

Medical Students Lifestyle and Health Related Behavior: A Survey from Nishtar Medical College Multan

1. Allah Yar Malik 2. Imran Iqbal 3. Asiya Naqvi 4. Saad Masood

1. Sen. Demonstrator, Dept. of Community Medicine, NMC, Multan 2. Prof. of Pediatrics, Children Complex & Institute of Child Health, Multan 3. Health Educator, Dept. of Community Medicine, NMC, Multan 4. Home Physician, Dept. of Nephrology, Nishtar Hospital, Multan.

ABSTRACT

Background: The health status of people significantly depends upon their health related behavior and lifestyle. Medical students as a distinct and adolescents segment of our population need to address their health and lifestyle problems. This is a unique group of people with special wishes. Our survey aims to identify the lifestyle and behavioral patterns in this group and later come up with issues that demand special attention.

Objective: To determine the Medical Students Lifestyle and Health related Behavior in Nishtar Medical College Multan

Study Design: Cross sectional Descriptive study

Place and Duration of Study: This study was conducted at the Nishtar Medical College Multan from 01.01.2011 to 31.01.2011.

Materials and Methods: There was a non probability convenient sampling A survey was performed in one boy's hostel and one girls' hostels selected randomly. An interview base semi-structured questionnaire proforma was used to collect the data from willing medical students of 4th year MBBS. One hundred and five students (male: 49 & female: 56) residing in Hostels in Nishtar Medical college Multan, were included in the study.

Results: Females were more depressed than males and had more sleep problems and taking the unhygienic junk foods. Quite a few of them (7.1%) were involved in substance misuse and addictions. Nine percent male and 1 % female students were currently smoking cigarettes. Peer pressure was the most common reason (56.1%) to start smoking. As regard the physical exertion was concerned, 53.10 % male and 37.5 % female did exercise half an hour per day five days a week and were of opinion that physical exercise was essential for health.

Conclusion: Majority of the student's lifestyle and health related behavior was not healthy. Insufficient sleep, depression and smoking were the leading unhealthy behaviors among the respondents. Families can play an important role to help the students live a healthier life. Further research studies should be carried out to emphasize issues of concern and achievable solutions in the medical students. A health education campaign should address properly in the students to change their lifestyle and health related behavior.

Key Words: Health related behavior, Lifestyle, Eating habits, Physical activities, Addiction.

INTRODUCTION

Medical student population and health of Medical students is a very special issue and is the focus of interest worldwide for the parents. The demands on young adolescents are new and unmatched; their parents could not have predicted a lot of the pressures they face. How we help youth meet up these demands and provide them with the kind of education, skills and attitude they will need in a changing environment, will depend on how well we are aware of their world.¹

The population aged 18–24 in Pakistan was estimated to be approximately 27 million in 2000, and it is expected to continue to increase, reaching 44.6 million in 2020. This is an increase of 39 percent in just 20 years. This age group accounts for almost one quarter of the population in Pakistan and the peak number of youth will be reached in the year 2035.²

The fundamental data on education among adolescents shows that they are not receiving the adequate

schooling and capability building to prepare for the future.² Several health related behaviors (e.g. Smoking, alcohol) as well as health ornamental behaviors (e.g. Physical exercise) are adopted in adolescence and they often persist into adulthood.³

The most frequently reported behaviors in this population include such as watching TV, playing video games, beating others, smoking and drinking alcohol, as lack of sleep, swearing, throwing things, and vandalism.^{4,5,6}

Moreover, considerable gender differences can be found with relation to health-related behavior, both in adults and in adolescents. Usually, males exhibit healthier-risk and less health-protective attitude than females.^{7,8} However; in recent years some studies have depicted a remarkable increase in smoking among females.^{9,10}

With increasing evidence that chronic insufficient sleep results in negative daytime consequences e.g. Daytime sleepiness, depressed mood^{11, 12} interventions designed

to overturn adolescent delayed sleep timing may help ease these problems.¹³

Adolescence often turns away from parents and health care providers towards peers for support, guidance and management of their life. However, a brief look at the accessible information is therefore important to identify and highlight the health, lifestyle and behavioral issues of the adolescents and possible ways to promote a healthier lifestyle in this population. The purpose of the study was to make clear the lifestyle and behavior of the medical students and to identify the major health risk behaviors in this age group.

MATERIALS AND METHODS

A semi structured questionnaire was used to carry out the survey about lifestyle and health related behavior. One hundred and five students were interviewed who were residing in the hotels in Nishtar Medical College Multan. All the respondents were approached whoever came in first contact from a hostel randomly selected from all boys' hostels and one of all girls' hostels. Data collection was continued for four weeks during the month of January 2011. Interviews were conducted by one male and one female doctor, who were also involved in designing the questionnaire.

