ORIGINAL ARTICLE

Assessment of the Lifestyle of University Students in the Healthcare Area Using the Fantastic Questionnaire

Carolina Campos Tassini,[1] Gabriela Ribeiro do Val,[1] Sarah da Silva Candido,[2] Cynthia Kallás Bachur[1,2]

Universidade de Franca,[1] Franca; Universidade de São Paulo,[2] USP, Ribeirão Preto – Brazil

Abstract

Background: The constant concern about quality of life nowadays has incited individuals to seek parameters for disease prevention. Along with that, arise a need to investigate and the ability to measure elements that characterize an appropriate lifestyle.

Objective: To compare the factors determining the quality of life of students in the healthcare area using the Fantastic questionnaire.

Methods: Descriptive, cross-sectional, population study. The sample was obtained by convenience and comprised medical and physical therapy students of both sexes and any ethnicity, attending a private institution of higher education, who agreed to fill out the questionnaire voluntarily. The Fantastic instrument used in this study has 25 closed questions that explore nine domains including physical, psychological, and social lifestyle components.

Results: In total, 57 university students participated, of whom 28 (15%) were physical therapy students and 29 (50.8%) were medical students. The mean age was 23 ± 2 years, and 40 (70.1%) were female and 17 (28.8%) were male. The overall rating was "regular", and none of the participants scored in the "very good" and "excellent" categories. The domains that mostly required change among medical students related to nutrition and physical activity, while among physical therapy students they related to cigarette, drugs, and alcohol.

Conclusion: According to the data collected using the Fantastic questionnaire, there was a remarkable need for improvement in the management of the quality of life of physical therapy and medical students, therefore allowing some social and educational measures through health promotion and disease prevention. (Int J Cardiovasc Sci. 2017;30(2):117-122)

Keywords: Quality of Life, Chronic Disease / prevention & control; Students, Medical; Students, Health Sciences; Surveys and Questionnaires.

Introduction

according to the World Health Organization, chronic diseases are responsible for approximately 86.0% of the deaths and 77.0% of the diseases in Europe.[1-3] The main etiology of these diseases are a set of factors fundamentally connected to lifestyle, linked by means of individual choices over the life course.[4]

The Fantastic Lifestyle questionnaire (Annex 1) is an instrument developed in 1984 by Wilson and Ciliska, from the Department of Family Medicine at the University of McMaster, Canada, and validated in Brazil by Añe et al. in 2008.[5] This instrument aims at addressing the main factors that characterize a health-appropriate lifestyle. Several studies have confirmed the validity and good level of the questionnaire in determining the lifestyle of both healthy and unhealthy individuals.[6]

Health determinants can be grouped into five categories comprising factors that maintain an individual healthy, such as the social and economic environment, natural

Mailing Address: Carolina Campos Tassini
Rua Tiradentes, 1730. Postal Code 14400550, Centro, Franca, São Paulo, SP – Brazil
E-mail: caca_tass@hotmail.com; gabriela.doval@hotmail.com

DOI: 10.5935/2359-4802.20170024

Manuscript received October 20, 2016; revised November 28, 2016; accepted March 01, 2017.

physical or man-built environment, personal attitudes, individual capabilities, and services for the promotion, maintenance, and restoration of health.[7] In general, changes in lifestyle are not an easy task and may be accompanied by resistance. This often prevents an individual from maintaining for a long time the changes requested by a multidisciplinary team, such as regular physical activity, weight control, moderate consumption of alcohol and salt, cessation of smoking, and stress reduction.[8] University life, both for teachers and students, is marked by major changes in the psychosocial and professional spheres, in which the individual is able of consolidating autonomic habits and behaviors due to the distance from his family. Such factors can contribute to both harm and benefit the individual's lifestyle. The greatest changes at this stage occur with regard to diet, physical exercise, sex life, stress, and consumption of alcohol, drugs, and tobacco.[9]

The constant concern related to quality of life nowadays has instigated individuals to seek parameters to prevent diseases. Considering that, it becomes necessary to investigate and measure the elements that characterize an adequate lifestyle.[10] The objective of this study was to compare the determinants of quality of life among students in the healthcare area with application of the Fantastic questionnaire.

