

Lifestyle of Primary health care Physicians and Nurses Regarding Nutrition Patterns in Saudi Arabia 2024

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Abstract:

Background: Nutrition is a key modifiable determinant of non-communicable diseases, for which evidence illustrates the impact of changing dietary patterns on health outcomes. More specifically, dietary interventions play a crucial role in the prevention and treatment strategy of chronic diseases, including diabetes, cardiovascular disease and hypertension. Primary health care physicians and nurses are, for several reasons, considered to be a key group in health promotion, especially due to the fact that the healthcare system reaches a substantial number of people in need of lifestyle changes such as increased physical activity (PA). Furthermore, healthcare professionals (HCPs) are considered to be the most credible source of health information. HCPs' lifestyles can play an important role in increasing awareness among patients regarding lifestyle changes, because HCPs' own lifestyle habits and interests in lifestyle behavior have been shown to positively influence their counseling practices and attitudes.

The study aimed: To assess the lifestyle of primary healthcare physicians and nurses regarding nutrition patterns in Saudi Arabia 2024.

Methods: A cross sectional study was utilized. Researchers conducted survey based on a standardized and adapted questionnaire that included socio-demographic data and points related to nutrition healthy lifestyle. Researchers adhered to the latest recommendations on designing and reporting survey studies.

Results: the present revealed that nurses were more likely to adhere to healthy eating principles and to have a regular diet at home. Physicians were more likely to consume fast food and add salt when food is not salted enough. Nurses were more likely to eat greens regularly. Physicians had a stronger belief in the impact of diet on health. More nurses rated their diet as healthy. Media promotion significantly influenced Physicians for changing diet towards healthier options. Eating patterns vary according to the risk of stress. The current study shows that chronic stress influences the amount and types of consumed food, contributing to both overeating and malnutrition, and that stress hormones can lead to the development of obesity. **Conclusion:** It is known that a healthy lifestyle of physicians affects the attitude of patients and their motivation to change their lifestyle. Thus, the lifestyle patterns of HCPs, as well as the understanding of the motivation of these patterns, are more likely to affect public health.

Keywords: Lifestyle, Primary health care, Nutrition Patterns

Introduction:

Approximately one out of every five deaths worldwide is caused by nutritional issues. Different types of malnutrition, such as obesity and under nutrition, can coexist in the same population in many low- and middle-income nations⁽¹⁾. The advancement of universal health coverage (UHC) is being slowed by the disproportionate pressure that this twin burden of malnutrition is exerting on health systems⁽²⁾. Additionally, inadequate nutrition hinders local economies' expansion, which eventually impacts the world economy⁽¹⁻³⁾.

The prevalence of lifestyle-related diseases is rising, and non-communicable diseases like diabetes, cancer, and cardiovascular disorders are now near epidemic levels globally⁽⁴⁾. Thus, it is crucial to implement effective techniques that encourage better lifestyles, such as physical activity (PA) and diet, and the workplace has been recognized as a viable environment for health promotion^(4, 5). Indeed, many workplace health promotion (WHP) initiatives are considered a realistic means to reach many persons, and they are proved to positively influence health and boost employees' productivity^(3, 7).

Theoretically, healthcare professionals (HCPs) should be more likely to participate in WHP programs and have access to the training and resources they need to embrace a healthy lifestyle. Because the healthcare system reaches a significant number of people who require lifestyle changes, like increased PA, HCPs are regarded as an important group in health promotion for a number of reasons⁽⁸⁾. Moreover, the most reliable source of health information is thought to be medical professionals⁽⁹⁾.

The lifestyles of HCPs can have a significant impact on raising patients' awareness of lifestyle modifications because it has been demonstrated that these workers' personal lifestyle choices and interests have a beneficial impact on their counseling methods and attitudes^(9, 10). A global initiative called 'Health Promoting Hospitals and Health Services', started by the World Health Organization (WHO), emphasizes how important it is to pay attention to the lifestyle and health of its personnel. Numerous studies have demonstrated that HCPs report healthier lifestyles than the general population^(11, 12), but not all of them support the idea that HCPs consistently report healthier lifestyle-related behaviors, such as physical activity, or eating habits, when compared to other people⁽¹³⁻¹⁵⁾.

There aren't many researches on HCPs' involvement in WHP programs. While McCarty and Scheuer, (2005)⁽¹⁶⁾ demonstrated that employees in healthcare organizations in the United States had a participation rate of 20% and 9%, respectively, in two distinct fitness programs offered to the employees. Stein et al., (2000)⁽¹⁵⁾ demonstrated that hospital workers' participation in at least one health-promotion activity was just under 30%. Therefore, this study aimed to assess the lifestyle of primary healthcare physicians and nurses regarding nutrition patterns in Saudi Arabia 2024.

Methods:

A cross sectional study was utilized. Researchers conducted a survey based on a standardized and adapted questionnaire that included socio-demographic data and points related to healthy lifestyle. Researchers adhered to the latest recommendations on designing and reporting survey studies⁽¹⁷⁾. Before conducting the study, the questionnaire was pretested among five experts and revised two times. The filling of the questionnaire took on average 30 minutes. Ethical approval was obtained from Ethical Committee of University.

