Lifestyles of students from two universities in the Central-Eastern region of Peru

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ABSTRACT

The objective was to analyze the lifestyles of students from two universities in the Central Eastern Region of Peru. A descriptive, observational, cross-sectional, analytical-comparative study was carried out. The population consisted of 18.482 students selected by a probabilistic sampling, being the sample 476 university students from two universities (public and private). A lifestyle scale, previously validated and validated, was applied. Descriptive and inferential statistics were applied in the data analysis. When analyzing the type of lifestyle of the students, 63.2% (301) had a moderately healthy lifestyle, 22.9% (109) healthy and 13.9% (66) unhealthy. In the analysis by dimensions, it was found that 44.5 % (212) had a healthy lifestyle in the self-care dimension, followed by a significant proportion [78.2% (372)] of a moderately healthy lifestyle in the rest and sleep dimension, while the highest proportion [90.3% (430)] was unhealthy in the avoidance of unhealthy habits dimension. We conclude by indicating that there was a predominance of moderately healthy lifestyles.

Keywords: *health-related behaviors; lifestyles; health; college students; healthy behavior; healthy practices, healthy living.*

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RESUMEN

El objetivo fue analizar los estilos de vida de estudiantes de dos universidades de la Región Centro Oriental del Perú. Se realizó un estudio descriptivo observacional, transversal, con diseño analítico-comparativo. La población estuvo compuesta por 18 482 estudiantes seleccionados por un muestreo probabilístico, siendo la muestra 476 universitarios provenientes de dos universidades (pública y privada). Se aplicó una escala de estilos de vida, previamente validada y fiabilizada. En el análisis de datos se aplicó la estadística descriptiva e inferencial. Al analizar el tipo de estilo de vida de los estudiantes, el 63.2 % (301) tuvo un estilo de vida medianamente saludable, el 22.9% (109) saludable y el 13.9 % (66) no saludable. En el análisis por dimensiones se halló que un 44.5 % (212) tuvo un estilo de vida saludable en la dimensión autocuidado de la salud, seguido de una importante proporción [78.2% (372)] de estilo de vida medianamente saludable en la dimensión descanso y sueño, mientras que la mayor proporción [90.3% (430)] fue no saludable en la dimensión evitación de hábitos nocivos. Se concluye indicando que hubo un predominio de los estilos de vida medianamente saludables.

Palabras claves*: conductas relacionadas con la salud; estilos de vida; salud; universitarios; comportamiento saludable; prácticas saludables, vida sana. (Fuente:DeCs BIREME).*

INTRODUCTION

In recent years, society has undergone profound changes in the context of health. These changes determine lifestyles, which can be risky or protective for people's health (Bastías and Stiepovich Bertoni, 2014). Lifestyles are conceived as a set of behaviors consistent over time, which determine the health-disease process in combination with biological vulnerability, age, sex, psychophysiological reactivity and support networks (Gomez, 2018). Its dimensions are self-care of health, nutrition, physical activity, avoidance of harmful habits, interpersonal relationships, use of leisure time, self-perception of emotional state, rest and sleep.

Studies show evidence of the relationship between lifestyles in young populations and non-communicable diseases (Teresa Varela-Arévalo *et al*., n. d.). Among the unhealthy and modifiable habits that most frequently affect lifestyles, the following are identified: stress, smoking, alcoholism, sedentary lifestyles and consumption of unhealthy foods. Physical activity is a well-valued topic, but little put into practice (Gómez-Acosta, 2018). Physical inactivity increases the risk of many adverse health conditions, including major non-communicable diseases such as coronary heart disease, type 2 diabetes, and breast and colon cancers, and shortens life expectancy. Because so much of the world's population is inactive, this link presents a major public health problem (Lee *et al*., 2012).

As pointed out by Gallardo-Escudero *et al*. (2015), the university stage marks the beginning of a critical transitional period in which a series of emotional, physiological and environmental changes occur that determine lifestyles that in many cases will be maintained throughout life and will have an impact on the state of health. Lifestyles that will tend to remain until adulthood are consolidated (Teresa Varela-Arévalo *et al*., n. d.); that is why at this stage it is important to promote healthy and sustainable lifestyles, seeking the lowest cost and greatest individual benefit (Ferrer-Lues *et al*., 2021).