Methods

this was a descriptive, cross-sectional, epidemiological, population study developed in 2015. The sample for this study was obtained by convenience and comprised students in the healthcare area (medicine and physical therapy), without distinction of sex or ethnicity, at a private institution of higher education. These students agreed to fill out the questionnaire voluntarily according to their time availability, without interfering with their daily and academic activities. The Fantastic instrument, used in this study, comprises 25 closed questions that explore nine domains on physical, psychological, and social lifestyle components, identified with the acronym FANTASTIC: F - family and friends, A - physical activity/affiliation, N - nutrition, T - tobacco, A - alcohol and other drugs, S - sleep/stress, T - work/type of personality, I - insight, and C - health and sexual behaviors. The items have five options as answers, with numeric values ranging from 0 to 4. The sum of the scores from all domains derives the global score, which ranges from 0 to 100 points, stratifying the individual into five levels of behavior: 0 to 34 (needs improvement), 35 to 54 (regular), 55 to 69 (good), 70 to 84 (very good), and 85 to 100 (excellent). The lower the score, the greater the need for change.[10]

All information obtained during data collection were stored in the software Microsoft Excel and then transferred to the statistical software Stata 9.0 for calculation of absolute and relative frequencies. Quantitative variables were described by mean and standard deviation. This study was approved by the Research Ethics Committee, protocol CAAE no.: 48487515.0.0000.5495.

Statistical analysis

To analyze the variables, we used the Mann-Whitney nonparametric test, with a significance level of $p \leq 0.05$.

Results

a total of 57 university students participated in the study, including 28 (15%) physical therapy students and 29 (50.8%) medical students. Of all, 40 (70.1%) were female, and 17 (28.8%) were male, and their mean age was 23 ± 2 years. The distribution of the mean age and the anthropometric characteristics of the participants are described in Table 1.

As for the students' lifestyle, the mean global score was 48.1 ± 10.50, which falls into the category of 35 to 54 points, *i.e.*, "regular". In the present study, none of the participants scored in the category "very good" or "excellent". Table 2 shows the participants' scores and classifications.

The domains that mostly demonstrated a need for change were related to the consumption of cigarettes, drugs, and alcohol in both sexes among the medical students, and alcohol consumption for males and the type of behavior for females among the physical therapy students, as described in Table 3.

Both physical therapy and medical students reported healthy practices in the domain "family and friends" since most reported having with whom to talk about important issues, in the same proportion that they receive and provide affection.

In the item "physical activity", 19 (67%) students of physical therapy reported being vigorously active for at least 30 minutes per day less than once a week. On the other hand, eight (25%) medical students reported being vigorously active for at least 30 minutes a day, five or more times a week.

Table 1 – Anthropometric characteristics of the sample, with values presented as mean ± standard deviation. Franca, 2015

	Male (n = 17)	Female (n = 40)
Age (years)	24 ± 2.23	23 ± 2.34
Weight (kg)	80 ± 13.70	65 ± 15.2
Height (m)	1.78 ± 0.07	1.65 ± 0.05
BMI (kg/cm²)	25 ± 3.52	24 ± 5.11

n: number of participants; kg: kilogram; cm: centimeter; BMI: body mass index.

Table 2 – Students' scores obtained with the Fantastic Lifestyle questionnaire. Franca, 2015

	Needs improvement 0 to 34 points	Regular 35 to 54 points	Good 55 to 69 points
Physical therapy	0 (0%)	25 (89.2%)	3 (10.7%)
Medicine	1 (0.29%)	22 (75.8%)	6 (20.6%)

Table 3 – Description (mean and standard deviation) of the domains of the Fantastic questionnaire, divided by sex and course. Franca, 2015