Primary HCPs (physicians and nurses) were invited to participate in the study. Participation in the study was voluntary and all responders gave written informed consent. The informed consent note was included in the introduction of the form. No financial or other incentives were used. The data collected included age, gender, function, marital status, and eating habits related to fruit and vegetable consumption. Those who refused to participate

were excluded. The Google Forms platform was employed to run the survey from January to February 2024. Researchers reported absolute numbers and percentages. Chi-square tests were used to compare responses between groups. Results were considered significant at a P value of < 0.05. Statistical analyses were performed using the SPSS version 28.

RESULTS

Table (1) shows demographic characteristics of physicians and nurses. There is a statistically significant difference between physicians and nurses of all ages ($p < 0.0001$). Physicians are evenly distributed across the age range, and the proportion of nurses in the ≤ 29 , 40-49 and 50-59 age groups is quite high. There is a difference in gender distribution between physicians and nurses ($p < 0.0001$). Among physicians, the proportion of men is higher than that of nurses. The vast majority of employed physicians and nurses are women.

There is a statistically significant difference between physicians and nurses in terms of marital status ($p = 0.0224$). Among physicians, the proportion of married is higher than that of nurses.

There is a difference between physicians and nurses in terms of work experience ($p = 0.0004$). The proportion of physicians with work experience of 0-10 years and 30-40 years is higher than that of nurses. As for the workplace, there are differences between physicians and nurses ($p < 0.0001$). Compared to nurses, physicians often work in private medical organizations, while the proportion of nurses working in public clinics is higher (**Table 1**).

Table (1): Demographic characteristics of study participants

Characteristics	Physicians 471 (%)	Nurses 506 (%)	p-value*
Age groups			
≤ 29	(31.42)	(35.04)	<0.0001
30-39	(37.15)	(16.78)	
40-49	(11.04)	(21.03)	
50-59	(20.38)	(27.15)	
Sex			
Male	(13.38)	(2.07)	<0.0001
Female	(86.62)	(97.93)	
Marital status			
widower (widow)	(2.77)	(7.01)	0.0224
never married	(21.11)	(23.1)	
divorced	(11.51)	(10.96)	
Married	(62.05)	(56.96)	
Work experience			
0-10 years	(58.39)	(48.37)	0.0004
11-20 years	(18.47)	(17.57)	
21-30 years	(8.92)	(15.2)	
31-40 years	(10.83)	(15)	
More than 41	(3.4)	(3.85)	
Place of work			
State polyclinic	(90.02)	(95.46)	<0.0001
Private medical organization	(9.98)	(4.54)	

Table (2) shows different aspects related to dietary habits and healthy eating in the two groups. There is a significant difference in compliance to the principles of proper nutrition between the two groups ($P = 0.0059$). Nurses better adhere to the principles of proper nutrition in comparison with physicians. There are significant differences in diet between groups in terms of nutritional characteristics ($p = 0.0044$). Many employed physicians rarely cook at home and eat in cooking formations.

There is a significant statistically significant difference between the two groups in the consumption of fast food products ($p < 0.0001$). Physicians consume less fast food than nurses do. There are also differences in the use of salt ($P = 0.0104$); physicians use less salt than nurses do. There is a statistically significant difference in the regular consumption of green spaces between groups ($p = 0.0165$). Physicians consume more greenery compared to nurses (**Table 2**).

When asked for insights into the health effects of diet in general, physicians seem more confident in the health effects of diet compared to nurses ($p = 0.0004$). There are significant differences in responses regarding factors that affect proper nutrition ($p < 0.0001$). While physicians point to the positive example of relatives, friends, and acquaintances, nurses are more influenced by the promotion of the principles of healthy eating in the media and other sources (**Table 2**).

On open questioning of identifying barriers that negatively affect the implementation of healthy lifestyle; the majority of the surveyed medical workers noted a number of factors, including lack of motivation, lack of time, and insufficient funds.

