

Original Research Article

Hostelites of medical college: A Health Reality

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Abstract: Medical students give least priority to their health. They are at high risk of developing plethora of diseases. The aim is to study the Health profile of students and interns residing in the hostel of Terna medical college. The objective is to assess the BMI. To assess the Knowledge, Attitude and Practice of participants regarding their nutritional choices and eating habits. 120 students and interns residing in hostel were examined. A pretested semi structured proforma was designed. 24 hour calorie consumption was calculated. BMI and waist hip ratio were assessed. Systemic examination was done. Knowledge, attitude and practice on nutritional choices and eating habits were assessed & the data was analyzed. 7.85% participants were underweight, 63% normal weight & 24.16% were overweight. 3.33% belonging to Obese Class -1. 1.66% belonging to obese class-2. Waist hip ratios showed that 41% male participants & 65% female participants had high waist hip ratio. 49 % participants sometimes made healthy food choices, 39 % participants frequented whereas 12 % always chose healthy food every day. 12 % had junk food every day, 31 % had 3-5 times a week, 33 % had 1-3 times a week and 24% of the participants had junk food once a week. 26 % don't take breakfast whereas 74% participants take breakfast. 45% participants less frequently fell ill, 11 % most of the times & 44 % did not fall ill after consumption of fast food.

Keywords: Health profile, Medical students, BMI, Waist: Hip Ratio, Junk food

INTRODUCTION AND RATIONALE

Health of medical students staying in hostels is always at stake pertaining to their hectic schedule and exposure to patients. This study was conducted amongst the medical students and interns of Terna Medical College. There is increasing burden of cardiovascular risk amongst students, unhealthy eating practices add to more risk and the risk may progress as student advances at medical colleges. Developing strategies, targeting at the risk behavior and determining factors are necessary to promote healthy life styles amongst medical students. Life style related behavioral risk factors are mainly studied because of increased burden of obesity[1].

A pre designed questionnaire was developed to collect the information on identification data, socio economic status, anthropometry, general examination, systemic examination, calorie consumption in the last 24 hours. Anthropometric measurements including height, weight, Waist circumference and hip circumference were measured. BMI was calculated, waist hip ratio was assessed. Risk of obesity & related

diseases were found out. BMI values are age-independent and same for both the sexes. The health risks associated with increasing BMI are continuous and the interpretation of BMI grading and waist circumference is the commonly used parameters to evaluate obesity. General examination including temperature, blood pressure was done. Study has shown that doctors with healthy personal lives are more likely to impart more healthy behavior to their patient. The rationale behind this study is that such kind of study was never done before in the hostel of Terna medical college. With this study, current health status of students and interns residing in the hostel is highlighted. It also underlines their eating habits and their choice of having nutritional food. We can assess whether there is practical application of the knowledge they possess.

AIM

To study the Health profile of the participants residing in the hostel of Terna medical college

OBJECTIVE

- 1) To assess the BMI of the participants.
- 2) To assess the Knowledge, Attitude and Practice of the participants regarding their nutritional choices and eating habits.

METHODOLOGY

1) **Sample size:** 120 students and interns residing in hostel of Terna medical college

2) **Setting:** Terna hostel Nerul, Navi Mumbai

3) **Study design:** Cross sectional study.

Study Period: Students and interns staying in the hostel in the month of January to August 2015.

4) **Inclusion criteria:** All medical students and interns of Terna medical college who were willing to participate.

5) **Exclusion criteria:** Non willing medical students & interns, Engineering students, Dental and Physiotherapy students

6) **Study procedure:** A pretested semi structured proforma was designed and presented to students and interns residing at hostel. Basic information like identification data and 24 hour calorie consumption was calculated. BMI and waist hip ratio was assessed. Systemic examination was done.

Knowledge, attitude and practice on nutritional choices and eating habits were assessed on the basis of questionnaires.

