The Lifestyles of Students from the Bachelor’s Degree in Health Education

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Abstract

Aim: To determine the physical activity, eating and sleeping lifestyles in undergraduate students.

Method: It was an exploratory, transversal and non-experimental research and it was developed in University Center UAEM Nezahualcoyotl of the UAEM of the Autonomous University of the State of Mexico. There were 200 students who voluntarily participated giving their informed consent. The participants filled out themselves the “Lifestyles Questionnaire for Young University Students” (CEVUC-R by its Spanish abbreviation of “Cuestionario de estilos de vida en jóvenes universitarios”). It was carried out in the period between July and August 2017.

Results: 60% answered that “never or rarely do any sport justifying that it is "out of laziness" (58%), “lack of time” (18%) this group of people argumented that "it involved a lot of effort getting tired easily" (12%). Most days 25% of the participants eat fast food. In relation to their sleeping habits 15.61% answered that “no day has a particular time to go to bed” arguing that it is because of extreme school work or different responsibilities.

Conclusion: It is necessary to strengthen the actions so that all the students introject the acquired knowledge.

Keywords: Lifestyles; Health education

Introduction

The population’s health is influenced by a series of factors. In 1974 they were classified in: human biology, health systems organizations, environment and lifestyles [1]. The current biopsychosocial health model reflects that the interrelation of these factors determines either the community’s health or disease [2]. According to the World Health Organization, it is the family support, which becomes the space where lifestyles are designed and turned into life’s skills every day encouraging adaptive and positive behavior to address effectively the life’s demands and challenges [3].

Since the Latin-American perspective, efforts have been made to have a social understanding of health [4] where different forms and rankings are identified of the determination of health and disease processes understanding the human dialectic and the genesis of inequalities and inequities. This posture considers as analysis category the lifestyles, the production and reproduction processes, the deterioration and wear, as well as the levels of process of health-disease in the singular and general; locating the subsumed subjects in the modes and conditions of life imposed by a social whole [5].

Given the recognition of the limitations of medical-care interventions aimed to individual risks of getting sick, the concept of social determinants had a strong rise about twenty years ago. That non-social sight does not consider the relation of society in the appearance of diseases. The social determinants have a socio individual nature, such as the health practices, the capacity and the aptitudes to the person’s adaptation, as well as those derived from the same society’s structure, identifying themselves with poverty, education, work, genre, socioeconomic status. In this way, the social determinants for health represent both the social context and the processes where the social conditions are translated into consequences for health [6]. There are the key aspects of life, the people’s working circumstances and their lifestyles that largely explain the difference in many health indicators. These turn into predictive factors in the adoption of lifestyles which promote health among population [7]. The lifestyles turn into the “the way of living that a person or group adopts, the way of using their free time, the consumption, the eating costumes, the hygiene habits” [8]; which are composed by their common reactions and by the behavior patterns that the individual have developed during his socialization processes, characterizing the general way of living of an individual or group” [9-11].

These patterns are learned from parents, siblings, friends and classmates; as well as by the influence that is received in the school, the media, social networks, etc. and they are interpreted being permanently exposed to various social situations and being linked to modifications.”
It is the social context, it is the location where a bigger complexity is presented, and it is the mediator and moderator between the behavior and the environment in the determination of the population’s health. Likewise, there are the psychological factors such as behavior, which is a necessary link in the chain that causes most of the environmental and genetically determinants having consequent effects in health [12]. There have been different investigators who have reported the influence of lifestyles as protective factors either as risk factors for the existence of the health status or the presence of the disease in the population [13-17]. Furthermore, significant associations have been found in the lifestyle of the health promoter, with the different psychosocial variables such as: perception in the context’s problems, satisfaction concerning different aspects of life, affective support and trust; self-esteem and self-efficacy. It was found that the last two mentioned elements have a strong relation and have been lifestyles’ predictors [18-20]. These backgrounds allow us to assert the need of studying lifestyles with a multidimensional look considering the social, cultural and psychosocial elements.

In Mexico, within the framework of current public policies in health, it has been considered to strengthen the preventive actions of the disease [21]. In parallel, in education policies this vision is being resumed and in the university classrooms of the State of Mexico human resources are being trained, as it is the case of the educative offer of the Degree in Health Education, which raises lifestyles as the object of study and in its graduating profile, it is stated that graduates must transmit knowledge that improves the biopsychosocial welfare of individuals and families [22].