University students are also a risk group, so universities are the ideal center for health promotion and disease prevention among the members of their community. Therefore, it is aspired to assume a comprehensive formative commitment to them (Ruiz-Aquino *et al.,* 2021). In this context, universities, as part of their social responsibility, have to promote healthy and sustainable lifestyles.

Olesova *et al*. (2019) identified the impact of the university educational environment in promoting awareness of healthy lifestyle components (Jalloun and Surrati, 2020). In the study by Sherlinblessy *et al*. (2020), they found that all health behaviors exhibited independent associations with lifestyle practices, as they found that frequent consumption of vegetables and fruits, family breakfast and dinner, and regular physical activity were positively associated with good levels of lifestyle practices and body mass index (BMI), whereas frequent consumption of junk food, poor sleep quality, as well as overweight and obesity, were negatively associated with lifestyle practices and BMI.

In the context of the above reflection, the objective of this study is to analyze the lifestyles of students from two universities in the Central-Eastern region of Peru.

METHODS

Design and study area

The research was quantitative, descriptive, observational, and cross-sectional, with a comparative-analytic design. The study was carried out at the Universidad de Huánuco (UDH) and the Universidad Nacional Hermilio Valdizán (UNHEVAL), private and public, respectively. Both universities are located in the city of Huánuco, Peru.

Population and sample

The population consisted of 9671 UDH students and 8811 UNHEVAL university students. The sample consisted of 237 university students from UDH and 239 from UNHEVAL, from the first to the fifth cycle, selected by probability sampling by strata. The sample was calculated using an expected proportion of 50%, a confidence level of 95% and a precision level of 5%. The sample included university students with regular attendance to academic classes and those who, in addition, agreed to sign the informed consent form voluntarily.

Measurement techniques and instruments

A face-to-face survey technique was applied and the instrument was the lifestyle scale, which was previously self-elaborated in a psychometric study. The scale had 58 items that were dimensioned in self-care of health, nutrition, physical activity, avoidance of harmful habits, interpersonal relationships, use of free time, self-perception of emotional state, rest and sleep. It was considered on a 5-point Likert scale: always = 5 points, almost always = 4 points, sometimes = 3 points, almost never = 2 points, never = 1 point. The type of lifestyle was categorized as: healthy, moderately healthy and unhealthy.

The lifestyle scale was subjected to a qualitative validation of content through a review of the existing literature on lifestyles in university students and the review of 10 judges and experts in the subject of the study. The quantitative validation was carried out through two reliability analyses using Cronbach's alpha; likewise, the Kaiser-Meyer-Olkin measures and subsequent exploratory factor analysis were applied. Data collection was conducted during the last quarter of 2019. In addition, data were collected on the sociodemographic characteristics of the sample under study.

Data analysis

After data collection, they were entered into a database created in Microsoft Excel 2010. In the descriptive analysis, the absolute and relative frequencies of the categorical variables were calculated, while the measures of central tenure were used for the numerical variables. The chi-square test and Spearman's rho were used in the inferential analysis. The statistical significance value was considered to be $p < 0.05$; supported by PASW V15.0.

Ethical Aspects

The study was approved by the Research Ethics Committee of the Universidad de Huánuco. Likewise, data collection and information gathering were carried out following ethical standards to guarantee confidentiality, benefits and minimal risk for the participants. The study subjects were informed about the purpose and objectives of the research, about their voluntary participation and that they could leave the study at any time. Before recruitment for the study, written informed consent was obtained from each study subject.

RESULTS

When analyzing the demographic characteristics of the sample under study, it was found that both universities were dominated by young adults between 18 and 29 years of age [91.1% (216) at UDH; 93.3% (223) at UNHEVAL]. About gender, 58.2% (138) at UDH belonged to the male gender, compared to 56.9% (136) of females at UNHEVAL. In the social aspect, it was found that the marital status was mostly single [88.6% (210), UDH; 97.9% (234), UNHEVAL]. Regarding work parallel to their studies, 46.4% (110) of UDH students do so, compared to 27.6% (66) at UNHEVAL. Regarding whether they profess any religion, both universities do so around the same

proportion [68.4% (162), UDH; 64.0% (153), UNHEVAL]. Regarding the person with whom they currently live, about 62% (147) of the university students live with their parents. A significant proportion had no health problems [90.7% (215), UDH; 90.4% (216), UNHEVAL]. It was found that the highest proportion of students was from social science careers [40.9% (97) from private universities; 33.9% (81) from public universities]. Likewise, regarding the years of study, 33.8% (80) of the private university were in their fifth year, compared to 34.7% (83) of the public university (Table 1).