	Medicine		Physical Therapy	
Domain	Male (n = 15)	Female (n = 14)	Male (n = 2)	Female (n = 26)
Family and friends	4 ± 0	4 ± 0.53	4 ± 0.62	4 ± 0.58
Physical activity	2.3 ± 1.4	2 ± 1.3	4 ± 1.15	4 ± 0.59
Nutrition	1.8 ± 1.17	1.8 ± 1.3	4 ± 1.83	4 ± 0.59
Cigarette and drugs	0.5 ± 0.8	0.2 ± 0.3	2 ± 2.31	4 ± 0.87
Alcohol	1.2 ± 1.0	0.8 ± 1.0	0 ± 1.26	4 ± 0.88
Sleep, seat belt, stress and safe sex	2.7 ± 1.1	2.8 ± 1.1	3 ± 1.05	4 ± 0.89
Type of behavior	2.4 ± 1.0	1.7 ± 1.1	3 ± 1.08	3 ± 0.91
Insight	2 ± 1.0	2.2 ± 1.1	3 ± 1.83	3 ± 0.93
Work	3 ± 0	3 ± 0.6	2 ± 2.00	4 ± 0.92

In regards to eating habits, this study showed in the "nutrition" domain that physical therapy students consume more servings of fruits and vegetables that medical students. On the other hand, medical students reported eating more sugar, salt, and foods with excess fat. In this dimension, the question "am I within a range of... kilograms of a weight considered healthy for me?" was used to inferring the body perception that the students had of themselves. Within the results, we observed that most physical therapy and medical students considered themselves to be more than 2 kg above their ideal weight.

In the domain "tobacco, alcohol, and drugs" among the main practices, we estimated that 23 (76%) medical students and 24 (85%) physical therapy students had not consumed cigarettes within the prior 5 years. In all, 21 (75%) physical therapy students and 20 (66%) medical students reported consuming less than seven doses of drinks during the week, while 13 (43%) medical students reported occasionally drinking more than four doses of alcoholic beverages on one occasion, with a similar number of physical therapy students reporting the same. Additionally, 23 (82%) physical therapy students reported never having driven after consuming alcoholic beverages; among the medical students, 20 (66%) reported having sometimes driven after consuming alcoholic beverages. None of the students in both courses reported consuming some type of drug, 25 (83%) medical students and 19 (67%) physical therapy students reported never having used drugs that could be purchased without a prescription. Among the physical therapy and medical students, 19 (67%) and 19 (63%), respectively, reported consuming drinks containing caffeine (coffee, tea, or colas) one to two times per day.

On the domain "sleep and stress", eight (28%) physical therapy students and 10 (33%) medical students reported rarely sleeping well or feeling relaxed. In all, 13 (43%) medical students indicated feeling able sometimes to cope with day-to-day stress, while 10 (35.7%) physical therapy students reported almost always knowing how to deal with daily stress. Additionally, 13 (46%) physical therapy students almost always relax and enjoy their free time, in contrast to only 10 (33%) medical students who reported being able to do so.

In the domain "work, type of behavior, and insight", the medical students reported feeling more in a hurry when compared with the physical therapy students. On the other hand, physical therapy students reported feeling less nervousness and hostility, and appeared to be more satisfied with the work and functions that they had compared with the medical students, who in turn reported feeling more disappointed and overwhelmed than the physical therapy students.

In relation to the last domain, "sexual behavior, health, and others", we observed that 19 (67%) physical therapy students reported always using condoms, while 15 (50%) medical students reported using condoms with relative frequency.

Discussion

As this study used a convenience sample comprising students in the healthcare area, we observed a limitation of the participants in terms of lack of time availability to fill out the questionnaire, especially among medical students.

The insertion of youths in the university is a period of change marked by the conquering of more autonomy and responsibility. The environmental transformation with the entry into the university world brings new interference in an environment in which students often take root or initiate unhealthy behaviors such as smoking or consuming alcoholic beverages and illicit drugs. Increased demands, responsibility, and stress of the studies imposed by the university have been responsible for the emergence of physical and emotional problems in these students.[11]

The emotional and personal demands bring great adversities with the progression of the academic life. Universities offer the skills necessary for a proper professional exercise on the offered course but may become an appropriate place for the acquisition of habits that make these students and future professionals susceptible to various types of diseases.[12]

The quantification of lifestyle is known to be a challenging and imprecise task because it comprises several dimensions that are naturally difficult to be measured directly in an objective manner. Based in the domains "habits and addictions addressed" assessed during the study, we found that medical and physical therapy students in general fit into the categories "needs improvement" (1.6%), "regular" (79.6%), and "good" (15.2%), and that none of the participants scored in the category "very good" or "excellent". These results differ from those obtained in the study by Rodriguez Añez et al.,[6] in which a survey using the Fantastic questionnaire among graduate and postgraduate students with a mean age of 21.3 years showed that 82.3% had lifestyle levels between "good" and "very good".