In the university context, it is assumed that when a student changes his status to graduate, he has the competences of his profession and with the necessary life skills to fulfill his working and social role. It is assumed that the now professional only because of the fact of having attended at least four years the university classrooms, has taken over what has been learned and it is expected that he develops a behavior based on the introjected knowledge; however, it has been identified that even in these classrooms, there are students who present the same society’s diseases in general, such as the addiction to cigarette, alcohol, obesity and unplanned pregnancies [23-27]. It is also recognized that in this time, a series of social and academic pressures and demands have been exposed which contribute to mold their lifestyles. This population group, once graduated from the educative institutions, shall be added to the society with a double role: as a member of a family and as professional.

In the case of the students of the degree in Health Education and according to the graduating competences presented in the curriculum, they are the future professionals who in their labor compliance and considering unhealthy lifestyles as an object of study must work around them to raise awareness and make individuals healthy [28]. Prior to graduate, students must empower themselves with the acquired knowledge in the classrooms and introject it, demonstrating in every moment that they do have healthy lifestyles; however, with eleven generations of students in classrooms (and 7 generations of graduates) the lifestyles presented by these future professionals are unknown. Knowing the lifestyles of this group increases the interest to investigate, considering the influence they have when talking about health professionals, specifically in preventive actions, not only in the impact on their own health [29], but also because of the professional role that is achieved in society, especially when the need of the interventions in health education is recognized above interventions [30]; in this way, it is expected a certain coherency between what they teach and their healthy behavior. Therefore, it is proposed as an objective to determine some of the student’s lifestyles from the degree in Health Education taught by of the Autonomous University of the State of Mexico.

Material and Methods

It was a descriptive, exploratory, transversal and non-experimental study. It was developed at University Center UAEM Nezahualcóyotl of the Autonomous University of the State of Mexico located in the eastern area of the entity.

Participants

The population that was considered was all the enrolled students (238) to the program of the Degree in Health Education. These students belonged to the eight groups from the four levels which are taught in two schedules (morning and afternoon). Those students who didn’t sign their informed consent, who didn’t want to participate or who didn’t attend the Campus in the application period of the instrument were not included, leaving a total of 197 participants.

Ethical aspects

In the investigation, the provisions established in Helsinki’s declarations were compiled where the principle to respect the right of the individual to his self-determination and to give assent to decisions about participation in research, is recognized. Additionally in Mexico, the General Health Law (General Law of Health) states that the consent of the subject whom the research will be done must be obtained and derived from this, there is also the Regulation of the General Health Law in Research (General Law of Health), where it is stated that the informed consent must be formulated by hand. In this way and in compliance with the above, the informed consent from all participants was obtained.

Instrument

The “Lifestyles Questionnaire for Young University Students” (CEVJU-R by its Spanish abbreviation of “Lifestyle questionnaire for university students”) from Salazar et al. [31] was used and for this matter a previous authorization from the authors was given. The instrument evaluates 9 dimensions (physical activity, leisure time, eating, alcohol, cigarette and illegal drugs consumption, sleeping, interpersonal relationships, coping and emotional state) but to the present
study only the items about physical activity, eating and sleeping were considered. The items have three different options to answer: scale Likert, multiple choice and single answer.

Collection process

The period of application of the information was carried out during the months of August and September 2017. The instrument was captured and the free tool available from Google Driver was used to apply the remote questionnaire, which was filled out by the participants in a computing lab in different schedules. Those who gave their informed consent and joined the investigation, were explained the purpose and way of filling which did not allow them to go to the next page or finish the filling process, if they were missing any of the questions.

Information Interpretation Procedure

The information obtained was processed in the informatics statistical program "Statistical Package for the Social Sciences" (SPSS) which allowed obtaining the results with measures of central tendency.

The results were grouped considering the three defined categories (physical activity, eating and sleeping).

In them, the question formulated is presented, relating them to the numerical results obtained. An analysis of the trends was made and compared with the information previously recovered as investigations and theoretical contributions (secondary sources) identifying similarities and differences.