Variables Measured: The common health and lifestyle behavior variables measured are as follows:

- Hygienic practice
 - Washing hands
 - Brushing teeth
- Eating habits
 - Breakfast Intake
 - Fruit intake
 - Junk food intake
- Physical exercise.
- Smoking prevalence: smoking is there or not in the respondents.
- Often' feel depressed / anorexic: the term "often" included at least twice every week.
- Bedtime: / Sleep:
 - Before midnight, after midnight

Data Analysis: The data were entered in SPSS (Statistical Package for Social Sciences) version 16 and analyzed accordingly. Descriptive statistics included frequencies and percentage for continuous and categorical variables. The results were presented in the form of figure and tables.

RESULTS

A total 114 students including males and females were approached in this survey, nine students (8.5%) declined to participate; therefore the response rate for the study was 91.5%. The total numbers of medical students who took participation in the interview and used for analysis were one hundred and five. About

forty seven percent of the respondents were males and 53% were female. The median age of the respondents was 21 years.

As far as satisfaction regarding living conditions in hostel life was concerned, 65.7% students were not satisfied with living conditions whereas 7.6% were satisfied and 26.7% were uncertain.

Hygienic Practices: As regards hygienic practice, 79.6 % males and 80.4% female students washed their hands regularly before taking meal. Only 14.3 % male and 19.6 % female students brushed their teeth twice or thrice a day.

Eating Habits: Regarding the eating habits, the majority stated that they did not take breakfast and were in the habit of eating from the college canteen. The reasonable percentage of respondents stated to be indulged eating unhealthy, junk foods and carbonated drinks. They considered their eating habits as being 'just rights' and a scarce percentage of respondents used fruits, milk and yogurt. (Table 1)

Table No.1: Percentage of different habits of eating
n = 105

Activity	Gender	Number (%age)
Taking breakfast daily	Male	7 (14.3)
	Female	12 (21.4)
Taking meals regular	Male	27 (55.1)
	Female	29 (51.8)
Taking Junk food daily	Male	13 (26.5)
	Female	17 (30.4)
Taking 3 or more Carbonated drinks per day	Male	26 (53.1)
	Female	22 (39.3)
Taking fruits daily	Male	8 (16.3)
	Female	8 (14.3)
Taking milk/yogurt daily	Male	5 (10.2)
	Female	17 (30.4)

Females were more depressed than males and had more sleep problems. Substance abuse and other additions were also documented in a very little number of respondents (Table 2)

Table No.2: Sleep Pattern & use of Anxiolytic Drugs
n - 105

Activity	Gender	Number (%age)
Time of going to bed up to 12.00 midnight	Male	16 (32.6)
	Female	30 (53.5)
Time of wakening (before Fajar prayer)	Male	15 (30.6)
	Female	27 (48.2)
Taking Anxiolytic drugs	Male	3 (6.1)
	Female	4 (7.1)

Smoking among the Students: Almost nine percent of male students and 1 % of female students were smoking cigarettes currently. A significant majority were aware

of the hazards associated with smoking. Smoking among the respondents is detailed in Table 3.

Table No.3: Percentage of smoking among respondents n - 105

Question	Response	Number	% age
Smoke Cigarettes Currently		Male (12) Female (1)	8.7 1
Smoke (cigarettes / day):	1-5	4	3.8
	6-19	7	6.6
	> 20	2	2
Why started smoking?	Peer pressure	10	9.5
	Father smokes	2	1.9
	Get rid of stress	1	1

Physical Exercise: As regards physical exercise, 53.10% of male and 37.50 % of female were stated to do physical exercise for half an hour five days of the week, while the large majority as detailed in the figure were fond of a sedentary lifestyle. (Figure 1)

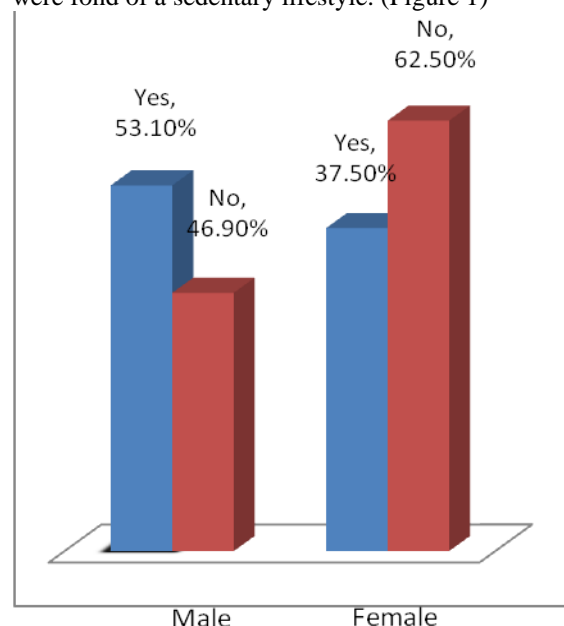


Figure 1: Physical Exercise (30 minutes per day)