Table 1. Sociodemographic characteristics of students at two universities in the Central Eastern Region of Peru, 2019.

Demographic characteristics	n = 476			
	Private University (UDH)		Public University (UNHEVAL)	
	fi	%	fi	%
Age groups				
Teenagers (16-17)	3	1.3	11	4.6
Young adults (18-29)	216	91.1	223	93.3
Medium adult (30-39)	17	7.2	5	2.1
Mature adult (40-43)	1	0.4	0	0.0
Genre				
Male	138	58.2	103	43.1
Female	99	41.8	136	56.9
Social characteristics				
Marital status				
Single	210	88.6	234	97.9
Cohabitant	16	6.8	5	2.1
Married	8	3.4	0	0.0
Divorced	3	1.3	0	0.0
Parallel work to the study				
Yes	110	46.4	66	27.6
No	127	53.6	173	72.4
Religious affiliation				
Yes	162	68.4	153	64.0
No	75	31.6	86	36.0
Type of religion				
Catholic	102	43.0	87	36.4
Evangelical	56	23.6	55	23.0
Jehovah's Witness	5	2.1	6	2.5
Mormon	2	0.8	0	0.0
Jewish	1	0.4	6	2.5
Buddhist	0	0.0	1	0.4

Person with whom you currently live				
With my parents	147	62.0	148	61.9
With my relatives or family members	23	9.7	17	7.1
Alone	52	21.9	66	27.6
I share with colleagues/friends	2	0.8	2	0.8
Other	13	5.5	6	2.5
Health problem				
Yes	22	9.3	23	9.6
No	215	90.7	216	90.4
Academic characteristics				
Careers by science				
Health Sciences	48	20.3	52	21.8
Engineering Sciences	85	35.9	68	28.5
Education Sciences	7	3.0	38	15.9
Social Sciences	97	40.9	81	33.9
Years of study				
First cycle	11	4.6	9	3.8
Second cycle	36	15.2	83	34.7
Third cycle	53	22.4	52	21.8
Fourth cycle	57	24.1	56	23.4
Fifth cycle	80	33.8	39	16.3

When analyzing lifestyles at the level of physical health, it was found that in the self-care dimension of the study sample, 52.9% (252) always used the angle of the elbow when sneezing or coughing; 39.1% (186) frequently washed their hands with soap for at least 20 seconds; 58.4% (278) sometimes went to a health facility (post, hospital, clinic) when sick; while 58.6% (279) never had annual blood tests (hemoglobin, cholesterol and triglycerides). In the food dimension, 48.3 % (230) always consumed the three main meals of the day (breakfast, lunch and dinner); 50.4 % (240) frequently consumed fish and chicken, rather than red meat; 57.1 % (272) sometimes consumed snacks or food between main meals, and 16.8 % (80) never read the labels of industrialized foods to identify nutrients (artificial and/or natural, cholesterol, sodium or salt, preservatives, colorants, emulsifiers, etc.). In the physical activity dimension, 19.7% (94) always practiced sports for at least 30 minutes; in 29.4% (140), the physical activity they frequently performed was related to the fulfillment of household chores and 12.6% (60) never practiced sports such as volleyball, soccer, basketball, jogging, running, swimming, gymnastics, walking, etc. Regarding the avoidance of harmful habits, a minimum percentage [4.4% (21)] avoids smoking and frequent alcohol consumption; 32.4% (154) sometimes avoid consuming energy drinks (Redbull, Burn, Monster Energy); while a high proportion [93.5% (445)] never self-controlled the excessive use of information and communication technologies (Table 2).

Table 2. Description of lifestyle dimensions in the physical health of students from two universities in the Central Eastern Region of Peru, 2019.