Results

The participating population was composed of 78.05% women and 21.95% men, this is a characteristic of the degree, whose members are mostly women. The age range was between 18 and 21 years old.

Physical activity

On physical activation, they were asked if they perform any exercise or body practice for at least 30 minutes three times a week, 18% answered “never”, 43% rarely, 24% frequently and 15% always. Those who answered that they did not perform physical activity were justified saying that it was "out of laziness" (58%), "lack of time" (18%) and "it involved a lot of effort getting tired easily" (12%) “Others” (11%) (Table 1).

Those who answered that they did physical activity (79%), the reasons were "to benefit their health or is part of the lifestyle of their parents or siblings" (Table 1).

On their physical activity and exercise practices 28% said they were "satisfied and did not think they were problematic"; 25% affirmed that "they could change them but that they did not know if it would do it and 24%" they had already made some changes, still lacking to obtain achievements". Others affirmed (14%) that "they were satisfied with the changes and thought to keep them".

Table 1 Frequency of physical activity.

| Frequency | Reasons not to do physical activity |
|-----------|-------------------------------------|
| 18%       | Never                              |
| 43%       | Rarely                             |
| 24%       | Frequently                         |
| 15%       | Always                             |

Reasons not to do physical activity

58% For laziness
18% Lack of time
12% It involved a lot of effort easily getting tired
11% Others

Reasons for doing physical activity

79% Benefit your health or is part of the lifestyle of your parents or siblings

Opinion about physical activity

28% Satisfied and I did not think they were problematic
25% They could change them but I did not know if I would
24% They had already made some changes, still lacking in achievement
14% They were satisfied with the changes and thought to keep them
9% They can change them in a short time and they already have a plan to do it

Eating

On the type of food they eat such as fast foods, chips and sweets, the most outstanding data of all the respondents were: 61% "someday they do it", 11% every day, 25% "most days" and 3% "no day" (Table 2).

To the question, do you drink carbonated or artificial beverages?: 19% "most days and 4% "drink every day" (Table 2).

With respect to the usual schedule of eating breakfast or lunch: 42% "some days" and 10% "no day" (Table 2).

In addition, 7% reported that "every day omits some of the main meals", 23% "most days" and 52% "some days" (Table 2).

When asked if they stopped eating, even if they were hungry, 40% "some days" and 7% "most days". In contrast, 2% said that they "eat too much, even if they are not hungry", of which 4% "most days"; 35% "some days" and 59% "no days" (Table 2).

In a complementary way, they were asked if they vomited or took laxatives after eating in excess: 1% answered that "most days", 2% "some days" and 97% "someday".
They were also asked what the main reason to eat properly was. The most significant data in their answers were that 53% was "to maintain health"; 20% "to lose weight"; 16% "improve their physical and mental performance" (Table 2).

Those who responded that they did not eat properly were asked to say what the main reason why they did not eat was. The data collected were 26% "do not like to restrict themselves in what they eat"; 22% "do not think about the negative consequences of a bad diet"; 20% "cannot control what they eat" and 2% "do not care to keep their figure" (Table 2).

Regarding their feeding practices, 42% consider that "they could change it, but they do not know if they will do it" and 14% "are satisfied with their practices and do not think they are problematic" (Table 2).

Table 2 Eating lifestyle of students in health education.

| Fast food intake       |       |       |
|------------------------|-------|-------|
| 61% Someday            |       |       |
| 25% Most days          |       |       |
| 11% Everyday           |       |       |
| 3% Any day             |       |       |
| Ingestion of carbonated or artificial beverages |       |       |
| 4% Everyday            |       |       |
| 19% Most days          |       |       |
| 66% Some days          |       |       |
| 11% Any day            |       |       |
| Regular breakfast time |       |       |
| 13% Everyday           |       |       |
| 35% Most days          |       |       |
| 42% Some days          |       |       |
| 10% Any day            |       |       |
| Omission of main foods |       |       |
| 7% Everyday            |       |       |
| 23% Most days          |       |       |
| 52% Some days          |       |       |
| 18% No day             |       |       |
| Stop eating even if they are hungry |       |       |
| 1% Everyday            |       |       |
| 7% Most days           |       |       |
| 40% Some days          |       |       |
| 52% No day             |       |       |
| Excessive intake       |       |       |
| 4% Most days           |       |       |
| 35% Some days          |       |       |

