Original Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20201991

Pattern of fast or junk food consumption among medical students of north Karnataka- a cross sectional study

Rakesh K. Nayak*

Department of Community Medicine, SDM College of Medical Sciences and Hospital, Shri Dharmasthala Manjunatheshwara University, Dharwad, Karnataka, India

Received: 15 February 2020 **Accepted:** 19 March 2020

*Correspondence: Dr. Rakesh K. Nayak,

E-mail: drrakeshnayak@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: The culture of fast food consumption is replacing the traditional meal. It is an emerging trend among the younger generation. Their ready availability, taste, low cost, marketing strategies and peer pressure make them popular. Stress in medical students' life and study load would be factors that negatively influence their diet.

Methods: A cross sectional study was carried out among undergraduate medical students of a medical college in north Karnataka from May to October 2018. 178 students consisting of both boys and girls participated in the study and were interviewed using a pre-tested structured questionnaire. Data collected was analysed.

Results: A total of 178 medical students participated in the study out of which 84 were males (48%) and 94 were females (52%). Majority of them (92%) resided in the hostel within the campus and only a few were local residents (8%). Mean age of subjects was 20±1.4 years. Taste was the main reason given by students which led to increased consumption of fast/junk food (46.7%). Chocolates were the most commonly consumed food followed by soft drinks. Majority of the students (87%) were well aware of the side effects of these fast/junk foods.

Conclusions: Fast/junk foods preference and consumption are highly prevalent among medical students despite their knowledge about its health hazards.

Keywords: Fast food, Medical students, Pattern

INTRODUCTION

The culture of fast food consumption is replacing the traditional meal. Fast food (FF) is an empty calorie food that lacks in micronutrients such as vitamins, minerals, or amino acids, and fibre. It is a food that is prepared and served quickly at outlets called fast food outlets. Junk foods (JF) comprise anything that is quick, tasty, convenient and fashionable. They are energy dense foods with high sugar/fat/salt content and low nutrient value in terms of proteins, fibres, vitamins and mineral content e.g. chips, chocolate, ice cream, soft drinks. The terms FFs and JF are often used interchangeably. Most of the JF are FFs as they are prepared and served fast, but not all of

FFs are JF, especially when they are prepared with nutritious contents.¹⁻³

The increasing urbanization occurring in both developing and developed countries is causing changes in the diet towards high energy-dense foods and sedentary lifestyle. FF culture is an emerging trend among the younger generation. Their ready availability, taste, low cost, marketing strategies and peer pressure make them popular. 3,4

According to WHO (2003), frequent fast food consumption is also a health concern because most fast foods are rich in saturated fats, trans fats, simple carbohydrates and sodium-all of which are nutrients

associated with hypertension, cardiovascular diseases, and type 2 diabetes.⁴ Consumption of fast/junk foods is also associated with obesity, dyslipidaemia, impaired glucose tolerance, dental caries and gastritis.⁵ The general assumption is that medical students eat healthy when compared to non-medical students but some studies have found otherwise and knowledge about healthy lifestyle does not necessarily result into better practices. Stress in medical students' life and study load would be factors that negatively influence their diet.^{6,7} The use of FF by tomorrow's physicians is of concern as they will set an example for their patients and the community.

The objective of this study were to assess the pattern of FF and JF consumption among medical students and also to know students' knowledge about the effects of FFs on health.

METHODS

A cross sectional study was carried out among undergraduate medical students of a Medical college in North Karnataka. The study period was 6 months from May to October 2018 which included 3 months of data collection. Informed consent was taken from study participants and only those who consented were allowed to participate in the study. Our target was to include at least 2 batches of students (100 students in each batch) from different years of study so as to make a sample size of 200. However only 178 students consented and participated in the study. These 178 students consisting of both boys and girls were interviewed using a pre-tested structured questionnaire. The questionnaire consisted of demographic information, fast food preferences, pocket money spent on fast/junk food, reason for consumption and awareness about ill effects of fast food on health etc. The questionnaire was distributed in the evening after working hours and enough time was given to return back the filled questionnaire. Data collected was analyzed and results were expressed as percentage.

