

# **Knowledge, Attitude, and Prevalence of Lifestyle** medicine Practice among Family Physicians in Primary care centers in Saudi Arabia

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#### **KEYWORDS**

## Knowledge, Attitude, Practice, Family Physicians,

#### **ABSTRACT:**

### **Background:**

Lifestyle medicine is the adoption of lifestyle interventions in the management and treatment of disorders. It encourages lifestyle modifications to prevent, effectively manage, and reverse the progression of underlying Lifestyle medicine chronic diseases. A healthy life includes regular physical activity, a balanced nutritional diet, and stress-free living. Primary healthcare centers have a vital role in promoting health and they are the first access for the individuals to the healthcare system. Family physicians are better able to counsel patients toward better health and offer guidance on good lifestyle choices if they adopt a healthy lifestyle.

#### Aim:

To assess knowledge, attitude, and prevalence of lifestyle medicine practices among family physicians in Saudi Arabia.

#### **Methods:**

Using a cross-sectional design this study included family physicians and the selection of the participants was based on inclusion criteria. The study was performed using an online survey using Google Docs which was distributed via various social media platforms. The questionnaire involved three major sections, that investigated the demographics of physicians, and their general health as well as it involved lifestyle questions.

#### **Results:**

The study included 57 physicians, 22.8% had excellent health and 42.1% had healthy eating habits. The mean±SD scores of mental health and attitude were 5.3±1.8 and 39.8±7.1, respectively. There 77.2% reported regularly reading research journals and being updated on treatment guidelines.

#### **Conclusion:**

Family physicians need to increase their knowledge, attitude, and practice regarding lifestyle medicine. Also, they need to improve their physical practice and adopt healthy eating habits. However, they have a good degree of counseling patients on exercise and nutrition.

#### **Introduction:**

Based on the American College of Lifestyle Medicine (ACLM), lifestyle medicine is defined as the adoption of lifestyle interventions in the management and treatment of diseases [1]. Lifestyle medicine encourages significant lifestyle modifications (particularly about nutrition and meal planning, physical activity and exercise intervention, stress management for behavioral changes, social support for behavioral changes, and altered environmental exposures) to prevent, effectively manage, and reverse the progression of underlying chronic diseases by addressing the underlying cause [2]. ACLM confirms that the interventions, including a balanced diet, management of stress, smoking cessation, exercise, and other non-drug modalities are a part management of lifestyle-associated diseases [1]. To address lifestyle-associated

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disorders and bring about behavioral changes toward leading a healthy life that includes regular physical activity, a balanced nutritional diet, and stress-free living, lifestyle medicine intervention has emerged as a more recent discipline to complement conventional medical management therapy. To lower the risks of acute and chronic diseases linked to a particular lifestyle, lifestyle medicine aims to implement meaningful and progressive evidence-based behavioral changes [3, 4].

Primary healthcare (PHC) centers have a vital role in promoting health by providing the population with quality care, prevention, treatment, rehabilitation, promoting self-care and palliative care. PHC centers also are the first access for individuals to the healthcare system. Medical professionals serve as health role models for both society and their patients. By modeling healthy lifestyles, they are better able to counsel patients toward better health and offer guidance on good lifestyle choices. Also, because doctors are usually honest with their patients about their privacy and their health, people have greater faith in them. Compared to health coaches, doctors are better at providing counseling [5].

It has been demonstrated that the lifestyle choices and habits of healthcare providers favorably impacted their attitudes and counseling practice [6-8]. Other studies found that the practice of physicians' health behavior was associated with counseling, health advice, and screening practice with their patients. On the other hand, physicians with unhealthy behavior had difficulties counseling patients to change their unhealthy lifestyle [9, 10]. Therefore, it is necessary to assess the prevalence of and attitude toward practicing lifestyle medicine among family medicine physicians at PHC centers as the physicians are responsible for counseling their patients and PHC is the first access to the healthcare system. Therefore, we conducted this study.