Table (2): nutrition patterns among physicians and nurses

	Physicians (n=471) (%)	Nurse (n=506), n (%)	P value
Do you adhere to the principles of healthy eating?			
Yes	(39.07)	(48.57)	0.0059
Not familiar with the principles of healthy eating	(0.42)	(0.69)	
Do not stick to healthy eating	(8.49)	(7.4)	
Sticking to healthy eating irregularly	(52.02)	(43.34)	
Daily nutrition regime			
3-4 meals a day at home	(26.96)	(35.64)	0.0044
3 meals a day, at home and in catering establishments	(36.09)	(29.71)	
I rarely cook at home, I eat in catering establishments	(8.28)	(6.42)	
There is no regular diet	(28.66)	(28.23)	
How often do you eat fresh vegetables and fruits?			
1-2 times a month	(7.86)	(10.46)	0.3887
1-3 times a week	(41.83)	(40.57)	
Every day	(47.56)	(45.61)	
Less than 1 time per month	(2.76)	(3.36)	
Do you eat fast food products (fast food products)			
1-2 times a month	(52.65)	(45.61)	<.0001
1-3 times a week	(25.9)	(18.56)	
Yes, almost daily	(4.25)	(7.01)	
I do not use	(17.2)	(28.83)	
Do you add salt at the table?			
Always before meals	(4.9)	(7.4)	0.0104
When food is not salted enough	(58.64)	(63.18)	
Never	(36.46)	(29.42)	
Do you use fortified foods in your diet (foods enriched with vitamin complexes, trace elements, dietary fibers, etc.)?			
Yes, all the time	(38)	(37.41)	0.4107
Sometimes	(53.93)	(56.27)	
Unaware of such products	(8.07)	(6.32)	
Do you eat greens regularly?			
Yes	(57.57)	(64.07)	0.0165
No	(42.43)	(35.93)	
Do you use vitamin complexes, biologically active food additives?			0.9646

	Physicians (n=471) (%)	Nurse (n=506), n (%)	P value
Yes, all the time	(23.57)	(23.4)	
Sometimes	(46.07)	(46.79)	
Do not use	(30.36)	(29.81)	
In your opinion, does the composition and diet affect human health?			
Yes	(91.3)	(83.02)	0.0004
Does not affect	(1.27)	(3.36)	
Did not think about it	(2.34)	(4.54)	
Slightly	(5.1)	(9.08)	
How do you rate your diet?			
Find it difficult to answer	(8.28)	(8.98)	<0.0001
Healthy eating	(15.92)	(31.49)	
Do not adhere to any principles in nutrition	(20.59)	(22.61)	
Close to the principles of healthy eating	(55.2)	(36.92)	
How many glasses of koumiss, shubat or saumal (1 cup – 200ml) Do you consume per month?			
1-2 cups	(7.89)	(8.09)	0.8998
3-4 cups	(4.9)	(5.13)	
Irregularly, several glasses per month	(13.43)	(12.04)	
Rarely	(73.77)	(74.73)	
What, in your opinion, can influence a change in diet in favor of a healthy diet?			
A positive example of relatives, friends, acquaintances	(33.97)	(34.16)	<0.0001
Promotion of the principles of healthy eating in the media and other sources of information	(38.85)	(29.22)	
Advertising of enriched products	(12.53)	(20.73)	
Special legislative acts	(14.65)	(15.89)	

Discussion:

An understanding about the knowledge, skills and attitudes of primary healthcare practitioners towards their role in the promotion of healthy nutrition is warranted. According to the results of the current study, nurses were more likely to follow healthy eating guidelines and maintain a consistent diet at home. When food isn't salty enough, physicians are more inclined to eat fast food and add salt. Regular consumption of greens was more common among nurses. The physicians believed that nutrition had a greater influence on health. Their food was evaluated as healthy by more nurses. Physicians were greatly persuaded by media advocacy to switch to better diets. Eating patterns vary according to the risk of stress. Research shows that chronic stress influences the amount and types of consumed food, contributing to both overeating and malnutrition, and that stress hormones can lead to the development of obesity⁽¹⁸⁾.

This is consistent with previous literature, suggesting that healthcare professionals should conduct a nutritional assessment, provide basic evidence-based nutrition advice, and refer patients to a dietician when necessary⁽¹⁹⁻²¹⁾. As healthcare practitioners are accessible to a large proportion of the population, this provides opportunities to discuss nutrition encourage dietary changes and support the long-term maintenance of these dietary changes^(22, 23). However, uncertainty regarding an operational definition of basic nutrition care was reported by some primary healthcare practitioners, who found it difficult to differentiate their professional roles^(22, 24, and 25). Clarification of the scope of practice of healthcare practitioners in relation to nutrition may relieve uncertainty and enhance confidence in the delivery of such information⁽²⁶⁾. Professional associations could consider the development of a position statement or guiding principles to achieve this outcome.

Recognition of the crucial role of dietary interventions in the prevention and treatment of non-communicable diseases can influence the frequency of dietary counseling by HCPs⁽²²⁾. However, while nurses reported that they believed there is considerable evidence to support the success of dietary interventions, the strength or extent of this evidence was unknown to them⁽²⁷⁾. The lack of awareness of primary healthcare practitioners, prompted by a deficiency in nutrition knowledge, can precipitate negative beliefs about the effectiveness of nutrition interventions⁽²⁴⁾. Health professionals, particularly doctors, are shown to influence patients' nutrient intake; hence there is a need for healthcare practitioners to lead and promote a collaborative nutrition care approach⁽²⁸⁾.

Conclusion:

In the current study, the overwhelming majority of health care professionals who participated in the survey identified several barriers that hinder leading a healthy lifestyle, including a lack of time due to lengthy shifts, a lack of motivation, and a lack of funds. It is well established that physicians who lead healthy lifestyles influence their patients' attitudes and drive to make lifestyle changes. Public health is therefore more likely to be impacted by the lifestyle choices made by HCPs and their comprehension of the reasons behind these choices.

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