RESULTS

A total of 178 medical students participated in the study out of which 84 were males (48%) and 94 were females (52%). Majority of them (92%) resided in the hostel within the campus and only a few were local residents (8%). Mean age of study participants was 20 ± 1.4 years. All the students consumed fast food at some time or the other. The students had good knowledge about fast food. Sixteen percent of the students (28) consumed fast food on most of the days of the week (>5 days). Thirty percent of students preferred fast food to home food (53).

The tendency to skip meals was very high among the medical students. Thirty five percent of the students agreed that they skipped major meals. The most common reason given for skipping meals was lack of time. The commonest meal which was skipped was dinner. About

10% of the students spent more than 75% of their pocket money on fast/junk food (Figure 1).

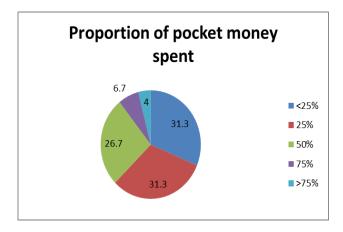


Figure 1: The distribution of the pocket money spent on fast food.

Taste was the main reason given by students which led to increased consumption of fast/junk food (46.7%). The other reasons given were, no other food option available (14.7%), pleasure (20%), easy availability (6%) and by habit (5.3%). Seven percent of the students did not specify any particular reason for consumption of fast food.

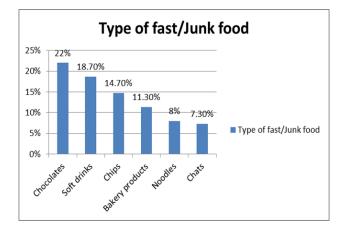


Figure 2: The distribution of commonly consumed fast/junk food.

Figure 2 shows the commonly consumed fast/junk food consumed by medical students. Chocolates were the most commonly consumed food followed by soft drinks. The practice of consumption of energy drinks was also quite high (26%). The reason given by these students was that it helps them perform better in studies.

Forty percent of the students were in the habit of reading information given on packed food packets which was a good practice. The most commonly read information on the food packets was the content of trans fat. Among the rest 52% who did not read the information, 15.3% said it was not important, 27.3% shared that they had no time

and the rest 9.3% gave the reason that they cannot understand the information given.

Only 10.7% of the students understood the nutrient label thoroughly and the rest did not. Majority of the students (87%) were very well aware of the side effects of these fast/junk foods. They said increased consumption could lead to obesity, diabetes and hypertension. The source of information for these was mainly internet (82%), friends and teachers (12%) and Medical education (6%).

DISCUSSION

In present study almost all students (100%) consumed fast food/junk food. However the frequency and quantity varied. Similar observations were seen in a study done in Patna (100%), Jammu and Kashmir (100%), Lucknow (98%) and China (97.5%).⁸⁻¹¹

Driskell et al found that soft drinks were the most frequently consumed by female college students. Similar was the finding in the present study, however the incidence was the same among both boys and girls. While in a study done in Australia, 25% students usually chose soft drinks instead of water or milk. 13

In present study we observed that the major factor influencing the food preferences was taste, which was similar to the observations in a study done in Mangalore. 14 In a study conducted by Bipasha et al, it was pleasure/habit followed by easy accesses and changing lifestyle which was the main reason for consumption.¹⁵ It was also observed in present study that nutritional information provided on food packets rarely influenced their choice of food selection as noted in the Mangalore study. 14 Most of students in present study were well informed about the negative effects associated with fast food consumption, but they still continued these practices without considering their health complications. Similar findings were seen in a study done in Malaysia by Ganasegaran et al.16 Another study done in Baroda showed that children despite knowing the harmful effects continued to eat fast foods and for reasons like taste preferences, strong desire to do so and quick to eat. 17

In present study, the commonest sources of their information about FFs was internet. Only 6% of them got their information from medical education. This reflects that medical curricula do not include sufficient information about health hazards of FFs. Similar findings were noted in a study done in Egypt.¹⁸

CONCLUSION

Fast/junk foods preference and consumption are highly prevalent among medical students despite their knowledge about its health hazards. Increasing information about fast foods and its ill effects on health should be a part of the medical curricula. More emphasis should be laid on the practical application of the

principles of nutrition in our day to day life. Practice of reading the health information on packed foods especially the nutrient label is very important and needs to be taught to medical students to help them make better choice of food.