DISCUSSION

The most commonly reported health and lifestyle risk behaviors among our respondents were unhealthy and unhygienic eating, inadequate sleep, lack of physical exertion, and smoking was the leading unhealthy and risky behaviors among the medical students. The least prevalent health risk behaviors were use of anxiolytics. WHO's report that at least 20% of adolescents will experience some form of mental illness mood disturbances, eating disorders.¹⁴ Dental care including brushing of teeth and preventive dental checkups is considered part of a healthy lifestyle.¹⁴ The status of

dental care among the medical students needs improvement.

A study carried out among Lebanese university students; it was found that they had better eating habits as 53% of female were taking breakfast as compared to only 12% in our study. Similarly 61% of Lebanese students used to take their meal regularly whereas only 29 % in our study. The findings were not inconsistent with our study.¹⁵ A study at Alexandria University hostels, it was found that 86% ate unhealthy diet, 34% were physically inactive, 17.5% of male students were current smokers & 32% had poor sleep behaviors. These findings did not correlate well with our study¹⁶. Our results showed that (79%) of the respondents were getting less sleep daily, which is a cause for concern and further inquiry.¹⁷

The addictive behavior most common amongst medical students was cigarette smoking. Almost half of the 150 million adolescents who continue to smoke will finally end up to their graves by tobacco related diseases.¹⁸

Smoking among adolescents may also be an indicator of many other lifestyle and health issues.^{19, 20} Francis; et al.²¹ had reported that adolescents who smoke were at higher risk of psychopathology versus to adolescents who were non-smokers.²²

There was proof that medical student's decisions to smoke were strongly influenced by the family and friends. Our study also supports the fact that peer pressure was the most common reason to start smoking. Having a friend who smoked might be an influence to initiate smoking.²³ Ten percent of the medical students in our study started to smoke since their associates and friends were smokers. Introducing programs in educational institutions regarding the hazards of smoking be carried out. Moreover bans on advertising companies and an increase in the price of tobacco products must be practiced.

A study carried out among students at university of Brazil,²⁴ which showed a similar pattern as the present study that male students were regular in physical exercise as compared to female students. Hence there is a strong need to encourage students to devote some time to extracurricular activities.

It was inspiring to note that more than half of the respondents (57.7%) exercised on a regular basis. However we should strive to create further understanding regarding the significance of exercise and physical activity, since very few of them were of the opinion that exercise is essential for health.

This study provided a valuable local point of view with regards to the medical student's lifestyle and behavior. Interventions have been found to be successful for lifestyle change in the student population.²⁵ significant data are available in favor of lifestyle interventions leading to a better health outcome.²⁶

Strengths and Limitations: A very limited research has been done regarding the assessment of medical student's lifestyle and health related behavior; our study is the first of its kind to the best of our knowledge.

The present study at the same time had a few limitations. We used non probability convenience sampling to draw our sample; this method is inferior to probability sampling in representation of the population, and this limits the validity of the study

CONCLUSION

Unhealthy and unhygienic eating, inadequate sleep, lack of physical exertion, smoking and use of anxiolytic drugs were the leading unhealthy and risky behaviors among the medical students. The students as an adolescents need to be treated as a distinct segment of our population and we suggest that the families of these students can prove to be a great source to help them, live a healthy life. The study has attempted to highlight various areas of concern with respect to medical student's lifestyle and health related behavior. Health promotion and change in lifestyle programs are required for good health of the medical students