In regards to medical students, the domain cigarette, drugs, and alcohol, examined with the Fantastic questionnaire, presented the worst scores of all fields. A study conducted by Silva et al.[13] found that the consumption of alcohol over 12 months by surveyed students rated first, followed by tobacco.[6]

Overall, the consumption of illicit substances and alcohol has increased among graduate students. In this sense, more and more alternatives have been sought out to help individuals cope with such impact, including activities and training to face the stress imposed by the university's demands and measures to prevent the use of these substances harmful to health through early detection of this setback. The deficiency of effective policies against the use of drugs, alcohol, and tobacco by students has been observed in several studies. However, none of the Brazilian medical schools are heading actions against this problem, such as activities and training sessions enabling the best ways to deal with the stress imposed by the universities.[14-16]

In terms of "sleep" and "stress", many students had difficulty in reconciling leisure, sleep, free time, and activities demanded by the university, and reported feeling tired and stressed with the daily routine. Camargo and Bueno[17] claimed that it is often difficult to find a balance between physiological and psychological needs and requirements of the work organization, and that this conflict may trigger an emotional change that is often not elaborated, resulting in effects on physical and mental health.

In the present study, many medical students reported poor eating habits in the "nutrition" domain. With the university routine, adolescents adopt practical and fast habits, such as a preference for industrialized products, low intake of fruits, vegetables and legumes, and omission of meals. The routine of irregular eating is considered a fundamental behavior to the development of obesity, diabetes, hypertension, and chronic diseases, which contribute to public spending in the health area.[17,18]

Medical students presented the worst scores in the "physical activity" domain. Similar to findings in the literature, a sedentary lifestyle is perpetuated in beginning students, as well as in those completing the studies.[19] Silva et al.[20] have reported that there is a need to guide students toward a healthy lifestyle and stimulate them to practice physical activity as a way of improving a sedentary lifestyle and its impact on health.

A study conducted by Vieira et al. has shown that the habit of practicing sports in Brazilian universities is deficient and needs encouragement to prevent a sedentary lifestyle. Less than half of the adolescents had the habit of practicing physical activity, and most of those who practiced it did not exceed 4.5 hours weekly.[21] The incentive to sports is able to indirectly improve other domains such as stress and consumption of alcohol, cigarettes, and drugs, as well as adequate eating habits, reducing the risk of chronic diseases. These observations emphasize the importance of this domain.

The results show that the questionnaire has a high-quality classification ability. Having no change in the items that determine lifestyle, the individuals are reclassified. This is important during intervention programs, which promote lifestyle in order to improve health and quality of life. Positive changes in the classification demonstrate that the questionnaire is reaching the expected results. The Fantastic lifestyle questionnaire is a tool to help different professionals get to know individuals evaluated in primary care, as well as to guide them toward a better quality of life.[13]

Conclusion

The data obtained in the present study using the Fantastic questionnaire suggest a need for intervention in the quality of life of medical and physical therapy students through educational programs, as well as the implementation of means to encourage the promotion of health and improvement of quality of life.

Author contributions

Conception and design of the research: Tassini CC, Val GR, Candido SS, Bachur CK. Acquisition of data: Tassini CC, Val GR, Candido SS, Bachur CK. Analysis and interpretation of the data: Tassini CC, Val GR, Candido SS, Bachur CK. Statistical analysis: Tassini CC, Val GR, Candido SS, Bachur CK. Writing of the manuscript: Tassini CC, Val GR, Candido SS, Bachur CK. Critical revision of the manuscript for intellectual content: Tassini CC, Val GR, Candido SS, Bachur CK.

Potential Conflict of Interest

No potential conflict of interest relevant to this article was reported.

Sources of Funding

There were no external funding sources for this study.

Study Association

This study is not associated with any thesis or dissertation work.

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