

Healthy Behaviors between Medical and Non- Medical University Students

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ABSTRACT

Objectives: The study aims to assess behavioral lifestyle, to compare these behaviors between two group of students, and found out the relationship between healthy lifestyle with their socio-demographic data.

Methodology: A comparative study was carried out through selection seven Colleges at university of Kerbala from 26th September 2022 to 20th, April 2023. A non-probability (convenience) sample of 300 students. The data was analyzed through the use of a descriptive and inferential statistical approach.

Results: The finding reveals that healthy lifestyle behaviors toward all the students were moderate level within 79.3%, 74% ($M \pm SD = 103.29 \pm 9.769$), ($M \pm SD = 106.00 \pm 9.728$) for medical and non-medical colleges students respectively. Also, the results show that there is significant difference in overall healthy lifestyle behaviors at p -value = 0.017, particularly in subdomains of physical activity and nutrition 0.037 and 0.007 for two group. Furthermore, residency area for non-medical college students demonstrated high significant.

Conclusion: The findings of current study report more than two-thirds of the sample have moderate level for healthy behaviors. Also, there is no relationship between medical college students' healthy lifestyle and their demographic characteristics. But there is a strong correlation between healthy lifestyle with their area of residency for non-medical colleges students.

Recommendation: Implementing an education program special for unmarried students or those living in rural areas to increase awareness to personal cleanliness and the need to avoid from using non-prescribed medications.

Keywords: Healthy Behaviors, University Students, Medical Students

INTRODUCTION

Health is not just the lack of sickness; instead, it is a psychological, socially, physically, and spiritually balanced state of being. A person's lifestyle choices have a substantial impact on their health since it is a dynamic continuum that is always changing and complex¹. Healthy lifestyles are actions that assist individuals in maintaining and enhancing their personal well-being. Healthy lifestyle practices include those that support individuals in living healthy as well as help people avoid disease². The most health lifestyle include maintaining a healthy diet, engaging in regular physical activity, avoiding harmful behaviors and medications, protecting oneself from accidents, recognizing physical symptoms of illness as soon as they appear, controlling feelings, emotions, and thoughts, managing stress and mental health issues, and adjusting interpersonal relationships from a social perspective³. Despite the fact that young people influence the next generation and the promotion of health in society, they are not prioritized in health promotion efforts globally since they are seen as being in a relatively healthy period of life⁴. Promoting behaviors are a significant method for lowering the illness load. Around 11 million fatalities might be prevented globally by eating a balanced diet that includes more fruit, vegetables, grains, legumes, and fish while consuming less salt, sugar, fats, and red meat. A good amount of recreational physical exercise and quitting smoking can avert around 7 million and 1 million deaths annually, respectively⁵. The study's participants were chosen for a number of reasons. First of all, young people are in a stage of life where they are most receptive. Second, they serve as excellent role

models for a healthy lifestyle in society, especially for medical students who are themselves a chord link or sling loop in the health chain⁶. The students may be vulnerable to a variety of stressful situations, such as time management difficulties, the pressure of tests and deadlines, sleep disturbances, relationships with new colleagues, and difficulty adjusting to the new environment. These elements might result in less physical activity and more junk food intake, which could influence your body weight⁷. Students in medical faculty tended to seek counsel or guidance in topics pertaining to their health, which was a significant difference from those who did not. just 16% of female non-medical students reported performing a monthly breast self-exam, compared to 21% of female medical students⁽⁴⁾. Additionally, as role models for the community, medical students must have strong knowledge, positive attitudes, and good behavior⁸. Preserving a healthy behavior can significantly impact their health. As an outcome, in lowering the high costs of healthcare and the requirement for a shift treatment to prevention-based strategy⁹. According to studies, 53% of deaths are caused by factors associated with human living. The frequency and incidence of numerous chronic illnesses, including as obesity, atherosclerosis, and coronary heart disease (CHD), have significantly increased as a result of unhealthy lifestyle choices¹⁰.

METHODS

The Study Design: The current study was a comparative study using a descriptive approach. Which conducted on undergraduate non-

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medical and medical colleges at the University of Kerbala during 26th September 2022 to 20th April, 2023.

The sampling: Sampling was performed through two phases, firstly, using a random sampling selection process for chosen seven college (Medicine, Dentistry, Nursing, Law, Education for human sciences, Pure Science, and Engineering) at University of Kerbala. Secondly, a convenience non-probability sample was used to choose 300 students (Table1).

The criteria of inclusion: The inclusion criteria were being a fourth-year student whose were available at the time of collecting information and who had no history of chronic conditions. Criteria for exclusion were the transfer and guest students.

