

Original Research Article

Health status of Lebanese university students

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ABSTRACT

Background: In order to assess the health status of the students in Lebanese Universities, an epidemiological study was conducted in 3 Lebanese universities during the year 2014-2015.

Methods: A standard anonymous questionnaire was distributed in 3 universities in Lebanon; questions were related to socio demographic characteristics, hygiene and lifestyle, social and behavioral life, and diseases.

Results: We have collected 500 questionnaires, with a majority of females. Health status was perceived to be good or very good by most of the respondents. This was seen in the group with better sleeping hours. Most of the students were normally to extremely attentive to their hygiene, these students were found to be living at their parents' house, and have been at least once this year for a medical check-up. Female sex and academic year differences were found related for stress perception and emotional reactions.

Conclusions: This study presents some results that are fairly consistent with other foreign surveys. More research is needed to better evaluate the health deterrents of the students in order to recommend adequate preventive measures and consider generalization of the results to all the students in the Lebanese universities.

Keywords: Health status, Student health, Primary care medicine

INTRODUCTION

The elementary health status defined by the World Health Organization as a combination of physical, mental and social well-being has been a topic of interest for several years.¹ Several studies have examined demographic characteristics, hygiene and lifestyle, academic performance, social life and their relationship to basic health status of students. For example, a study in USA in 1991 showed that the place of residence and family hostility have a strong influence on the behavioral lifestyle of students, those living in urban areas have higher levels of stress as well as those from families where a certain degree of conflict exists.²⁻⁴ On the other hand, when perceived negatively or when it became excessive, stress affected health and academic

performance.⁵ Canadian university students were trying to control and reduce stress by sports activities, moral support (psychologists' mostly), or by trying to better manage their time and change their lifestyle.⁶⁻⁸ Other studies have also shown the effect of sex and academic year on the performance and perception of stress by students. Women not only perceived more stress and anxiety in their environment but also developed symptoms of depression.⁹ The same applies to first-year university students. Some had suicidal ideas, others smoked a lot or used alcohol.¹⁰⁻¹² Several surveys have studied hygiene and lifestyle. A study conducted on American university students showed that elementary health and well-being are related to the quality of sleep rather than its quantity.¹³ These characteristics have not, however, undergone a deep investigation in Lebanese

territory. Therefore, with a view to improving public health knowledge in Lebanon, a study was carried out in 2014-2015. This study mainly describes students' lifestyle, evaluate their social life and reveal their health status.

METHODS

The subjects of the study are university students chosen from Lebanese universities during the year 2014-2015. Selection criteria include students aged between 18 and 23, registered in the year 2014 in one of the Lebanese universities: Saint Joseph University, American university of Beirut and Lebanese University. A questionnaire was distributed during the intercourses in these 3 universities. The questionnaire was put in a closed envelope in an anonymous way.

The questionnaire was administered in French and English, it consists of five parts: socio-demographic characteristics, hygiene and lifestyle, behavior, acute and chronic diseases.

Data was entered on Microsoft Excel, and the statistical analysis was performed using the SPSS program.

Additional analysis was conducted using version 10 of the STATA software, with a 5% level of alpha significance.

RESULTS

A total of 500 questionnaires were collected. The majority of participants were females (64%). Our population is predominantly single (99%) and without children (99%). Regarding their nationality: 100% are Lebanese. Concerning their family, 92.2% of students' parents are married and live together, 5% are divorced, and 2.8% are widowed. On average, the number of siblings varies between 2 and 3. Concerning parents' education, 82% of the fathers and 54% of the mothers achieved university diplomas while 1% of the fathers and 4% of the mothers had only primary studies. 22.2% of the students are in the first year, 37.6% are in the second year, 15% are in the third year, 20% are in the fourth year, 5% are in the fifth year and 0.2% doing higher studies. In fact, 25% of the students do the same specialty of their parents (Table 1).

Table 1: Demographic data of students.

Demographic data	Number of responses (N =500)	Percentage (Total =100%)
Age (in years)		
18-19	307	61.4
20-23	193	38.6
Sex		
Male	180	36
Female	320	64
Nationality		
Lebanese	500	100
Other	0	0
Religion		
Christian	238	47.6
Muslim	250	50
Other	12	2.4
Place of residence		
Dorms	170	34
Parents house	293	58.6
Private house	30	6
Other	7	1.4
Family status		
Single	495	99
Married	5	1
Educational level		
1 st year	111	22.2
2 nd year	188	37.6
3 rd year	75	15
4 th year	100	20
5 th year	25	5
Higher studies	1	0.2

Table 2: Clinical characteristics of students.