Self-care of the health	n = 476							
	Always		Often		Sometimes		Never	
	fi	%	fi	%	fi	%	fi	%
Avoid going to places with crowds of people	220	46.2	159	33.4	81	17.0	16	3.4
Disinfect your hands with alcohol gel	145	30.5	178	37.4	129	27.1	24	5.0
Avoid conventional greetings (hug, kiss, shake hands).	214	45.0	150	31.5	94	19.7	18	3.8
Washes hands with soap for at least 20 seconds	190	39.9	186	39.1	92	19.3	8	1.7
Avoid touching your face	137	28.8	163	34.2	160	33.6	16	3.4
Use the angle of the elbow when sneezing or coughing.	252	52.9	147	30.9	69	14.5	8	1.7
Use sunscreen during the day	27	5.7	75	15.8	189	39.7	185	38.9
Annual blood tests are performed (hemoglobin, cholesterol and triglycerides).	20	4.2	37	7.8	140	29.4	279	58.6
Take into account safety signs (no smoking, danger, forum, etc.).	258	54.2	134	28.2	73	15.3	11	2.3
Use a tissue when sneezing or coughing.	110	23.1	150	31.5	134	28.2	82	17.2
Obey traffic regulations, whether you are a pedestrian or a driver.	226	47.5	167	35.1	74	15.5	9	1.9
Watches your body closely for physical changes	63	13.2	146	30.7	215	45.2	52	10.9
Wear seat belts as a driver or a passenger	117	24.6	147	30.9	175	36.8	37	7.8
Go to a health facility (health post, hospital, clinic) when ill	42	8.8	69	14.5	278	58.4	87	18.3
Avoid self-medication	140	29.4	161	33.8	138	29.0	37	7.8
Feeding	**Always**		**Often**		**Sometimes**		**Never**	
	fi	**%**	**fi**	**%**	**fi**	**%**	**fi**	**%**
Consume vegetable stews	89	18.7	226	47.5	158	33.2	3	0.6
Consume fruits	105	22.1	215	45.2	154	32.4	2	0.4
Consumes tubers	118	24.8	236	49.6	116	24.4	6	1.3
Egg consumption	114	23.9	219	46.0	138	29.0	5	1.1
Consume cereals	72	15.1	191	40.1	192	40.3	21	4.4
Consume vegetables	122	25.6	210	44.1	141	29.6	3	0.6
Consume dairy products	72	15.1	167	35.1	223	46.8	14	2.9
Consume snacks or food between main meals	60	12.6	116	24.4	272	57.1	28	5.9
Read labels on industrialized foods to identify nutrients (artificial and/or natural,	45	9.5	116	24.4	235	49.4	80	16.8

cholesterol, sodium or salt, preservatives, colorings, emulsifiers, etc.).								
Eat at regular times	97	20.4	195	41.0	173	36.3	11	2.3
Consume more fish and chicken than red meat.	95	20.0	240	50.4	135	28.4	6	1.3
Eat the three main meals of the day (breakfast, lunch and dinner).	230	48.3	192	40.3	53	11.1	1	0.2
Consume 8 to more glasses of water	62	13.0	160	33.6	218	45.8	36	7.6

Physical activity	**Always**		**Often**		**Sometimes**		**Never**	
	fi	**%**	**fi**	**%**	**fi**	**%**	**fi**	**%**
Practice sports for at least 30 minutes.	94	19.7	129	27.1	194	40.8	59	12.4
The sports she plays are volleyball, soccer, basketball, jogging, running, swimming, gymnastics, walking, etc.).	75	15.8	129	27.1	212	44.5	60	12.6
The physical activity she performs is related to the fulfillment of household chores.	60	12.6	140	29.4	239	50.2	37	7.8

Avoidance of harmful habits	**Always**		**Often**		**Sometimes**		**Never**	
	fi	**%**	**fi**	**%**	**fi**	**%**	**fi**	**%**
Avoid smoking and alcohol consumption	0	0.0	21	4.4	95	20.0	360	75.6
Self-controls the excessive use of information and communication technologies.	4	0.8	1	0.2	26	5.5	445	93.5
Avoid consuming energy drinks such as Redbull, Burn, Monster Energy.	5	1.1	26	5.5	154	32.4	291	61.1

When analyzing lifestyles at the level of mental health, it was found that 39.5% (188) frequently maintained good relationships with their family or partner; 50.2% (239) frequently maintained good relationships with their classmates; 37.4% (178) sometimes felt good when they were in a group; while 2.3% (11) never felt happy with the activities they carried out. Similarly, a significant proportion [41.8% (199)] always respected the opinion of others; 47.1% (224) frequently expressed their opinions adequately, and 42.2% (201) adequately expressed their disagreement. In the dimension use of free time, 29.8% (142) always did some activity they liked (dancing, drawing, music, painting, etc.); 48.7% (232) frequently surfed the Internet (not chats) for information; 51.3% (244) sometimes spent a good deal of time chatting. In the dimension of perception of emotional state, 29.4 % (140) always felt satisfied with their physical condition; 50.2 % (239) frequently felt cheerful and; 26.9 % (128) sometimes felt optimistic or hopeful. Finally, in the rest and sleep dimension, 52.9% (252) sometimes took naps of a maximum of 30 minutes a day; 32.4% (154) frequently slept at least 7 hours a day (Table 3).