### **Subjects and methods:**

#### Design, settings, and subjects:

This study is cross-sectional and was carried out using an online survey using Google Docs. The questionnaire was distributed via various social media platforms such as Twitter and WhatsApp. The study enrolled all family physicians from Saudi Arabia. The inclusion criteria of the participants were family physicians from both genders, with a minimum of two years of experience, and family medicine clinics, including residents and staff doctors living in Saudi Arabia. On the other hand, non-family physicians and those with experience of less than two years and not living in Saudi Arabia were excluded.

#### Data collection and statistical analysis:

The data was collected using a constructed web-based questionnaire that was published on Google Forms. The questionnaire involved three major sections, the first investigated the demographics of physicians, the second assessed the general health of the physicians, and the third part involved lifestyle questions. A pilot study was conducted on 15 physicians whose data wasn't included in the main study to assess the validity and reliability of the questionnaire.

Data from the retrieved questionnaires was entered and analyzed using SPSS version 20, where descriptive statistics were performed as frequency and proportions for categorical data, whereas mean (±SD) was used for numerical data. The comparison was performed using the Chi-square test for categorical data, whereas the Student-T test was used for numerical data. P-value<0.05 was defined to be significant.

#### **Results:**

This study included 57 participants, whose demographics are shown in Table 1. Females were slightly dominant compared to males, 32 (56.1%) Vs. 25 (43.9%), respectively. The most dominant age group was that included participants of 25-34 years 34 (59.6%) and more than one-half were married 36 (63.2%). More than one-half 35 (61.4%) of the subjects had Board Certified Family Medicine and less than one-half

23 (40.4%) had an experience of 2-5 years. Most of the participants were from Riyadh province 44 (77.2%). Wight changes revealed that more than one-half had normal weight 30 (52.6%) (Figure 1).

Table 1: socio-demographic characteristics

			Table
Variables		Count	N %
Gender:	Female	32	56.1%
	Male	25	43.9%
Age:	25 to 34	34	59.6%
	35 to 44	13	22.8%
	45 to 54	9	15.8%
	55 to 64	1	1.8%
Marital Status:	Divorced	3	5.3%
	Married	36	63.2%
	Single	18	31.6%
Level:	Board Certified Family Medicine	35	61.4%
	Board-eligible Family Medicine	6	10.5%
	GP	6	10.5%
	Training resident	10	17.5%
Working Experience	<2 years	5	8.8%
(including residency):	> 20 years	5	8.8%
	10 - 15 years	9	15.8%
	15 - 20 years	4	7.0%
	2 - 5 years	23	40.4%
	5 - 10 years	11	19.3%
province:	Eastern province	1	1.8%
	Jizan Province	5	8.8%
	Madinah Province	2	3.5%
	Makkah Province	3	5.3%
	Riyadh Province	44	77.2%
	Tabuk Province	2	3.5%
Weight changes	Underweight	2	3.5
J	Normal	30	52.6
	Overweight	13	22.8
	Obesity	12	21.1

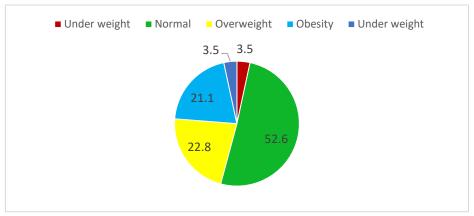


Fig 1: Distribution of body mass index



The health of family physicians is shown in Table 2; there 13 (22.8%) reported excellent health. Less than one-half reported having a regular medical checkup 26 (45.6%). Most of the subjects had no chronic diseases 44 (77.2%) and reported taking no medication 41 (71.9%). Less than one-half reported healthy eating habits 24 (42.1%) and more than one-half 30 (52.6%) reported that in the previous month, their health didn't make it difficult for them to handle their workload as physicians.

Table 2: Health of FM physicians

		Count	N %
In general, would you	Excellent	13	22.8%
say your health is:	Good	23	40.4%
	Very good	18	31.6%
	Fair	2	3.5%
	Poor	1	1.8%
Do you have regular	No	31	54.4%
medical checkups?	Yes	26	45.6%
Do you have any	No	44	77.2%
chronic diseases?	Yes	13	22.8%
Do you take any	1 -2	15	26.3%
medications?	3 or more	1	1.8%
	No	41	71.9%
Would you describe	No	33	57.9%
your eating habits to be	Yes	24	42.1%
healthy?			
In the past month, how			3.5%
often did your physical			52.6%
health make it difficult		25	43.9%
for you to handle your	time		
workload as a doctor?			

