

## STUDY OF LIFESTYLE PRACTICES OF STUDENTS OF RURAL MEDICAL COLLEGE, LONI

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### ABSTRACT

**Background:** Since doctors represent a significant human resource within a country, improving and preserving their health, is a form of preservation of a national resource. Doctors generally have difficulty maintaining a healthy lifestyle and good health practices.

**Aims & Objective:** (1) To study dietary habits of the medical students. (2) To study the levels of physical activity. (3) To study the prevalence of addictive habits among the students.

**Materials and Methods:** A cross sectional descriptive study was conducted to assess the lifestyle practices of students of RMC, Loni. Self-structured pre-tested questionnaires were given to 266 students for study purpose.

**Results:** Out of all students that participated in study, 68 (25.56%) were from first year, 93 (34.96%) from second year and 105 (39.47%) belonging to third year. Out of all participants, only 12.78% eat fruits daily. Daily junk food consumption was seen in 24.81% students and more than half (57.14%) tend to skip meals. Out of 92.10% students who perform physical activity in their leisure time, only 31.83% exercise adequately.

**Conclusion:** It is important to emphasize on the value of healthy lifestyles in medical colleges if the students are to value the importance of a healthy lifestyle for themselves and for their subsequent patients.

**Key Words:** Lifestyle Practices; Medical Students; Dietary Habits; Physical Activity

### Introduction

A significant amount of the mortality and morbidity experienced worldwide today is preventable.<sup>[1]</sup> Nearly half of all premature deaths are associated with unhealthy lifestyles.<sup>[2]</sup> Health status and health-related practices such as lifestyle patterns are important predictors of future health, productivity and life expectancy. WHO defines health as a state of complete physical, mental and social well-being and not merely the absence of disease and lifestyle as aggregation of decisions by individuals that affect their health and over which they have more or less control. Healthy living is thus defined as steps, actions and strategies one puts in place to achieve optimum health.<sup>[3]</sup> Since doctors represent a significant human resource within a country, improving and preserving their health, is a form of preservation of a national resource. It is well documented that physicians generally have difficulty maintaining a healthy lifestyle and good health practices.<sup>[4]</sup> Doctors are not able to take proper care of their health which may be due to the stress factors, due to the busy schedule and also due to pure negligence.<sup>[5]</sup> Thus, physicians are often poor role models for preventive health care and a wellness lifestyle. Studies indicate that physicians with better personal health habits are more likely to counsel patients about their health habits and behaviours.<sup>[6,7]</sup> It is therefore

important to investigate health behaviours and continued emphasis on the value of healthy lifestyles is needed in medical school if the students are to value the importance of a healthy lifestyle for themselves and for their subsequent patients and it is of utmost importance to have early intervention programs to prevent non-communicable diseases among these future doctors.<sup>[8]</sup>

### Materials and Methods

It was a descriptive type of cross-sectional study conducted at Rural Medical College, Pravara Institute of Medical Sciences, Loni from November 2013 –January 2013. Students of 1st, 2nd, 3rd year of RMC who consented for participating in the study were included and those who were absent at the time of survey were excluded from the study sample. Purposive sampling method was adopted. Permission was sought from the Ethical Committee of the institute and verbal consent obtained from the study participants after explaining to them the aim of the study.

Data was collected using a pre-tested self-administered questionnaire which included questions related to dietary habits, physical activity and addictive habits of the students. A pilot study was done on 30 students to test the validity, applicability and practicality of the questionnaire. Height was recorded (in cm.) using a non-

stretchable tape and weight was taken (in Kg.) using a weighing machine standing upright and with shoes off. Body Mass Index (BMI) was calculated in kg/m<sup>2</sup>. The questionnaires were checked for completeness, and the data entered in MS excel and SPSS 18 statistical software was used for descriptive and inferential analysis.

## Results

A total of 266 students participated in the study out of which 68 (25.56%) were from 1st year, 93 (34.96%) from 2nd year and 105 (39.47%) belonging to 3rd year. Males were 117 (43.98%) and females were 149 (56.01%). Average age of the participants was 19.75 years with standard deviation 1.58.

Students were classified according to BMI, 15.78% participants were underweight, 63.90% fell into the normal BMI category and 20.38% were found to be overweight [figure 1]. Parents' obesity was also considered for comparison. Significant association was found between overweight students and their parents being overweight. ( $\chi^2 = 6.46$ ,  $p < 0.05$  at 1 d.f.). [Table 1]

When enquired about the dietary habits, it was found that 48.87% students were not eating their breakfast daily. An increasing trend in terms of skipping breakfast was seen over I, II, III years; 33.82% students from first year, 49.46% in the second year and 58.09% students from the third year were skipping their morning breakfast and the difference was found significant ( $\chi^2 = 9.75$ ,  $p < 0.05$ , d.f.=2). Also, a large majority i.e. 87.21% and 74.06% were not eating fruits and green leafy vegetables daily respectively. About 24.81% ate junk food daily. A large number i.e. 42.85% students tend to skip meals due to eating heavy snacks. [Table 2]

It was good to see that about 92.10% students did some sort of physical activity in their leisure time. Though a large number seems to be exercising, only 34.83% of these performed adequate physical activity. [Table 3] However, about 80.14% preferred to walk to nearby places than using a vehicle.