7) **Statistical Analysis:** Excel package of Microsoft office and Epi Info version 7.2 were used.

RESULTS & DISCUSSION

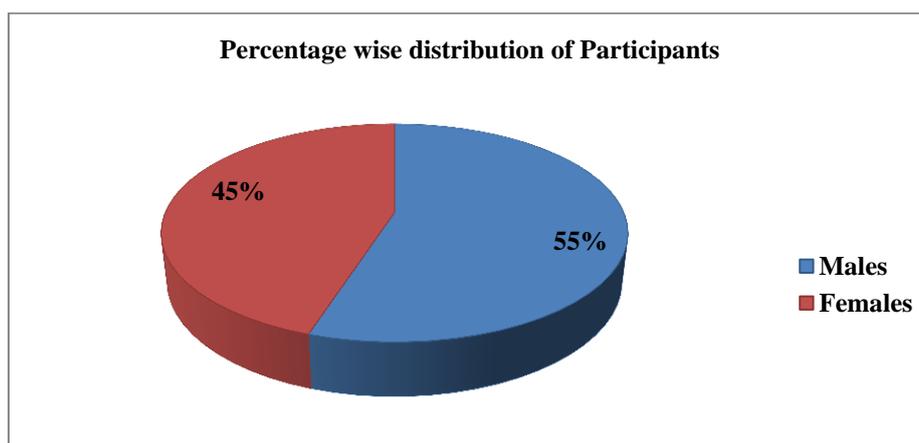


Fig 1: Percentage wise distribution of Participants

Figure 1 shows the percentage wise distribution of participants. There were 120 participants including interns and medical students of which 55%

(66) were male's participants and 45% (54) female's participants. The age group is ranging from 18 years to 25 years.

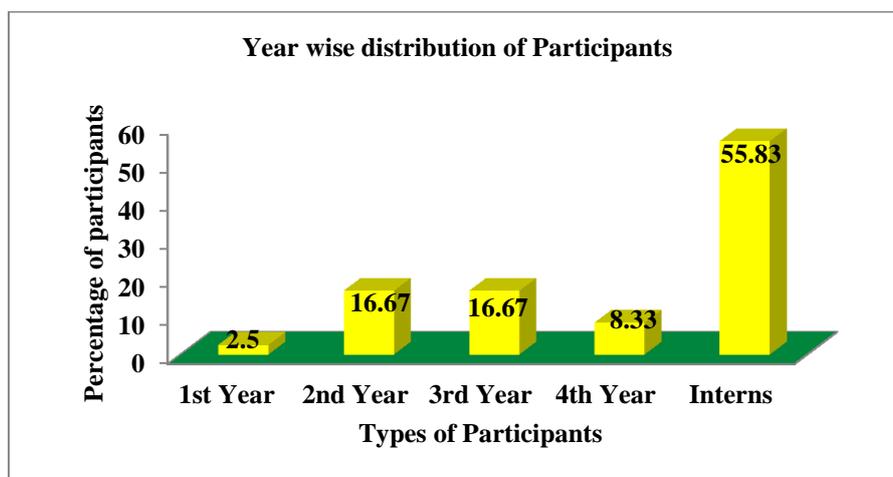


Fig 2: Year wise distribution of Participants

Table 2 shows year wise distribution of participants. The study population comprised of 55.83% interns (67) and 2.50%(3) 1st year students, 16.67%

(20)each were 2nd & 3rd year students & 8.33% (10) 4th year students respectively.