The assessment of the practice of the subjects regarding their checkup revealed that more than one-half 31 (54.4%) received flu vaccine less than one year, whereas less than one-half performed cholesterol management for less than one year 28 (49.1%). Few proportion of female participants 6(10.5) reported performing mammograms and pap smears for less than one year (Table 3).

Table 3: Practices regarding assessment and check-up (general health)

When was the	;	_	1	- <2	2-		3	- <4	4	-	Nev	er (not
last time you had	<1	year	yea	ırs	<3 <u>y</u>	years	ye	ars	<5y	ears	app	ly)
a	n	%	n	%	n	%	n	%	n	%	n	%
: [Flu Vaccine]	31	54.4%	13	22.8%	5	8.8%	1	1.8%	3	5.3%	4	7.0%
[Cholesterol	28	49.1%	13	22.8%	10	17.5%	1	1.8%	2	3.5%	3	5.3%
measurement]												
	6	10.5%	0	0.0%	6	10.5%	2	3.5%	0	0.0%	43	75.4%
[Mammography												
(women only)]												
[Pap smear	6	10.5%	3	5.3%	6	10.5%	4	7.0%	0	0.0%	38	66.7%
(women only)]												

The assessment of the mental health of the physicians showed that high proportions of physicians felt their life had a sense of purpose 53 (93%), following religious practice 52 (91.2%), felt the ability to manage their stress effectively 41 (71.9%) and visit or speak to a close friend or family members 51 (89.5%). On the other hand, lower proportions reported engagement in clubs 20 (35.1%), working up feeling refreshed and rested on most days 33 (57.9%), spending at least 20 minutes in nature 16 (28.1%), and



feeling adequate time to take care of their selves 36 (63.2%). The mean  $\pm$ SD score of mental health was 5.3 $\pm$ 1.8 (Table 4).

Table 4: Mental Health Assessment

	No		Yes	
Would you say:	n	%	n	%
[you feel your life had a sense of purpose.]	4	7.0%	53	93.0%
[you follow religious practices (prayers, fasting, reading Quran regularly).]	5	8.8%	52	91.2%
[you feel you can manage and deal with stressors effectively most days.]	16	28.1%	41	71.9%
[you are engaged in any clubs (athletic, community, etc).]	37	64.9%	20	35.1%
: [visit or speak to a close friend or family member on three or more times per month.]	6	10.5%	51	89.5%
[Woke up feeling refreshed and rested on most days.]	24	42.1%	33	57.9%
[you spend at least 20 min in nature daily.]	41	71.9%	16	28.1%
[Do you feel you have enough time to take care of yourself most days.]	21	36.8%	36	63.2%
Mental score mean± SD	5.3±1.8			

A total of eleven questions investigated the health behavior and work environment attitudes of the participants with five-choice answers. The questions and answers' details are shown in Table 5. The mean  $\pm$ SD score of attitude was estimated to be 39.8 $\pm$ 7.1.

**Table 5: Health behaviors and work environment Attitudes** 

	Strongly agre		Agre			sagree	Disag	´		ly disagree
Answer the following questions	n %		n	%	n	%	n	%	n	%
: [I tend to take care of my own medical needs.]	21	36.8%	24	42.1 %	10	17.5%	1	1.8%	1	1.8%
[I feel comfortable to seek medical resources if I need help for a physical health problem.]	25	43.9%	25	43.9	5	8.8%	2	3.5%	0	0.0%
[I feel comfortable seeking medical resources if I need help for a mental health/substance use problem.]	18	31.6%	22	38.6 %	11	19.3%	4	7.0%	2	3.5%