REFERENCES

- Hancox RJ, Milne BJ, Poulton R. Association between child and adolescent television viewing and adult health: a longitudinal birth cohort study. *Lancet* 2004; 364: 257–262.
- Khan A. Adolescents and Reproductive Health in Pakistan: A Literature Review. The Population Council, Pakistan Office. (Accessed 2009) Available from: <http://www.infoforhealth.org/youth/wg/PDFs/PopC/other/rr11.Pdf>.
- Achenbach TM. Manual for the Child Behavior Checklist and Revised Child Behavior Profile. Burlington, VT. University of Vermont, Department of Psychiatry, 1983.
- Currie C, Samdal O, Boyce W, Smith B. Health Behavior in School-Aged Children: a World Health Organization Cross-National Study: Research Protocol for the 2001/02 Survey Edinburgh, UK.
- The National Longitudinal Study of Adolescent Health: study design. (Accessed 2009) Available from: <http://www.cpc.unc.edu/projects/addhealth/design>.
- Brener ND, Kann L, Kinchen SA, Grunbaum JA, Whalen L. The methodology of the youth risk behavior surveillance system. *MMWR Recomm Rep* 2004; 53: 1–13.
- Steptoe A, Wardle J, Cui W, Bellisle F, Zotti AM. Trends in smoking, diet, physical exercise, and attitudes toward health in European university students from 13 countries. *Prev Med* 2002; 35: 97–104.
- Stock C, Wille L, Kramer A. Gender-specific health behaviors of German university students predicts the interest in the campus health promotion. *Health Promot Int* 2001; 16: 145–154.
- Rahkonen O, Berg MA, Puska P. The development of smoking in Finland from 1978 to 1990. *Br J Addict* 1992; 87: 103–110.
- Caspersen CJ, Pereira MA, Curran KM. Changes in physical activity patterns in the United States, by sex and cross-sectional age. *Med Sci Sports Exerc* 2000; 32: 1601–1609.
- Acebo C, Wolfson AR. Inadequate sleep in children and adolescents. Kushida CA, Ed. *Sleep deprivation*. New York: Marcel Dekker. 2005; pp 151–171.
- Millman RP. Excessive sleepiness in adolescents and young adults: causes, consequences, and treatment strategies. *Pediatrics* 2005; 115: 1774–1786.
- Bootzin RR, Stevens SJ. Adolescents, substance abuse, and the treatment of insomnia and daytime sleepiness. *Clin Psychol Rev* 2005; 25: 629–644.
- Adolescent Friendly Health Services-An agenda for change. (Accessed 2009). Available from http://whqlibdoc.who.int/hq/2003/WHO_FCH_CA_H_02.14
- Yahia N, Achkar A and Abdullah A. Eating Habits and Obesity among Lebanese University Students. Available from: <http://www.nutritionj.com/content>
- Abolfotoug MA, Bassiouni FF, Mounia GM. Health Related Life style & Risk Behavior among Students living in Alexandria University Hostels. *East Mediterr Health J*; 2009;15 (3): 722-8.
- Rajput V, Bromley SM. Chronic insomnia: a practical review. *Am Fam Physician*; discussion on Adolescent Lifestyle. Available from www.plosone.org 5 Sept. 2010; (5) 9: 291-4
- Eccles JS, Barber BL, Stone M, Hunt J. Extracurricular activities and adolescent development. *J Social Issues* 2003; 59: 865–889.
- WHO-10 Facts on Adolescent Health. (Accessed 2009) Available from: http://www.who.int/features/factfiles/adolescent_health/facts/en/index4.html
- Rudatsikira ESS, Kazembe LN, Muula AS. Prevalence and associated factors of physical fighting among school-going adolescents in Namibia. *Ann Gen Psychiatry* 2007;6:274-80.
- Dierker LC, Sledjeski EM, Botello-Harbaum M, Ramirez RR, Chavez LM. Association Between psychiatric disorders and smoking stages within a representative clinic sample of Puerto Rican adolescents. *Compr Psychiatry* 2007; 48: 237–44.
- Francis K, Katsani G, Sotiropoulou X, Roussos A, Roussos C. Cigarette smoking among Greek adolescents: behavior, attitudes, risk, and preventive factors. *Subst Use Misuse*. 2007; 1323–1336.
- Livaudais JC, Napoles-Springer A, Stewart S, Kaplan CP. Understanding Latino adolescent risk behaviors: parental and peer influences. *Ethn Dis* 2007; 17: 298–304.
- Viviane Colares, Carolina da Franca, Emília Gonzalez. Health-related behavior in a sample of Brazilian college students: gender differences. *Cad. Saúde Pública*, Rio de Janeiro Mar 2009; 25(3):521-528
- Kunitsuka K, Yamatsu K, Adachi Y A. Correspondence behavioral approach for 6 lifestyle's improvements in a workplace. *Nippon Koshu Eisei Zasshi* 2002; 49: 525–34.
- Anonymous. Evidence mounts that lifestyle interventions have big payback. *Dis Manag Advis* 2002; 8: 81–85.

Address for Corresponding Author:

Dr Allah Yar Malik Cell: 0300-8638485