Table 1: Student distribution in the chosen colleges

Medical Colleges			Non-Medical Colleges		
College	f	%	College	f	%
Medicine	52	34.7	Engineering	37	24.7
Nursing	55	36.8	Education for human sciences	38	25.3
Dentistry	43	28.7	Pure sciences	40	26.7
Total	150	100	Law	35	23.3
			Total	150	100

f: Frequency, %: Percentage

Data Collection tool: A self-administered questionnaire was used for data collection. It was a modified version of HPLP II developed by (Walker et al., 1987)¹¹. Which consist of two sections: The section I related to sociodemographic characteristics such as (gender, marital status, living status, monthly family income, and residency environment), and the section II was related to the behaviors of the healthy lifestyle had 48 items and included six subsets encompassing health responsibility (seven questions), physical activity (seven questions), nutritional habits (thirteen questions), psychosocial health (seven questions), coping stress (7 items) and dealing with drugs and substance (seven questions), It was scored using the Likert scale, ranging from never (1), sometimes (2), to always (3).

The Instrument Validity and Reliability: The validity of the preliminary questionnaire was obtained by a penal of fourteen experts and updated as per the suggested modifications. reliability was calculated using the Cronbach's Alpha technique, thirty seniors in Kerbala University medical (n=15) and non-medical (n=15) students completed a questionnaire and should be emphasized that these pupils did not take part in the study (r=0.80).

Statistically Analysis: The data were analyzed using SPSS, the descriptive statistics used frequency, percentage, mean, and standard deviation. As well as the Inferential statistical methods used such as independent-samples t-tests, Cronbach Alpha, and Spearman's rank correlation coefficient. Results are considered significant at (p≤ 0.05) and not significant at (p>0.05).

Ethics Approval: Permission to collect the data was obtained from the dean of each College, and all participants provide informed consent. The ethics committees of Kerbala University (1490.82) approved the study protocol.

RESULT

Table 2: Demographic Information of the Students

No.	Characteristics	Medical		Non-Medical		
		f	%	f	%	
1	Gender	Male	47	31.3	76	50.7
		Female	103	68.7	74	49.3
		Total	150	100	150	100
2	Marital status	Unmarried	132	88	116	77.3
		Married	18	12	31	20.7
		Divorced	0	0	2	1.3
		Widowed/er	0	0	1	0.7
		Total	150	100	150	100
3	Living with	Family	139	92.7	131	87.3
		Friends	1	0.7	6	4
		Relatives	2	1.3	2	1.3
		University Apartment	8	5.3	11	7.3
		Total	150	100	150	100
4	Residency	Urban	58	38.7	55	36.7
		Rural	92	61.3	95	63.3
		Total	150	100	150	100
5	Monthly income (IQD)	≤ 300000	8	5.3	31	20.7
		301000 – 600000	34	22.7	43	28.7
		601000 – 900000	33	22	37	24.7
		901000 ≤	75	50	39	26
		Total	150	100	150	100

No: Number, f: Frequency, %: Percentage

The most students in non-medical colleges are male 50.7% of, compared to students at medical colleges 68.7% of female. Regarding marital status reported 88% of medical colleges and 77.3% of non-medical colleges are still unmarried. concerning to living status, 87.3% of students in non-medical colleges and 92.7% of students in medical colleges stated that they were living with their family. According to the report, 61.3% of students at medical colleges and 63.3% of those in non-medical colleges reside in rural areas. And the monthly income, 50% of students at medical colleges reported having high monthly incomes (90,000 IQD or more), whereas the majority of students in non-medical colleges report having incomes between 301,000 and 600,000 IQD (The table 2).

Table 3: Medical and non-medical Students Responses Regarding to overall healthy lifestyle behaviors

Levels	Medical colleges				Non-Medical Colleges			
	f	%	M	SD	f	%	M	SD
Poor	4	2.7			0	0		
Moderate	116	79.3	103.29	9.769	111	74	106.00	9.728
Good	27	18			39	26		
Total	150	100			150	100		

f: Frequency, %: Percentage, M: Mean of total score, SD Standard deviation

Poor= 0 – 15, Moderate= 15.1 – 30, Good= 30.1 – 45

Table (3) shows that students in medical and non-medical colleges have moderate levels of healthy lifestyle behaviors, as noted by 79.3% of students in medical colleges (MSD=103.29 9.769) and 74% of students in non-medical colleges (MSD=106.00 9.728).

Table 4: Significant Variation Between Students at Medical Colleges and Non-Medical Colleges in Terms of Healthy Lifestyle Habits

Healthy Lifestyle Behavior	Colleges		t	df	p≤ 0.05	Sig
	M	SD				
Health responsibility	Medical	16.25 2.264	.131	298	.896	N. S
	Non-medical	16.21 2.157				
Physical activity	Medical	13.16 3.207	-2.097	298	.037	S
	Non-medical	13.89 2.838				
Nutrition	Medical	25.53 4.138	-2.717	298	.007	S
	Non-medical	26.86 4.316				
Cope with stress	Medical	14.67 2.638	-1.668	298	.096	N. S
	Non-medical	15.17 2.483				
Deal with drug	Medical	17.38 2.215	.885	298	.337	N. S
	Non-medical	17.13 2.595				
Psychological health	Medical	16.29 2.465	-1.577	298	.116	N. S
	Non-medical	16.73 2.368				
Overall	Medical	103.29 9.769	-2.410	298	.017	S
	Non-medical	106.00 9.728				

M: Mean, SD: Standard deviation, t: t-test, df: Degree of freedom, Sig: Significance, p: Probability value, N.S: Not significant, S: Significant

The table (4) demonstrates that there is a substantial difference in healthy living behaviors between medical and non-medical college students at a p-value of .017, especially in the subdomains of "physical activity" and "nutrition" with p-values of .037 and .007, respectively.