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[My work environment generally encourages me to be healthy.]	3	5.3%	12	21.1	19	33.3%	16	28.1%	7	12.3%
[In my job there is a good relationship between all staff members.]	11	19.3%	33	57.9 %	9	15.8%	3	5.3%	1	1.8%
[You feel satisfied in your job]	5	8.8%	32	56.1 %	12	21.1%	5	8.8%	3	5.3%
[If you re-lived your life, you would still want to become a family physician]		26.3%	21	36.8 %	6	10.5%	6	10.5%	9	15.8%
[feel comfortable about your work environment.]	7	12.3%	32	56.2 %	9	15.8%	6	10.5%	3	5.3%
[You think you can balance your work, your family, social requirements, and other activities in your life.]		15.8%	31	54.4 %	7	12.3%	6	10.5%	4	7.0%
: [You think you receive the respect and prestige you deserve after all your hard efforts.]		17.6%	20	35.1 %	12	21.1%	11	19.3%	4	7.0%
[If you can, you will work even if when you are not feeling well.]	8	14.0%	27	47.4 %	8	14.0%	8	14.0%	6	10.5%
Attitudes score mean (SD)	39.8±7.1									

The correlation between mental and attitude scores revealed a positive significant correlation (r=0.643, P=0.0001), Table 6.

Table 6: Correlation between mental score and attitude score

			Mental score
Spearman's rho	Attitudes	r	.643**
	score	P value	.000

Investigating the correlation between mental health and demographics revealed no significant association between mental health and any of sex (P=0.08), level of education (P=0.3), or marital status (P=0.4), Table 7.



#### Table 7: Relation of mental health with demographics

		Mean	Std. Deviation	P value
Sex	Male	4.9375	1.94998	0.080
	Female	5.7600	1.39284	
Level	GP	5.3333	1.63299	0.32
	Trained res idents	5.9000	1.52388	
	Board FM	5.1463	1.83795	
Marital	Single	5.0000	1.60880	0.48
status	Married	5.3333	1.85164	
	Divorced	6.6667	1.15470	

The relationship between weight changes with the mean attitude score was a non-significant correlation (P=0.8). Also, there was no significant correlation between weight changes and the mean score of mental health (P=0.9), Table 8.

Table 8: Relation of mental and attitude score to weight changes

			Std.	
		Mean	Deviation	P value
Attitude score	Underweight	41.5000	14.84924	0.83
	Normal	39.0000	6.82793	
	Overweight	40.6154	7.55578	
	Obesity	40.8333	6.69916	
Mental score	Underweight	5.0000	2.82843	0.98
	Normal	5.2667	1.61743	
	Overweight	5.4615	2.14536	
	Obesity	5.2500	1.76455	

The lifestyle of the participants was investigated via 15 questions (Table 9). More than one-half of the physicians reported 5-7 hours of sleeping each night 37 (64.9%), feeling no eating behavior problems 39 (68.4%), and using olive oil as the primary oil or no use of oil in cooking 38 (66.7%). The majority of physicians reported no smoking 50 (87.7%), whereas 7 (12.3%) reported smoking a total of 100 or more cigarettes in their lifetime. Of those who reported smoking, the lowest proportions of physicians reported occasional smoking 1 (14%), cessation less than five years 1(14%), whereas the largest proportion reported 2-3 times in week performing mild, or minimally exertive exercise 24(42.1%) with a median of 25 minutes. The median of time performed in moderate and non-exhausting exercise was 10 minutes, with 23 (40.4%) reporting it 1-2 times per week. There 8 (14%) reported strenuous exercise 1-2 times per week with a median of 10 minutes. The median of hours spent sitting daily was seven hours and the median of a total number of at least 30 minutes of resistance training weekly was zero.



