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Research Article

Health Promotion Lifestyle in University Students

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Abstract:

Background: The increased incidence of non-communicable diseases among young in Iraq emphasizes the critical need to promote healthy lifestyles in this age group. The present study aimed to assess the health promotion lifestyle among students in university of Baghdad.

Methods: The descriptive cross-sectional study took place between February 10th 2023 to August 10th 2023 was carried out in the University of Baghdad (College of Languages) academic 4th year only, the study sample included 180 students. The questionnaire used in this study consisted of two parts: the first part included demographic questions and the second part the health-promoting lifestyle profile II questionnaire**.**

Results: that overall health-promoting lifestyle is slightly more than moderate; their main score (134.038) (maximum possible score = 208). In the health-promoting lifestyle profile subscales, the participants scored the highest in spiritual growth (mean=25.366) and the lowest in nutrition (mean=19.950), with ascending scores for interpersonal relationships, stress management, health responsibility, and physical activity falling in between.

Conclusion and recommendation: Health promotion lifestyle was moderate and nutrition domain was scored lowest, Healthcare providers should pay more attention on students' university knowledge to enhance health prevention.

Keyword: Health lifestyle promotion, university students, University of Baghdad.

Introduction:

Health promoting lifestyle (HPL) is essential during college as well as in preparing for future jobs and professional roles. (1) Health promotion is as stated in the 1986 World Health Organization (WHO) Ottawa Charter for Health Promotion, the "comprising processes that can support people to manage and improve their health and enabling people to increase control over. (2) Lifestyle refers to the health-impacting ways of people's lives and it can be considered healthy or unhealthy depending on the choice of behaviors. (3, 4) A healthy lifestyle is defined as a way of life that lessens the risk of being extremely ill or dying prematurely. There are a lot of benefits to following such a lifestyle for the prevention of disease occurrence, especially for preventable diseases with modifiable risk factors. (5) A longitudinal study in the United States discovered that

respondents who stayed lower-risk lifestyles, such as not smoking, maintaining a healthy weight, engaging in adequate physical exercise, consuming moderate amounts of alcohol, and eating a balanced diet, lived longer. [6] In contrast; many studies have shown that an unhealthy diet and physical inactivity increase the risk of diabetes, osteoporosis, obesity and cardiovascular diseases. [7–9] HPL focuses on life promotion through lifestyle which consists of six aspects of "physical activity", "nutrition", "health responsibility", "spiritual growth", "interpersonal relations" and "stress management". [10] College is a critical time when students are more likely to engage in risky health behaviours known to harm their well-being, such as physical inactivity, stress, and unhealthy food choices. HPL is a significant indicator of health status and is recognized as a vital role in maintaining and improving health. [4] Iraqis still need to improve their knowledge and awareness by including health education into the school curriculum and providing scientific evidence of its usefulness in assisting pupils to adopt healthy eating and physical activity practices. [11] The aim of this research was to assess HPL in university students of Baghdad, study findings provide an idea of Iraqis students' lifestyles they become future leaders within organizations, communities, and country. Given the significance of their health, policymakers and health providers should prioritize supporting students in Iraq adoption of health-promoting behaviors by offering them community-based programs aimed at assisting them in maintaining healthy lifestyle.

Methods:

Study Design and Population:

This descriptive cross-sectional study was conducted from February 10th 2023 to August 10th 2023 at University of Baghdad in Iraq. University of Baghdad is the largest and oldest university in Iraq, located in the capital city Baghdad. To conduct this study, obtain informed consent from all subjects and approval from the ethics committee of University of Baghdad. A sample of 180 students participated in this study; they were registered at non-medical colleges included (College of Languages) academic 4th year only. Convenience sampling was used to recruit students. In addition, Krejcie and Morgan's formula [12] method was used to estimate the sample size for the present study.

Instruments measurement:

The study was conducted through using the questionnaire. A data-collecting form includes two parts:

Part I: Demographic Characteristics:

Demographic characteristics including: sex, family history for chronic diseases, Smoking and body mass index score (BMI) (kg/m2).

Part II: Health Promotion Lifestyle:

The second section of the questionnaire was the Health-Promoting Lifestyle Profile II (HPLP II) questionnaire authored by Walker et al. (13). The HPLP II tool is composed of 52 health-promoting behaviour items divided into six subscales: health responsibility (nine items), spiritual growth (nine items), physical activity (eight items), interpersonal relationships (nine items), nutrition (nine items), and stress management (eight items). The translation and cultural adaptation were conducted initially. The procedure adhered to rigorous standards that were approved by the author and was established upon the protocol recommended by Guillemin, etal. [14]

Scoring system: Each behaviour was measured using a Likert-type scale with four options: never (1), occasionally (2), frequently (3), and routinely (4). The total score of the HPLP II ranges from 52 to 208 and is calculated as the mean score of responses to all 52 HPLP items. The entire HPLP II score is further categorised into four levels: poor (52-90), moderate (91-129), good (130-168), and excellent (169-208). Higher scores on all subscales indicate more frequent health-promoting behaviours. The Cronbach's alpha for the original edition of the HPLP II was 0.94, with values ranging from 0.79 to 0.87 for each of the six subscales.