ACKNOWLEDGEMENTS

We gratefully acknowledge the active participation of students, all the faculties and staffs of the Department of Community Medicine for their co-operation in supporting the study.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

REFERENCES

- 1. Ashakiran DR, Deepthi R. Fast foods and their impact on health. J Krishna Inst Med Sci Univ. 2012;1(2):7-15.
- 2. Drummond S, Crombie N, Kirk T. A critique of the effects of snacking on body weight status. Eur J Clin Nutr. 1996;50(12):779-83.
- 3. Savige G, MacFarlane A, Ball K, Worsley A, Crawford D. Snacking behaviours of adolescents and their association with skipping meals. Int J Behavioral Nutr Phys Activity. 2007;4:36.
- World Health Organization. Life Course Perspective of Coronary Heart Disease, Stroke, Diabetes. Available at: whqlibdoc.who.int/hq/2001/ WHO_NMH_NPH_01.4.pdf. Accessed on 14 February 2020.
- Kaushik JS, Narang M, Parakh A. Fast food consumption in children. Indian Pediatr. 2011;48:97-101.
- Ganasegeran K, Al-Dubai SA, Qureshi AM, Alabed A, Aljunid SM. Social and psychological factors affecting eating habits among university students in a Malaysian medical school: a crosssectional study. Nutr J. 2012;11(1):1-7.
- 7. Sajwani RA, Shoukat S, Raza R, Shiekh MM, Rashid Q, Siddique MS, et al. Knowledge and practice of healthy lifestyle and dietary habits in medical and non-medical students of Karachi, Pakistan. J Pak Med Assoc. 2009;59(9):650.
- Shree V, Prasad RR, Kumar S, Sinha S, Choudhary SK. Study on consumption of fast food among medical students of IGIMS, Patna. Int J Community Med Public Health. 2018:5:2750-4.
- 9. Vaida N. Prevalence of fast food intake among urban adolescent students. Int J Eng Sci. 2013;2:353-9.
- 10. Manjunatha S, Mishra S. Fast food consumption pattern and obesity among school going (9-13 year) in Lucknow District. Int J Sci Res. 2014;3:1672-74.
- 11. Zhu SP, Ding YJ, Lu XF, Wang HW, Yang M, Wang JX. Study on factors related to top 10 fast

- food consumption at 8 to 16 years of age, in Haidian District of Beijing. Zhonghua Liu Xing Bing Xue Za Zhi. 2008;29:757-62.
- 12. Driskell JA, Meckna BR, Scales NE. Differences exist in the eating habits of university men and women at fast-food restaurants. Nutr Res. 2006;26:524-30.
- Denney-Wilson E, Crawford D, Dobbins T, Hardy L, Okely AD. Influences on consumption of soft drinks and fast foods in adolescents. Asia Pacific J Clin Nutr. 2009;18:447-52.
- 14. Javalkar S, Akshaya KM, Nirgude AS. Food habits and fast food preferences among medical students. Int J Multidisciplin Res Develop. 2015;2(10):556-9.
- 15. Bipasha MS, Goon S. Fast food preferences and food habits among students of private universities in Bangladesh. South East Asia J Public Health. 2014;3(1):61-4.

- Ganasegeran K, Al-Dubai SA, Qureshi AM, Al-Abed A, Aljunid SM. Social and psychological factors affecting eating habits among university students in a Malaysian medical school: a cross-sectional study. Nutr J. 2012;11(1):1-7.
- 17. Kotecha PV, Patel SV, Baxi RK, Mazumdar VS, Misra S, Mehta KG, et al. Dietary pattern of school going adolescents in urban Baroda, India. J Health Popul Nutr. 2013;31:490-6.
- 18. El-Gilany AF, Abdel-Hady DM, Damanawy E. Consumption and knowledge of fast/junk foods among medical students, Mansoura University, Egypt. TAF Prevent Med Bull. 2016;15(5):440-5.

Cite this article as: Nayak RK. Pattern of fast or junk food consumption among medical students of north Karnataka- a cross sectional study. Int J Community Med Public Health 2020;7:1839-42.