## **Table 9: Lifestyle of the participants**

able 9. Enestyle of the participants		Count	Table N %
How many hours do you usually spend	< 5	8	14.0
sleeping each night?	5 - 7	37	64.9
	7 - 9	11	19.3
	> 9	1	1.8
Do you feel you have any problematic	No	39	68.4%
eating behaviors (emotional eating, eating disorders)?	Yes	18	31.6%
Do you use olive oil as your primary oil or	No	19	33.3%
use no oil when cooking?	Yes	38	66.7%
In your lifetime, have you smoked a total of	No	50	87.7%
100 or more cigarettes?	Yes	7	12.3%
yes:  A. At present, do you smoke	Daily	3	43%
cigarettes daily, occasionally, or not at all?	Not at all	3	43%
	Occasionally	1	14%
When did you stop smoking cigarettes? (If	< 1 year	2	28%
stopped)	> 5 years	1	14%
	3 - 5 years	2	28%
	No answer	2	28%
In an average week, how many times do you perform mild, minimally exertive exercise	2-3	24	42.1
, , , , , , , , , , , , , , , , , , ,	4-5	8	14.0
	Daily	5	8.8
	non	11	19.3
	Once	9	15.8
	Times	Median (IQR)	25(15-30)
In an average week, how many times do you perform moderate, non-exhausting exercises		23	40.4
(e.g., fast walking, dancing, easy swimming,		10	17.5
or biking)? (time/ week	daily	2	3.5
	NI	22	29.6
	Non Minutes consumed	22 Madian (	38.6
	Minutes consumed	Median (IQR)	10 (5-30)
In an average week, how many times do you	1-2 per week	8	14.0
perform strenuous exercises where your heart		7	12.3
beats rapidly	Never	40	70.0
	Once/month	2	3.6
	Minutes consumed	Median (IQR)	10(5-42)
The average number of hours spent sitting each day	Median (IQR)	7(5-9)	
	MEAN	6.95±3.2	
Total number of at least 30 min resistance training workouts performed per week	MEDIAN (IQR)	0(0-2.5)	
•			



The beliefs of the physicians are shown in Table 10. The largest proportions reported needing more training 47 (82.5%), uninterested patients in prevention 36 (63.2%), patients more prone to adopt healthier lifestyles in case of counseling 45 (78.9%), the responsibility of physicians to promote prevention 57 (100%) and physician must be adherent to oneself to effectively counsel the patients 45 (78.9%). On the other hand, few proportion 13 (22.8%) reported that prevention is less interesting than treatment. Table 10: believes of FM physicians

	No		Yes	
Do you believe that	n	%	n	%
: [Doctors need more prevention training.]	10	17.5%	47	82.5%
[Prevention is less interesting to me than	44	77.2%	13	22.8%
treatment.]				
[Patients aren't interested in prevention.]	21	36.8%	36	63.2%
[Patients are more likely to adopt healthier	12	21.1%	45	78.9%
lifestyles if physicians counsel them to do so.]				
[Physicians have a responsibility to promote	0	0.0%	57	100.0%
prevention with their patients.]				
: [You think for a doctor to effectively counsel	12	21.1%	45	78.9%
patient on a healthy lifestyle changes, a				
physician must be adherent to one him/herself.]				

There 52 (91.2%) reported feeling more professional in the case of practicing healthy habits, 23 (40.4%) reported having adequate time to spend with their patients during patient visits and 44 (77.2%) reported it is important to regularly read the major biomedical research journal. More than one-half 30 (52.6%) reported that they confirm a lot to their patients to stay healthy (Table 11).

Table 11: Knowledge of the participants

		Count	%
I feel I am perceived as being more professional if	No	5	8.8%
I practice healthy habits and follow a balanced life.	Yes	52	91.2%
I have adequate time to spend with my patients	No	34	59.6%
during a typical patient visit.	yes	23	40.4%
It is important for me to regularly read the major	No	13	22.8%
biomedical research journals (e.g. BMJ, JAMA,	Yes	44	77.2%
Lancet, NEJM) and be updated on treatment guidelines.			
How much emphasis do you place on helping your	A lot	30	52.6%
patients stay healthy and prevent disease rather	Not much	8	14.0%
than on treating sicknesses?	Sometim	18	31.6%
	es		
	Non	1	1.8%

The proportions of physicians who usually/always talk to their patients were the highest regarding cholesterol tests 43 (75.4%), exercise 35 (61.4%), nutrition 33 (57.9%), and weight 30 (52.6%), (Table 12).