| Reason for proper nutrition |       |       |
|-----------------------------|-------|-------|
| 59% No day                  |       |       |
| 2% Every day                |       |       |

| Reason for not feeding properly |       |       |
|---------------------------------|-------|-------|
| 26% They do not like to restrict themselves in what they eat |       |       |
| 22% Do not think about the negative consequences of a bad diet |       |       |
| 20% They do not have time to take care |       |       |
| 11% They are not interested in keeping their figure better |       |       |
| 13% They are not at home        |       |       |
| 6% Others                       |       |       |

| Opinion on their feeding practices |       |       |
|------------------------------------|-------|-------|
| 42% They could change them, but they do not know if they will |       |       |
| 25% They have already made some changes, but they still have to achieve what they want |       |       |
| 15% They could change them in a short time and they already have a plan to achieve it |       |       |
| 14% They are satisfied with their practices and do not think they are problematic |       |       |
| 4% They are satisfied with the changes they have achieved and plan to keep them |       |       |

Sleeping

In relation to their sleep habits, 19% do have "daily" a regular time for bedtime and getting up, 28% "most days", 38% "some days" and 15% "no day".

The main reason to sleep the time they need is: "rest" 54%; "Have a good physical and or mental performance" 38%; "Avoid irritable dawn" 7% and "others" 1% (Table 3).

On the question if they wake up at dawn and have difficulty sleeping again: 44% reported that "some days"; 8% "most days" and 4% "every day". In contrast, 44% reported that "no day" (Table 3).

Those students who reported that they did not sleep the necessary time, justified their response by reporting that: "they have a high academic load" 66%; "have different responsibilities to the study that prevents them from sleeping" 17%; "they have many concerns and issues to think about" 9%; "something or someone wakes them up" 5% and 3% reported other reasons (Table 3).
Finally about their dream practices of all the respondents: 39% consider that “they could change them, but they do not know they will do it”; 14% consider that "they can change them in a short time and already have a plan to achieve it”; 24% “are satisfied with their practices and do not think they are problematic”; 21% "have already made some changes, but still need to achieve what they want”; and 2% answered that “he is satisfied with the changes he has achieved and intends to keep them” (Table 3).

Table 3 Sleeping schedule of students in health education.

| Usual bedtime and bedtime schedules       |       |
|-------------------------------------------|-------|
| 38% | Some days                                 |
| 28% | Most days                                 |
| 19% | Everyday                                 |
| 15% | No day                                   |

| Reasons to sleep the necessary time       |       |
|-------------------------------------------|-------|
| 54% | Rest                                      |
| 38% | Have a good physical and/or mental performance |
| 7%  | Avoid irritable dawn                     |
| 1%  | Others                                   |

| They wake up in the early morning         |       |
|-------------------------------------------|-------|
| 44% | Some days                                 |
| 44% | No day                                   |
| 8%  | Most days                                 |
| 4%  | Everyday                                 |

| Causes of not getting enough sleep        |       |
|-------------------------------------------|-------|
| 66% | They have a lot of academic load         |
| 17% | They have different responsibilities to the study that prevents them from sleeping |
| 9%  | They have many concerns and issues to think about |
| 5%  | Something or someone wakes them          |
| 3%  | Others                                   |

| Opinion on their dream practices          |       |
|-------------------------------------------|-------|
| 39% | They could change them, but they do not know they will |
| 24% | They are satisfied with their practices and do not think they are problematic |
| 21% | They have already made some changes, but they still have to achieve what they want |
| 14% | They can change them in a short time and they already have a plan to achieve it |
| 2%  | They are satisfied with the changes they have made and plan to keep them |

Those habits are life patterns acquired in early ages and which have influence in habits and lifestyles of adult years [33]. If they are positive, they become protective factors that reduce the probabilities of suffering diseases.

If undergraduates are identified as a study population, it is important to know what their behaviors are, since in a short time when they acquire the status of graduates (or before), they will be forming new families, in which the lifestyles they have acquired in their childhood and modified with the step in the university classrooms will be reproduced, being able to get to be positive or not. The lifestyles (EV) in this stage may vary according to the different personalities, their preferences, their socio-economic status, their organization and use of their free time, to the influence of their friends and the media, establishing the lifestyles they adopt [34].