Data analysis:

SPSS 20.0 was used for statistical analysis: Descriptive data analysis was done through frequency, percentage, mean, standard deviation and independent t test.

Results:

Table (1) Sample demographic and clinical characteristics (N = 180)

Variables	Groups	F	(%)
Gender	**Male**	**88**	**48.9**
	Female	**92**	**51.1**
family history of chronic disease	**Yes**	**37**	**20.6**
	No	**143**	**79.4**
Body Mass Index	**Underweight**	**6**	**3.3**
	Ideal Weight	**151**	**83.9**
	Overweight	**23**	**12.8**
	Obese	**0**	**0**
Smoking	**Yes**	**18**	**10**
	No	**162**	**90**

F= frequency, %= percentage.

Table (1) presents the demographics and characteristics of the study participants. Of the 92 participants, 51.1% were female. Regarding to the family history of chronic disease the majority of sample 143(79.4%) was haven't family history of chronic disease. In relation to body mass index 151(83.9%) were ideal weight; concerning smoking, the most common aren't smoking which were 162(90%).

Table (2) Health Promoting Lifestyle Scores (N=180)

HPLP score and subscales	M	SD	Min.	Max.	Possible range
health responsibility	**21.900**	**4.070**	**15**	**34**	**9 – 36**
spiritual growth	**25.366**	**3.065**	**17**	**34**	**9 -36**
physical activity	**20.872**	**3.387**	**13**	**30**	**8 -32**
Nutrition	**19.950**	**2.724**	**13**	**28**	**9 – 36**
interpersonal relationships	**23.266**	**3.979**	**15**	**32**	**9 – 36**
Stress Management	**22.683**	**3.554**	**15**	**32**	**8 – 32**
Total HPLP	**134.038**	**8.764**	**116**	**161**	**52 - 208**

HPLP = Health-Promoting Lifestyle Profile, M = Mean, SD = Standard Deviation, Min = minimum, Max= Maximum.

Table (2) presents the participants' HPLP. The mean total was 134.038 (possible range 52–208). In the HPLP subscales, the participants scored the highest in spiritual growth (mean=25.366) and the lowest in nutrition (mean=19.950), with ascending scores for interpersonal relationships, stress management, health responsibility, and physical activity falling in between.

Table (3) Distribution of Health-Promoting Lifestyle Profile scores according to sex and family history (N=180).

HPLP score and subscales	Sex (M + SD)		t	P value	Family history		t	P value
	Male	Female			Yes	No		
health responsibility	21.659 4.325	22.130 3.820	0.776	0.43	20.486 3.069	22.265 4.224	2.40	0.017 *
spiritual growth	25.363 2.925	25.260 2.971	0.234	0.81	24.297 2.747	25.573 2.941	2.38	0.018 *
physical activity	20.806 3.506	20.9348 3.28769	0.253	0.80	20.810 3.323	20.888 3.415	0.123	0.902
Nutrition	20.045 2.770	19.858 2.691	0.459	0.64	20.027 2.521	19.930 2.782	0.192	0.848
interpersonal relationships	22.988 4.027	23.532 3.937	0.916	0.36	23.000 3.366	23.335 4.131	0.456	0.649
Stress Management	22.511 3.760	22.847 3.357	0.634	0.52	23.108 3.740	22.573 3.509	0.815	0.416
Total HPLP	133.488 8.478	134.565 9.043	0.823	0.41	131.729 6.760	134.636 9.137	1.81	0.072

HPLP = Health-Promoting Lifestyle Profile, M = Mean, SD = Standard Deviation, t = t test, p = p value, * = significant = p < 0.05

Table (3) showed there are significant differences found between health responsibility subscale with scores in terms of family history (P = 0.017), and spiritual growth subscale with scores in terms of family history (p= 0.018); while, there is a non-significant differences between health-promoting lifestyle profile scores and subscales with other variables analysis as done by independent t test.

Table (4) Distribution of Health-Promoting Lifestyle Profile scores according to smoking.