Table 12: practices in dealing with patients

With a typical patient, how often Never/rarely			Sometimes		Usually/Always	
do you talk to patients about						
(mark one for each):	n	%	n	%	n	%
[Nutrition]	4	7.0%	20	35.1%	33	57.9%
[Exercise/physical activity]	3	5.3%	19	33.3%	35	61.4%
[weight]	3	5.3%	24	42.1%	30	52.6%
[Smoking cessation]	8	14.0%	26	45.6%	23	40.4%
[Mental health]	10	17.5%	29	50.9%	18	31.6%
[Sleep]	24	42.1%	19	33.3%	14	24.6%
[Alcohol]	44	77.2%	9	15.8%	4	7.0%
[Safe sex]	45	78.9%	10	17.5%	2	3.5%
[Cholesterol test]	2	3.5%	12	21.1%	43	75.4%
you order/perform/recommend	2	3.5%	32	56.1%	23	40.4%
a: [Mammogram for women						
above 50]						

The highest proportion of physicians received extensive training regarding mental health 22 (38.6%), smoking cessation 13 (22.8%), and weight 12 (21.1%), (Table 13).

Table 13: Training of the participants

#### **Discussion:**

Physicians can positively affect the health habits of their patients by counseling them about prevention, health-promoting behavior, and healthy lifestyles. The counseling of

How much training have Extensive you had on the following			Non		Some	
topics (mark one for						
each):	Count	Table N %	Count	Table N %	Count	Table N %
[Nutrition]	9	15.8%	21	36.8%	27	47.4%
[Exercise/physical	7	12.3%	18	31.6%	32	56.1%
activity]						
[weight]	12	21.1%	16	28.1%	29	50.9%
[Smoking cessation]	13	22.8%	14	24.6%	30	52.6%
[Mental health]	22	38.6%	8	14.0%	27	47.4%
[Sleep]	4	7.0%	21	36.8%	32	56.1%
[Alcohol]	3	5.3%	35	61.4%	19	33.3%
[Safe sex]	5	8.8%	29	50.9%	23	40.4%

physicians is strongly associated with their health practice [11]; therefore, the physicians must have adequate knowledge, and attitude toward lifestyle medicine practice. Hence, we conducted this study to assess such items among family physicians. Chronic disease is the leading reason of disability and death; however, 80% of all chronic illnesses are preventable [12]. In our study, most of the physicians had no chronic disease (77.2%) and this proportion may explain another finding in the present study as the large majority reported excellent, good, or very good health. However, less than one-half reported regular medical checkups and this may return to the fact that most of them had no chronic disease and the largest proportion reported high levels of health.

Obesity has adverse health impacts and it is the second leading cause of preventable mortality in America [13]. More than one-half of the subjects in this study had normal weight, whereas lower proportions reported either overweight or obesity. Additionally, we found that the largest proportions of the physicians performed mild and minimal



exercise 2-3 times/week, and moderate exercise 1-2 times per week, whereas strenuous exercise was less prevalent among the participants.

A study from Jordan revealed that the rate of smoking was 36% among health professionals recruited from ten hospitals [14]. One study from Saudi Arabia, involving 322 different health professionals from family medicine centers revealed that 21.1% were physically active, 8.4% were smokers, and 38.8% had normal BMI. Regarding diet, 75.1% scored more than 50% for a healthy diet [15]. In our study, we didn't assess the overall rate of physical activity, but normal BMI was more prevalent compared to the previous study, but the rate of smoking was almost comparable to the previous study. In contrast to the previous study [15], healthy eating habit was reported by less than one-half of the physicians.

Malnutrition can lead to adverse outcomes such as reduced functional status and poor survival [16]. Despite the few proportion of physicians in our study reported healthy eating habits, more than half of the physicians reported no problematic eating behavior and they primarily used olive oil.