Table 5: Relationships among Medical and Non-medical Students' Healthy Lifestyle Behaviors with regard to their Demographic Variables

Variables	Medical Students (N=150)		Non-Medical Students (N=150)	
	Correlation coefficient	Significance	Correlation coefficient	Significance
Gender	.090	.271	.028	.730
Marital status	.017	.833	.069	.398
Living status	.002	.983	.065	.430
Residency	.042	.610	.160	.050*
Monthly income	.030	.715	.042	.611

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

This table shows that there is no significant relationship among medical students' health lifestyle behaviors with their demographic variables, but there is evidence of significant relationship between non-medical students' health lifestyle and their residency at p-value= .050.

DISCUSSION

The findings showed the demographic characteristics of the current research. It reveals that in the medical group, more than half of the students (68.7%) were female, while in the non-medical group,

50.7% of the students were male. This study's findings were in the same line with those of Mehdizadeh et al. (2018)¹², who noted that in the medical group and non-medical group, respectively, there were more male (58.7%) than female (58.1%). In terms of marital status, the study's findings indicate that more than three quarters of the medical and non-medical samples (88%) and (77.3), respectively, were single. This study's findings are in agreement with those of Montazeri et al. (2017)¹³, which show that (94%) of respondents were single. In my opinion, this is because many don't start thinking about marriage until after they finish their studies, since it's hard to balance work and family obligations with studying, and because there isn't enough money to support a married life. More than three quarters of students lived with their family. The findings support a study by Sok et al. (2020)¹⁴, which found that 48.4% of participants in the study sample lived with their families. According to the residency, more than half of students at medical and non-medical colleges live in rural areas. The current findings are consistent with research by Wang et al. (2013)¹⁵, which discovered that 44.56% of participants lived in rural regions. In my view, this is because students from rural regions join government colleges since their moderate monthly income is lower than that of students from urban areas, who enroll in private colleges because their economic conditions are better. About half of students at medical colleges refer to their income (901000 IQD and above), whereas a little more than a quarter of students in non-medical universities refer to their income (between 301000 and 600000 IQD). According to Alzahrani et al. (2019)¹⁶ reported more than half of students had a medium level of monthly income (Table 2). The results suggest that both groups have moderate healthy lifestyles, as stated by 79.3% of medical college students (MSD=103.29 9.769) and 74% of non-medical college students (MSD=106.00 9.728) (table 3). The findings of the current study accept with those of Dortkol & Ozdemi's, 2021¹⁷, which found that learners engaged in healthy activities at a moderate level (125.7–17.1). According to the study's findings, there are significant differences between medical and non-medical college students' overall HLBs, particularly in the subdomains of physical activity and nutrition. However, there are not significant variations between the two groups' HLBs when it comes to health responsibility, stress management, dealing with drug and substance, or psychosocial health. Table (4) shows that medical students performed worse than non-medical students. The findings support research by Mehdizadeh et al. (2018)¹² that found significant variations between medical and non-medical students with reference to subgroups of physical activity and dietary practices. In other words, compared to non-medical students, medical students had worse eating and exercise habits. Due to the easy access to harmful foods on campus that cause weight gain or mental stress, their diet is not optimal and typically comprises of inexpensive and quick meals, snacks, and hot beverages like tea and coffee. And they are unable to participate in regular exercise classes because they are too busy with their demanding practical training, which consumes a lot of their time and energy. There is no evidence of a significant relationship between the healthy behaviors of medical students and their demographic characteristics, however there is a substantial relationship between the healthy behaviors of non-medical students and their residency environment.

CONCLUSION

The outcomes of the research indicate there are HLBs of non-medical and non-medical seniors. are on a moderate level. Also, The HLBs of medical and non-medical students differ significantly overall, and especially for the subdomains of diet and physical activity. Also, non-medical colleges, there is a strong correlation between healthy lifestyle habits with their region of residence.

RECOMMENDATIONS

1. Emphasizing aspects of healthy behaviors and incorporating them into university curriculum.
2. Encouraging university presidents to provide sports facilities for both genders in order to promote the value of physical activity.
3. The Ministry of Health should implement educational campaigns to raise students' understanding of a healthy nutrition habit.

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Competing Interest: None

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