**Physical activity**

The information that was obtained in this study, leads to important reflections about the lifestyles that undergraduates have particularly students of the Degree in Health Education.

The first variable was the physical activity which they did as physical activity understood as the movements of the body which make muscles work consuming energy or as the performance of any sport.

In the present investigation more than half of the participants seldom or never perform physical activity, these results coincide with the research carried out with Brazilian students [35,36] where there was a coincidence when finding that it is a weakness, the regular practice of exercise as part of lifestyles in this population group. Likewise, the data of the present study confirm the findings found in the research carried out with medical and nursing professionals, where equally, physical activity and sports was the most affected dimension [37].

The data on low frequency compared to the practice of physical activity are consistent with studies with Physical Education professionals, where the practice of exercise was positively associated with perception of high quality of life in men [38].

About the levels of sedentary pronounced in the university stage, they are attributed to the decreasing of free time, the continuity of sedentary habits established since childhood, the influence of the social environment and of their friends who generate some type of peer pressure with the abandonment of physical activity [39].

In this investigation, more than half of the students do not perform any sport justifying that it is due to laziness, lack of time or because it involved a lot of effort, so they got tired easily.

The sedentary lifestyle phenomenon has been increasing due to the advancement of the application of technology and its relationship with various chronic diseases such as type 2 diabetes [40], osteoporosis and some types of cancer has been demonstrated [41], as well as other complications [42,43], has led to the affirmation that physical inactivity occupies one of

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**Discussion**

Even if they represent a very wide population, the studies about lifestyles carried out in undergraduates are limited [32].
the main causes of global morbidity and mortality [44-46]. In view of these diseases, the World Health Organization, in its strategy “Health for All” in 2010, emphasized the reduction of the prevalence of overweight and obesity as a strategy to reduce cardiovascular risk.

On the other hand, a more comprehensive analysis must be done and we have to consider that the lack of physical activation not only affects the individual, but also being present in diverse groups, affects society (as is the case of Mexico, which occupies the first places in Obesity and Overweight worldwide), when presenting diverse diseases that for their attention increase their cost in the health systems [47].

It has been documented that levels of physical activity decrease in the youth stage [48], in this investigation in more than half of the participants, there is satisfaction about their "physical activity and exercise practice". From these almost half accepted that they could change them, but they did not know if they would, which shows their lack of motivation. Its lack of motivation is surprising if one considers that according to their age it would seem interesting to show off their figure, in addition they are students of the Degree in Health Education who according to their graduating competences have to achieve with the implementation of educational interventions the community improvement in their lifestyles, as in this case physical activation would be. For all the above, improving the figure should be a motivating element to increase the practice of exercise, although if we talk about a healthy lifestyle, it should be recognized that the main motivation would be related to health and not physical appearance [49].

Eating

It is proved that the process of globalization that we have experienced has had consequences in different areas, one of which is health. These manifestations are even more present in the developing countries, where food standards have been modified. The increase in the consumption of industrialized and highly processed products has intensified. This consumption has a direct relationship with the profile of morbidity and mortality in countries such as obesity. Studies on adolescent eating show poor dietary adequacy with excesses of sugars and fats, often marked by preference and not by the availability of healthy foods [50].

The literature that suggests changes in taste with respect to the consumption and preference of certain foods may be influenced by unhealthful lifestyles of their environment, since schoolmates themselves, to the lack of nutritional information that students have, which is referred by themselves [51].

The investigated students referred they had consumed fast foods, potato chips and sweets. Although a little more than a quarter of respondents answered that most days do eat them, more than half also admit that they do so in some days; similar results were obtained in a study conducted in Chile [52].

Similarly, about the soft drinks or artificial drinks, almost all of them consume them, which allow us to affirm that this population group contributes to place Mexico among the first places worldwide in the consumption of soft drinks and sweetened beverages with an annual consumption of 163 liters per person [53].

This consumption has caused an increase in diabetes and early obesity cases in Mexican children and young people since they are made with sucrose, glucose and fructose that easily reach the blood according to the National Institute of Public Health. They increase diabetes and obesity in children by drinking soft drinks [54].