HPLP score and subscales	Smoking (M + SD)		*t*	P value
	Yes	No		
health responsibility	22.222 5.352	21.864 3.922	0.353	0.724
spiritual growth	26.111 3.393	25.222 2.884	1.218	0.225
physical activity	20.888 3.998	20.870 3.327	0.022	0.983
Nutrition	20.166 2.407	19.925 2.763	0.355	0.723
interpersonal relationships	23.777 4.332	23.209 3.949	0.573	0.567
Stress Management	21.777 3.473	22.784 3.559	1.140	0.256
Total HPLP	134.944 11.769	133.938 8.406	0.461	0.645

HPLP = Health-Promoting Lifestyle Profile, M = Mean, SD = Standard Deviation, t = t test, p = p value.

Table (4) reveals that there are non-significant differences of between health-promoting lifestyle profile scores and subscales with smoking variable as analysis is done by independent t test.

Table (5) Distribution of Health-Promoting Lifestyle Profile scores according to body mass index.

HPLP score and subscales	body mass index	N	Mean	Std. Deviation	F	P value
health responsibility	underweight	6	23.666	5.240	0.586	0.55
	normal weight	151	21.827	3.954		
	over weight	23	21.913	4.591		
spiritual growth	underweight	6	26.333	5.163	0.388	0.67
	normal weight	151	25.291	2.860		
	over weight	23	25.173	2.870		
physical activity	underweight	6	20.500	4.764	0.048	0.920
	normal weight	151	20.854	3.402		
	over weight	23	21.087	3.028		
Nutrition	underweight	6	18.6667	2.581	0.686	0.50
	normal weight	151	19.993	2.696		
	over weight	23	20.000	2.969		
interpersonal relationships	underweight	6	25.333	3.386	0.925	0.39
	normal weight	151	23.245	4.088		
	over weight	23	22.869	3.307		
Stress Management	underweight	6	22.500	3.885	0.027	0.97
	normal weight	151	22.668	3.539		
	over weight	23	22.826	3.725		
Total HPLP	underweight	6	137.00	17.708	0.352	0.70
	normal weight	151	133.947	8.188		
	over weight	23	133.869	9.696		

HPLP = Health-Promoting Lifestyle Profile, p = p value.

The findings of table (5) reveal there is a non-significant difference between health-promoting lifestyle profile scores and subscales with body mass index variable analysis as done by one way ANOVA.

Discussion:

This study identified the patterns of HPLP among a group of university' student and provided evidence of the differences between socio-demographics status and HPLP. When HPLP and related domains is assessed; showed that overall HPLP is slightly more than moderate; their main score (134.038) (maximum possible score = 208). The results gained supported prior studies were assess that HPLP among a group of university' student showed a moderate level of HPL among a group of university' student. [15-17] Furthermore; study in Iraq; study conducted in University of Mosul among nursing students shows the total HPLP II an moderate level (total mean score was 123.2). [18]

Regarding to related domains; the highest domain was the spiritual growth domain, followed by the interpersonal relationships domain, next the stress

management domain, followed by the health responsibility domain; than the physical activity domain and the nutrition domain, which got the lowest score (Table .2.). However, the study able recognized areas of insufficient level health lifestyle promotion domains, including the physical activity domain and the nutrition domain. With these results in together, healthcare providers can develop unique instructional program to fill health lifestyle promotion gaps in areas where they scored low. Several studies have demonstrated that university students frequently have poor dietary habits. For example, findings from both Western and Arab countries have shown that university students do not consume a healthy diet and do not engage in the required level of physical activity. [19-21] It is evident that the majority of young adults are university students; these students are subjected to a variable transitory period of new independence living, expecting to be self-sufficient, but are more likely to engage in various tasks that contribute significantly to unhealthy lives. [3, 19]

Regarding to association between HPL with demographical characteristics, both sex showed more than medium level of health-promoting lifestyle in HPLP II, without significant sex difference. Similar to this result, no significant sex difference in HPLP II total score was found in other studies conducted among university students. [16, 22, 23]

Regarding to association between HPL with other demographical characteristics; there is a non-significant difference between with other demographic. While regarding HPL subscale; there are significant differences between health responsibility and spiritual growth subscales with scores in terms of family history variable.

Engagement in healthy lifestyle behaviors is suboptimal. The vast of the student's population does not meet current recommendations. A healthy lifestyle is defined by consuming a healthy dietary pattern, engaging in regular physical activity, avoiding exposure to tobacco products, habitually attaining adequate amounts of sleep, and managing stress levels. For all these health behaviors there are well-established guidelines; however, promotion in clinical settings can be challenging. It is critical to overcome these challenges because greater promotion of heathy lifestyle practices in clinical settings effectively motivates and initiates student's behavior change.

Conclusion and recommendation:

Health lifestyle profile was moderate and nutrition domain was scored lowest. Healthcare providers should pay more attention on students' university knowledge to enhance health prevention on students' university knowledge to enhance health prevention. Students' university should enhance their ability to analyse and appraise health information, as well as their diet. Health education should concentrate on utilising peer influence to promote the health-promoting lifestyle profile of students at university.

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