Table 3. Description of lifestyle on the mental health of students from two universities in the Central Eastern Region of Peru, 2019.

Interpersonal relationships	n = 476							
	Always		Often		Sometimes		Never	
	fi	%	fi	%	fi	%	fi	%
Maintains good relationships with family or partner	188	39.5	198	41.6	86	18.1	4	0.8
Maintains good relationships with classmates	124	26.1	239	50.2	107	22.5	6	1.3
Feels happy with the activities he/she performs	121	25.4	228	47.9	116	24.4	11	2.3
Feels capable of handling difficult situations that arise in your life	149	31.3	205	43.1	114	23.9	8	1.7
Feels good when in a group	105	22.1	182	38.2	178	37.4	11	2.3
Expresses affection to people close to him/her through words or physical contact	141	29.6	147	30.9	188	39.5	0	0.0
Expresses disagreement appropriately	76	16.0	199	41.8	201	42.2	0	0.0
Expresses opinions appropriately	101	21.2	224	47.1	151	31.7	0	0.0
Accepts expressions of affection from others	142	29.8	183	38.4	151	31.7	0	0.0
Respects the opinion of others	199	41.8	198	41.6	79	16.6	0	0.0
Use of free time	**Always**		**Often**		**Sometimes**		**Never**	
	fi	**%**	**fi**	**%**	**fi**	**%**	**fi**	**%**
Spends a lot of time chatting	50	10.5	130	27.3	244	51.3	52	10.9
Spends part of his/her free time visiting friends, going for walks, hiking or doing other recreational activities.	55	11.6	131	27.5	233	48.9	57	12.0
Spends free time on virtual games, internet, video games, movies, series.	99	20.8	198	41.6	172	36.1	7	1.5
Surfs the Internet (not chats) for information.	100	21.0	232	48.7	134	28.2	10	2.1
Allocates part of your free time to work activities.	65	13.7	175	36.8	198	41.6	38	8.0
Do some activity of your liking (dancing, drawing, music, painting, etc.).	142	29.8	208	43.7	122	25.6	4	0.8
Do free time activities with your family	67	14.1	159	33.4	229	48.1	21	4.4
Performs household chores	139	29.2	210	44.1	122	25.6	5	1.1
Spends part of his/her free time on academic activities	60	12.6	224	47.1	178	37.4	14	2.9
Self-perception of emotional state	**Always**		**Often**		**Sometimes**		**Never**	
	fi	**%**	**fi**	**%**	**fi**	**%**	**fi**	**%**
Feeling cheerful	105	22.1	239	50.2	124	26.1	8	1.7
Feeling optimistic or hopeful	121	25.4	215	45.2	128	26.9	12	2.5
Feeling satisfied with your physical condition	140	29.4	144	30.3	151	31.7	41	8.6

Rest and sleep	Always		Often		Sometimes		Never	
	fi	%	fi	%	fi	%	fi	%
Take naps of maximum 30 minutes a day	48	10.1	113	23.7	252	52.9	63	13.2
Sleep at least 7 hours a day	62	13.0	154	32.4	231	48.5	29	6.1

When analyzing the lifestyle dimensions of the study sample as a whole, 44.5% (212) had a healthy lifestyle in the self-care dimension; a higher proportion [90.3% (430)] had a healthy lifestyle in the avoidance of harmful habits dimension. In mental health, the interpersonal relations dimension was moderately healthy, followed by a significant proportion [78.2 % (372)] of moderately healthy lifestyle in the rest and sleep dimension (Table 4).

Table 4. Situational status of the lifestyles of students at two universities in the Central Eastern Region of Peru, 2019.