When a balanced diet is not taken, alterations that are harmful to health can occur, leading to possible diseases with both physical and psychological consequences, causing problems that could be irreversible [55].

Regarding the results obtained in terms of the usual time to eat their food, most of the participants do not have it, and almost half of them have disorders in the number of times of food intake. The first data coincide with those obtained in Santo Domingo with students finishing the Degree in Medicine who reported that they did not have it due to the complicated schedule of classes which leads them to consume fast foods and soft drinks. This consumption exposes them to cardiovascular events and chronic degenerative diseases such as diabetes and obesity [56].

The formation of eating habits as part of the lifestyles in the individual is permanent. These habits are acquired since childhood and they are influenced by the customs that are lived in families, which are determined by cultural factors. Although in childhood these influences are controlled in the family, since it is the family support that becomes the locus where the lifestyles of the individual are designed day by day, which are the life skills to adopt an adaptive and positive behavior that allows us to effectively address the demands and challenges of life [57].

When the individual accesses other school levels through their own life cycles, they become more vulnerable, as is the case of adolescence and youth. Already in the youth stage when one is in the university classrooms, the same university environment contributes to that formation, influence that is one of the determinants of the adult individual’s lifestyle. Additionally, the influence of the media on the consumption of hypercaloric foods should not be overlooked and the lack of physical activity generates overweight and obesity in the student population.

Sleeping

About their sleeping habits more than half do not have the habit of going to bed or getting up at a regular time; they argued that they do not have a pleasant rest because they wake up during the night and because they have difficulty to sleep again.

Man by nature is diurnal so during the day is active. During the day, the man performs various study, work and social activities. To do this, in the body occurs in an orderly manner a series of physiological processes which respond to external
causes such as the light-dark cycle with a duration of 24 hours. These cycles are known as circadian rhythms.

Its generation is necessary for the proper functioning of all physiological processes; however, current lifestyles originate diverse behaviors that alter them, such as eating high caloric foods, energy drinks or exposure to light at night. The above generates that the biological clock absorbs discordant signals altering the circadian rhythms. Alterations in circadian rhythms generate various health problems such as sleeping disorder, depression, obesity, reproductive problems and even cancer [58].

A study conducted at the University of Aguascalientes, Mexico [59] indicates that those who reported involvement due to insomnia, indicated that it affected their interpersonal and recreational relationships, memory, concentration, presence of tension, irritability and depression.

**Conclusion**

The development of this research allowed us to gain insight into some health practices that students of the Degree in Health Education have.

The obtained results allow us to identify some of the students' health practices. Belonging to this program of studies, motivated to carry out a double analysis, on the one hand, as a fraction of the group that has been included in the coverage of health programs implemented by the different health services and as future professionals who will be carrying out health education interventions aimed to the population.

The effects of lack of physical activity and resting hours as well as bad eating styles they have, are negatively reflected and it can be affirmed that they do not have self-care, which they should promote as graduates of this educational program.

It can be affirmed that even though the students are being trained in an educational program that deals with the preventive aspects of diseases, they have not internalized this knowledge to adopt healthy behaviors, being the influence of other factors existing in the social environment in which they develop (in this case the university student), the one that has influenced them, thus shaping their lifestyles, which in most cases are not healthy.

The lack of physical activity, the bad eating and sleeping styles of the students of Health Education is reflected negatively in their self-care that, these results highlight a warning to focus attention on the student population, which, if no action is taken, it is at risk of suffering from cardiovascular pathologies, and independently from their graduating profile, permanent programs and campaigns for health promotion and health education should be designed and implemented.

In these programs it is desirable to include both disease prevention topics, especially in food-nutrition education and physical activation, as well as the strengthening of psychosocial dimensions, interpersonal relationships, the development of coping strategies to face of stress situations and life projection so that they develop protective behaviors.

All the above suggests the need of Autonomous University of the State of Mexico to assume its double social responsibility within Health Education, as a strategy that, in addition to favoring the welfare of the people who comprise it, contributes formatively, this it is, that it favors the professionals in general, but those from health in particular, to observe lifestyles that are more congruent with their social responsibility addressing the offer of a sanitary practice more focused on the promotion of healthy habits and the prevention of risk factors against diseases.

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