Among 109 residents from Lebanon, it was found that 25.6% were smokers, 5.5% were practicing physical activity and more than one-half (69.7%) used to skip one or more meals, especially breakfast [17]. Such findings referred to low physical activity levels and most of the participants had unhealthy eating behavior. In our study, a lower proportion described their eating habits to be healthy. Additionally, the rate of physical activity varied among the participants based on the intensity of physical activity, where minimal and mild exercise was more performed weekly compared to moderate and strenuous exercises. One study from Jeddah conducted on physicians in public PHC centers found that the largest proportions of the participants performed moderate-intensity activities (42.5%), performed such activities four times per week (15.6%) and 37.3% spent less than ten minutes in such activities [5].

A study from Poland revealed that overweight and obesity were significantly prevalent among medical personnel; therefore, the majority of them practiced a high level of physical activity [18]. Obesity in our study was prevalent among 21.1% only and the pattern of physical activity wasn't assessed based on obesity. In a study from Estonia conducted on 198 family physicians, 63% of the physicians had normal BMI and it was demonstrated that 59% of the physicians performed moderate physical activity, whereas 34% reported high physical activity [19].

A study from Medina, Saudi Arabia enrolled PHC physicians and reported that one-quarter of physicians reported unhealthy lifestyles and related chronic diseases. Additionally, a lower score of quality of life was reported by obese physicians and those with unhealthy diets [20]. In the present study, the mean score of mental health was 5.3 and there were no significant differences between the classes of BMI and mental health score (P=0.98). Additionally, the mental health score wasn't varied with sex, level of education, or marital status. Regarding attitude, the mean score of attitude was 39.8 and there was a significant positive association between mental health and attitude of the physicians. However, similar to mental health, there was no association between the mean score of attitude and BMI classes.

In the current study, we found that the most of physicians (77.2%) regularly read the major biomedical research journals and are updated on treatment guidelines. A previous Saudi study revealed that scientific studies and literature represented only 5.7% of the sources of knowledge about lifestyle medicine among PHC physicians and the largest proportion (54.2%) reported updating their knowledge about lifestyle medicine at least once annually [5].

Regular chronic care visits can become transformative experiences if doctors possess the educational understanding and abilities to use lifestyle behavior modification as a therapeutic approach with their patients [21]. This study demonstrated that less than



one-half of the physicians (40.4%) reported having adequate time to spend with their parents and more than one-half (52.6%) emphasized their patients to stay healthy. The major talk between physicians and their patients was usually or always regarding cholesterol tests, followed by physical activity and exercise, and then nutrition. In the UK, it was reported that 16% of general practitioners spent an average of practice time on prevention, whereas 79% reported educating patients about lifestyle risks all of the time or most of the time [22]. A total of 890 doctors were assessed in one study, there 73% of doctors counseled 60-100% of their patients on smoking cessation, 58% on physical activity, 54% on weight control, 51% on healthy nutrition, and 44% on alcohol avoidance/reduction [23].

There are six items reported to be commonly employed in practicing lifestyle medicine, including regular physical activity for 30 minutes/day for five days a week, good sleep and restful sleep, avoiding smoking and reducing alcohol, consuming a balanced diet, adapting for stress management and socializing with family and friends [24]. As we declared previously the overall rate of physical activity wasn't assessed, but practicing exercise was dependent on the intensity of the exercise. Regarding sleep, more than one-half of our patients reported spending 5-7 hours sleeping each night. Also, few proportions reported smoking a high frequency of cigarettes, but unhealthy eating habits were more common among our participants. Most of the physicians (71.9%) reported managing stressors effectively, and a higher proportion (89.5%) reported speaking with family and friends.

#### **Conclusion:**

This study revealed that most family physicians increase their knowledge by reading research journals and updating their knowledge regarding treatment guidelines. However, they had inadequate attitudes toward lifestyle practices that were associated with their mental health and they could manage their stressors. Healthy eating habits were uncommon, but they commonly didn't complain of problematic eating behavior. The pattern of practicing exercise was dependent on the intensity of the exercise and they tended to perform minimal exercise. Regarding counseling, an inadequate proportion spent adequate time with their patients during visits but a significant proportion emphasized their patients to stay healthy and talk to the patients mainly regarding cholesterol tests and exercise.

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