Dimensions	n = 476					
	Healthy		Moderately healthy		Unhealthy	
	fi	%	fi	%	fi	%
Physical health						
Self-care	212	44.5	236	49.6	28	5.9
Eating	84	17.6	281	59.0	111	23.3
Avoidance of harmful habits	7	1.5	39	8.2	430	90.3
Physical activity	91	19.1	310	65.1	75	15.8
Mental health						
Interpersonal relationships	188	39.5	190	39.9	98	20.6
Use of free time	105	22.1	362	76.1	9	1.9
Self-perception of emotional state	165	34.7	294	61.8	17	3.6
Rest and sleep	52	10.9	372	78.2	52	10.9

When analyzing the average of the students' lifestyles, it was found that the minimum and maximum scores at the UDH were 98 and 205. respectively, with an average of around 159 points (SD = 20.76); while at UNHEVAL the minimum score was 92 points and the maximum was 214 points, with an average of around 155 points and a standard deviation of 21.37. When analyzing in general terms the type of lifestyle of the students, it was found that 63.2% (301) had a moderately healthy lifestyle; 22.9% (109) were healthy, and 13.9% (66) were unhealthy.

At the inferential level, when analyzing the medians of lifestyle according to the university of origin of the university students, it was found that 31.7% (151) of the UNHEVAL students had a moderately healthy lifestyle. When analyzing the type of lifestyle according to the university of origin, area of study, study cycle and age group, no statistical significance was found between these variables (Table 5).

Table 5. Comparison of lifestyle according to academic variables in university students of two universities of Central Eastern Peru- 2019.

	n = 476							
University of origin	**Lifestyle**						**X²**	**p-value**
	Healthy		Moderately healthy		Unhealthy			
	fi	**%**	**fi**	**%**	**fi**	**%**		
Private University (UDH)	60	25.3	150	63.3	27	11.4	3.287	0.193
Public University (UNHEVAL)	49	20.5	151	63.2	39	16.3		
Area of study	**Lifestyle**						**X²**	**p-value**
	Healthy		Moderately healthy		Unhealthy			
	fi	**%**	**fi**	**%**	**fi**	**%**		
Health Sciences	26	5.5	60	12.6	14	2.9	2.340	0.886
Engineering Sciences	37	7.8	95	20.0	21	4.4		
Educational Sciences	7	1.5	32	6.7	6	1.3		
Social Sciences	39	8.2	114	23.9	25	5.3		
Cycle of studies	**Lifestyle**						**Rho**	**p-value**
	Healthy		Moderately healthy		Unhealthy			
	fi	**%**	**fi**	**%**	**fi**	**%**		
First year	8	1.7	8	1.7	4	0.8	0.010	0.829
Second year	23	4.8	77	16.2	19	4.0		
Third year	25	5.3	65	13.7	15	3.2		
Fourth year	31	6.5	71	14.9	11	2.3		
Fifth year	22	4.6	80	16.8	17	3.6		
Age group	**Lifestyle**						**X²**	**p-value**
	Healthy		Moderately healthy		Unhealthy			
	fi	**%**	**fi**	**%**	**fi**	**%**		
Adolescent (16-17)	3	0.6	11	2.3	0	0.0	5.107	0.530
Young adults (18-29)	101	21.2	273	57.4	65	13.7		
Middle adult (30-39)	5	1.1	16	3.4	1	0.2		
Mature adult (40-43)	0	0.0	1	0.2	0	0.0		

7.- DISCUSSION

In the study, it was found that the type of lifestyle of the university students was in greater proportion moderately healthy, followed by an important proportion with a healthy lifestyle; in addition, in physical health, self-care was the healthiest, while in mental health it was the interpersonal relations dimension. Only a smaller proportion had an unhealthy lifestyle, with the most predominant in physical health being the avoidance of harmful habits dimension, while in mental health it was, to a lesser extent, the rest and sleep dimension.

Lifestyle is based on the Lalonde model of health, which explains four elements: human biology, the environment, lifestyles and the organization of health services. Lifestyles consist of the range of decisions that the individual makes and that affect him or her, over which he or she has greater or lesser control (11).

Young people are considered a relatively healthy population group (Escobar & Pico, 2013), which is why universities play a leading role in the society in which they are inserted. Oriented to leadership and knowledge development, they are the scenario for technical and professional training of community members and, through education, research and dissemination of knowledge, they guide and support changes in various national and international spaces. Castro (Castro Cuesta *et al.,* 2014) indicates that the university does not play the role that it could play in terms of promoting healthy lifestyles and abandoning styles that are harmful to health.

