15	15-<20	20 or >	
		n(%)	n(%)	n(%)	n(%)	n(%)	
Obese patients are lazier and more self-indulgent than normal weight people	Agree	4 (36.4)	6 (33.3)	4 (28.6)	8 (66.7)	1 (8.3)	.046
	Not sure	5 (45.5)	5 (27.8)	5 (35.7)	2 (16.7)	2 (16.7)	
	Disagree	2 (18.2)	7 (38.9)	5 (35.7)	2 (16.7)	9 (75)	

In table 6, Pearson chi-square test was used to compare GPs years of experiences and their readiness to manage overweight and obese patients. There was a high significant association between them. The test result showed that 91.7% of physicians with 20 years or more of experience feel themselves ready to manage these patients as compared to a 36.4% of physician with less than 5 years of experience. In table 7, Pearson chi-square test was used to compare GPs years of experiences and their view that patients are unable to lose weight or maintain weight loss. There was a high significant association between them. The test result showed that 91.7% of physicians with 20 years or more of experience who have this opinion as compared to a 27.3% of physician with less than 5 years of experience.

In table 8, Pearson chi-square test was used to compare GPs years of experiences and their view that obese patients are lazier and more self-indulgent than normal weight people. There was a high significant association between them. The test result showed that 75% of physicians with 20 years or more of experience disagree on that opinion as compared to a 18% of physician with less than 5 years of experience.

DISCUSSION

Overweight and obesity are significant health problem in Saudi Arabia since the prevalence of both obesity and overweight is 73%. It is a growing public health problem, requiring urgent intervention at the level of the General practitioners who have a significant role to play in preventing and diagnosing weight problems and in providing proper management.²²

This study explored the attitude of GP toward management of overweight and obesity. Of the 77 questionnaire distributed, 67 were returned complete with response rate of 87%.

Obesity management is significantly influenced in the first instance by low levels of obesity identification.¹⁵ Our GPs agreed that obesity is a disease. 79% of them believe that a small weight loss can produce health benefit. They feel that it is their responsibility to see overweight and obesity patients rather than referring them to other specialties as they view that a weight loss, even if small, can produce health benefit. This observation is consistent with results in other studies.^{23,24}

Many of them (45%) feel that GP time would be best spent in area of overweight and obesity prevention and one-fourth would only treat obese patients. One third of our GPs would offer advices regarding weight control when a patient requests it. This showed that some of them rely mainly on a therapeutic rather than preventive approach which may delay their management. Less than one half of them (43%) would spend more time working in weight management issues if their time was reimbursed appropriately. Time constraint could be a barrier to the work on prevention.

Health professionals, including GPs, hold negative attitudes toward their overweight and obese patients. It has been suggested that such attitudes can significantly impede the practitioner's levels of involvement and interaction.^{18, 23} Although most of our GPs (64%) feel themselves ready to manage overweight and obese patients, 39% of the GPs show negative attitude toward obese patients as they see them lazier and more self-indulgent than normal weight people. This view held by our GPs was higher than views to obese patients in one study in France 30% but our GPs have lower negative attitude than the

views of GPs in another study.²⁵ which showed that more than 50% of physicians viewed obese patients as awkward, unattractive, ugly, and noncompliant. This negative attitude could be explained by that most physicians blame the patients but not themselves. Patient's response to these negative attitudes creates a vicious circle that reinforces the doctor's attitudes.^{26,27}

Also GPs negative attitudes toward obese patients were associated with personal (BMI, eating, and exercising habits) characteristics since they have the same prevalence of obesity and overweight 36 and 37 and only 45% considering their eating habit to be healthy and the same percentage of them having regular exercise.

GPs consider lack of knowledge or training to be a barrier only to little extent by 67% of them. Most of them (67%) believe that only a small percentage of overweight and obese people can lose weight and maintain this loss. This high percentage was held by other GPs in one study were 57% were pessimistic about patients ability to lose weight.²⁴ This might be true since there were low success rates in decreasing and maintaining weight loss.²⁸ Another reason for this negative attitude may be due to the feeling that patients are unable to change their lifestyle this view is consistent with another study.²³

Many barriers may face GPs affecting their attitudes. GPs views of the of little usefulness to different modalities used in the treatment of overweight and obese patients, they consider counseling about nutrition, physical activity advices as superior to behavioral therapy, drug treatment and surgical management but all of them were considered to be quite important. In one study in US most physicians provided dietary and exercise advices to their patients as superior to other measures.²⁶

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