Clinical characteristics	Number of responses (N =500)	Percentage (Total =100%)
Height (cm)	Mean =170.2	
Weight (kgs)	Mean =63.4	
Number of hospitalizations (times per year)	Mean =0.6	
Absence due to illness (times per year)	Mean =2	
Smoking	202	40.4
Non smoking	298	59.6
Alcohol	458	91.6
Non-alcohol	42	8.4
Drugs	3	0.6
No drugs	497	99.4
Sleeping pills		
Never	457	91.4
Often	22	4.4
Rarely	21	4.2
Chronic diseases		
Vision disorder	150	30
Migraine	60	12
Anemia	30	6
Medication		
Multivitamins	140	28
Analgesics and NSAIDs	75	15

In answering the question about the health status of students: 71 (14%) answered "excellent", 160 (32%) "very good", 189 (38%) "good", 57 (11%) "average" and 23 (5%) "low". Regarding their hygiene and lifestyle, we noticed that 46.4% have one meal per day, 47.6% have 3 meals per day and 6% more than 3 per day. We found that 96% eat between meals and 96.4% consume fast food. 87.8% eat meat and a minority (12.2%) is vegetarians. We noticed that 40.4% smoke cigarettes for 2.8 years on average; 66% of smokers were males. 91.6% drink alcohol and 0.6% had experienced drugs; the most frequent was hashish (Table 2). The majority 91.4% never used sleeping pills, 4.4% often consume them, and 4.2% only during the exam period. Their sleeping hours are on average 8 hours during the week and 10 hours during the weekend. The results highlight that those with more than 9 hours of sleep consider their health 'excellent' or 'very good'. Regarding their sports activities 72% do sports, 28% do not mainly because of lack of time (66%). 38.2% of the total do vigorous sporting activities such as running, weight lifting, swimming, tennis (80% males, 20% females) and 37.4% do moderate activities such as walking, ping pong.

Concerning their personal hygiene, 40.2% of the students are "extremely attentive", 52.8% were "normally attentive", 7.0% were "not very attentive" and 0% were "completely inattentive" to their hygiene. The results show that students who are "extremely" or "normally" attentive to their personal hygiene live mainly (64.2%) at their parents' house, and are the most likely to have been at least once this year for a medical checkup. When we asked students about their social life: 61.6% considered

their year to be moderately satisfactory, 26.8% very satisfactory, and 11.6% found it unsatisfactory. 9% relied on professional support, and 81% relied on non-professional support, mostly from a friend or relative. We noticed that among the stressed people, 66% are females, 50.8% of them in their first year. They have an average of 15 hours of leisure per week; 23.4% of them have a job. From the students who work, 70% are females and 30% are males. As for the prevention of illness, students go to the dentist on average 2.2 times a year and to the general practitioner 0.8 times a year. 67.4% are unaware of their vaccination. Hospitalization is on average 0.6 times / year, absence due to illness is 2 times / year. 6.2% of them had at least one surgery. If the students are sick, 78% of them go see a doctor, 75% of them take their treatment. The most frequent chronic diseases are: vision disorder 30%, migraine 12%, and anemia 6%. The most common drugs are multivitamins 28%, analgesics and anti-inflammatory drugs 15%.

DISCUSSION

As we notice, the proportion of girls is relatively higher in our sample. The same trend is observed in other studies.^{1,5}

The results support the initial assumptions that differences between academic years and sex play an important role in the perception of stress, and hence in the well-being of students.⁹ Our findings in fact show that females in their first university year are generally more stressed than the others. These students experience a higher degree of stress probably because of a change in

their lifestyle (change of place of residence, unbalanced diet, and absence of family support).

On the other hand, the reaction to stress and lifestyle varies according to students' gender. In fact, females tend to have work in addition to their studies, while sports (especially the vigorous type), tobacco, alcohol and, more rarely, drugs, seem to be a means of disengagement for males like seen in other investigations.^{11,12} Other studies have also shown that work, sports and leisure time are an important strategy in preventing and reducing stress by making subjects more able to manage their time and solve their problems and their emotional effects.^{5,8}

Our findings point to a strong relationship between sleep and the subjective perception of health by students. Those with more than 9 hours of sleep per day consider their health 'excellent' or 'very good'. This seems to contradict other studies that suggest that the state of elemental health is related to the quality of sleep rather than its quantity.¹³ However, such results cannot be generalized because the quality of sleep has not been analyzed.

CONCLUSION

Despite its descriptive rather than causal and correlational nature, our study presents some results that are fairly consistent with other foreign surveys, mainly the effect of stress, body hygiene, lifestyle, sleep, consumption of alcohol and tobacco, on the elementary health status of students.^{7,10-12} The results of our study should be interpreted bearing in mind the limitations of the representativeness of our sample and considering the difficulty of their generalization to the population of Lebanese university students.

More research is needed. It would be useful to look at other lifestyle factors (number of hours spent studying, number of hours of computer use, etc.) and their relationship with diseases suffered by students (eye diseases, migraine, etc.). A more important step would be to determine the precise factors affecting physical, psychological and social well-being in order to exercise preventive measures and necessary intervention efforts against certain diseases.

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