In this sense, it is clear that, during the university stage, numerous factors interfere in the adoption of a healthy lifestyle, due to the abandonment of the family home, interaction with people from different places of origin, change in nutritional habits, absence of physical activity, overload of academic and social activities, and poor sleep and rest patterns (Suescún-Carrero *et al*., 2017). Similar results were found by Lara *et al*. (2018) who found that in the group of students analyzed a good lifestyle predominates, followed by regular excellent, and few have a lifestyle considered bad. For their part, Muñoz and Uribe (Muñoz & Uribe, 2013) evidenced the prevalence of a healthy lifestyle, with discrepancies between practices and beliefs.

Ruiz-Aquino and Diaz (2019) generally found that the lifestyle patterns of the sample under study expressed 67.6 % (213) had healthy patterns, compared to 32.4 % (102) who evidenced unhealthy lifestyles. Becerra (2016) found that the majority of students in their first years of study present healthy behaviors.

Contrary to these results, Sánchez and De Luna (2015) explain that young university students have a high presence of favorable beliefs about healthy lifestyle habits and, despite this, they generally do not put them into practice, do not have good eating habits and consume unbalanced diets with high caloric content. Furthermore, the practice of physical exercise is null, even though they know that a good diet and exercise have beneficial effects on health. To this must be added the high consumption of alcohol, tobacco and marijuana among young university students.

Ramos et al. (2017) found unhealthy lifestyles, attitudes and practices in educational environments. Also, Cedillo-Ramírez *et al*. (2016) found that most university students in Health Sciences do not apply their knowledge to their lifestyles (diet, physical activity and other practices). Gallardo *et al*. (2015) found that alcohol consumption is higher in the older age group and, with preference, they drink beer or wine; however, the younger group shows a consumption pattern focused on weekends, with distilled beverages being the preferred beverages consumed. One-third of the population smokes, with an increase in the number of cigarettes as age increases. There is a positive correlation between tobacco and alcohol. 88.9% of the younger age group and 52.7% of the older age group have sedentary-light physical activity.

Suescún-Carrero *et al*. (2017) found that 61.5 % of respiratory therapy students at the University of Boyacá do not have a healthy lifestyle. Cunningham *et al*. (2021) also found that final-year medical students in the UK are still unaware of physical activity guidelines. Furthermore, there is a demand among this cohort for more training in lifestyle medicine which, in turn, may be an effective way to improve physical activity knowledge. Zarceño *et al*. (2015) found that three out of four university students surveyed considered that a healthy lifestyle requires physical activity; however, almost half of the female university students admit to not engaging in any type of physical activity or sport in their spare time.

Castelao-Naval *et al*. (2019) indicate that university students present an unhealthy lifestyle, mainly due to eating habits far from the recommendations. More than 17% are at risk of developing an eating disorder. This information may be of interest to developing preventive actions. Some studies on the lifestyles of university students have shown the existence of unhealthy lifestyles, suggesting that, during the university stage, students abandon healthy habits and acquire unhealthy ones. There is no doubt that certain types of behaviors such as smoking, unhealthy diet, sedentary life or excessive alcohol consumption, could alone contribute to increased morbidity and even mortality (Cecilia *et al*., 2018).

Finally, it is concluded that there was a predominance of moderately healthy lifestyles in the sample of university students who participated in the study. The limitations of the present study were framed in the availability of time of the students to answer the questions of the self-report scale, which could have generated response bias given that it appealed to the sincerity and good memory of the participants. To improve this, the data were collected anonymously and the deadline for data collection had to be extended. The lifestyle typologies found will allow the university to carry out targeted interventions that consider the characteristics of different types of young people, achieving better results and optimizing available resources.

It is suggested to develop qualitative studies that delve deeper into these aspects of the lifestyles of university students; likewise, at the university level, it is necessary to incorporate the teaching of lifestyle medicine in the curriculum of the academic study programs of all universities. It should be included in health promotion plans in their various intervention scenarios.

At the level of the health sector, it is relevant to establish and implement public policies aimed at promoting healthy lifestyle habits in the university context and within the framework of the healthy universities model; promoting knowledge, skills and abilities for self-care and the implementation of healthy lifestyles. In any case, the university, as a work center and entity linked to knowledge, is the ideal institution for the promotion of health (Martínez-Sánchez & Balaguer, 2016).

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