When asked about their addictive habits, prevalence was 17.66% (smoking 6% and alcohol consumption 11.65%). When these addictive habits were compared, a significant rise was seen over the three years. ( $\chi^2 = 11.6$ ,  $p < 0.003$  at 2 d.f.). [Table 4]

Regarding attitude of the respondents, about 70.3% said that the barrier in following a healthy lifestyle was that

they had no time. Whereas about 20% said that it was not that important.

**Table-1: Comparison of weight of students and weight of parents**

Students	Parents		Total
	Normal Weight	Overweight	
Normal Weight	161	51	212
Overweight	31	23	54
Total	192	74	266

$\chi^2 = 6.46$ ; d.f.= 1;  $p < 0.05$

**Table-2: Classification of students according to dietary habits**

Dietary Habits	Yes	No
Eat morning breakfast daily	136 (51.12%)	130 (48.87%)
Eat fruits daily	34 (12.78%)	232 (87.21%)
Eat green leafy vegetables daily	65 (25.93%)	197 (74.06%)
Eat junk food daily	66 (24.81%)	200 (75.18%)
Tend to skip meals	114 (42.85%)	114 (57.14%)

**Table-3: Classification of students according to physical activity**

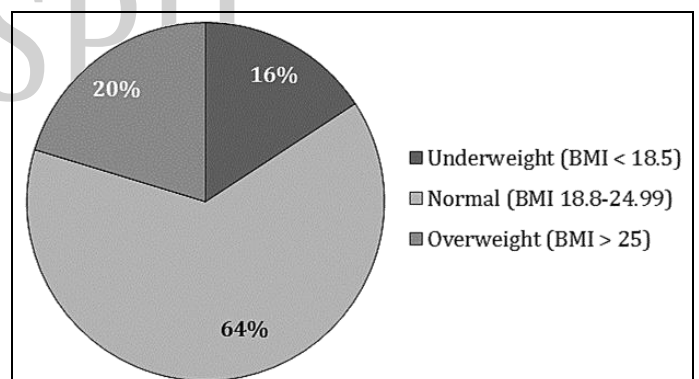
Response	No. of students
Yes	244 (92.10%)
No	22 (8.27%)
Total	266 (100%)

**Table-4: Classification of students according to addictive habits\***

Addictive habits	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	Total
Present	5	14	28	47 (17.66%)
Absent	63	79	77	219 (82.33%)

$\chi^2 = 11.6$ ; d.f. = 2;  $p < 0.003$

\*addictive habits included smoking, alcohol consumption and tobacco chewing.



**Figure-1: Distribution of students according to BMI (kg/m<sup>2</sup>)**

## Discussion

We compared our study with similar studies conducted among medical college students in various parts of India. Prevalence of overweight noted by us was 23.3% whereas a higher percentage (42%) was seen in a study conducted in Bangalore by Gore CA et al.<sup>[8]</sup> This study also reported 86% students who did not eat fruits daily, which was very similar to our study (87%) and clearly not in line with the recommendation of National Institute of Nutrition, Hyderabad which recommends consumption of at least 100 gm fruits per day as they are a good source of micronutrients, carotenes and phytochemicals.<sup>[9]</sup> Irregularity of breakfast was seen in almost half the students. An increasing trend was seen

over the three years in terms of skipping breakfast which was found significant and it may be due to time constraints ( $\chi^2 = 9.75$ ,  $p < 0.05$ ,  $d.f. = 2$ ). Chhaya S et al<sup>[10]</sup> also reported 42% students skipping their morning breakfast. Prevalence of daily consumption of junk foods like salty snacks, fried potato, bakery products, canned food, confectionary etc. was found to be around 25%.

Various forms of physical activities were done by majority of the students in their leisure time, most common being brisk walking and jogging. However a few enjoyed cycling, dancing and yoga. But only 31.83% of these performed physical activity adequately i.e. for more than 3 days a week and till it caused substantial increase in breathing, heart rate and sweating. This may be due to either time constraints or lack of knowledge of proper exercising. These results vary widely from Bangalore study showing 70% students performing some sort of physical activity. A study conducted in southern India by JP Majra<sup>[7]</sup> showing only 25% students exercising. Breakfast and meal skipping tendency and inadequacy of physical activity may be attributed to time constraints, busy schedule or mere casual approach towards these lifestyle practices.

Prevalence of addictive habits was found to be somewhat similar in the study conducted in Bangalore (10%), whereas, a higher percentage was seen in the study by Majra JP reported prevalence of smoking among 26% and alcohol consumption among 43% students. A significant rise was seen when addictive habits were compared over I, II, III year students, which may be attributed to either increasing levels of stress or greater level of peer influence ( $\chi^2$  trend value = 11.6,  $p < 0.003$  d.f. 2).

## Conclusion

A majority of the students consider their lifestyle to be healthy. However the results show a different scenario. Breakfast skipping tendency, not eating fruits and vegetables daily, tendency to skip meals due to junk food consumption was seen in quite many students. Also, physical activity done was inadequate in majority of the

students. The prevalence of addictive habits shows an increasing trend over the three years.

## Recommendations

The findings of this study suggest that there should be inculcation of healthy habits right from home. As significant association was seen between students and their parents being overweight, parents should first follow a healthy lifestyle and be a role model for their children. Health education must be given to the students emphasizing on lifestyle related non communicable diseases, adverse consequences of addictive habits and should be guided to balance healthy lifestyle practices with their busy schedule. A dietary counsellor and a fitness trainer should be made available whenever needed. It is of utmost importance to have early intervention programs among these future doctors to value the healthy lifestyle for themselves and for their subsequent patients.

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