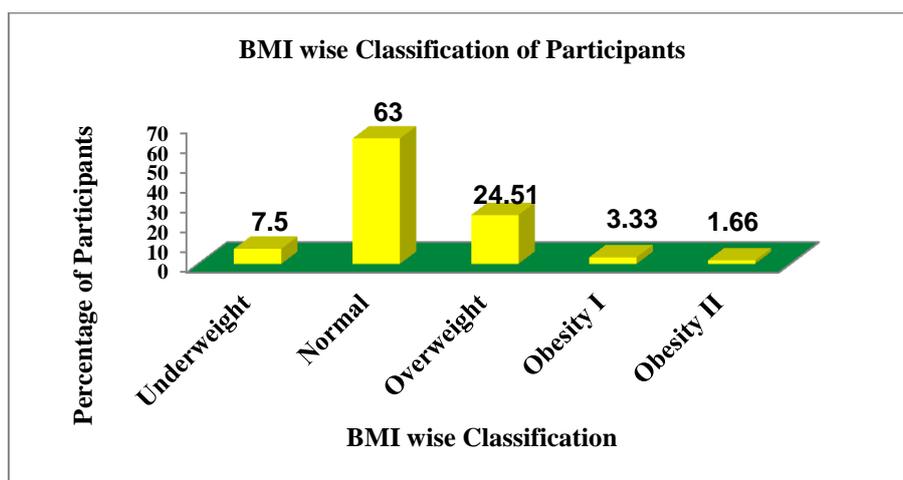


Fig 3: BMI wise classification of Participants

Table 3 shows BMI wise distribution of participants. Body Mass Index (BMI) is a simple index of weight for height that is commonly used to classify underweight, normal weight, overweight and obesity in adults. It is defined as the weight in kilograms divided by the square of the height in meters (kg/m^2).The BMI

was calculated according to the WHO classifications [1]. In our study, 7.5% participants were underweight, 63% participants had normal range of BMI (18.5 to 24.99). 24.51% participants were overweight. 3.33% fell in the category of obese class I and 1.66 % was of obese class II.

Table 4: Waist: Hip ratio in males & females

Waist-to-Hip Ratio (WHR) Norms				
Gender	Excellent	Good	Average	At Risk
Males	<0.85	0.85–0.89	0.90–0.95	≥0.95
Females	<0.75	0.75–0.79	0.80–0.86	≥0.86

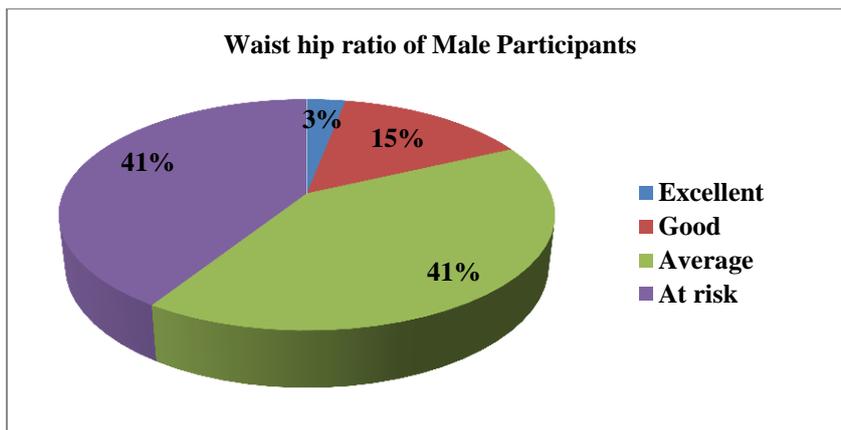


Fig 5: Waist: Hip ratio of Male Participants

Figure 5 shows waist hip ratio of male participants. The pie chart of waist hip ratios of males shows that out of 66 male participants, only 3 % (2) had excellent waist hip ratio. 15 % (10) had good waist hip ratio. 41 % (27) of them had average ratio and 41 % (27) participants were at risk.

Waist hip ratios of males and females were assessed separately. They were assessed by using a non-

stretchable tape. Waist circumference was measured at the midpoint between the lower margin of the last palpable rib and the top of the iliac crest whereas hip circumference was measured around the widest portion of the buttocks, with the tape parallel to the floor. This was done according to the standards set by WHO [2]. Then according to the waist hip ratio, norms assessment was done.

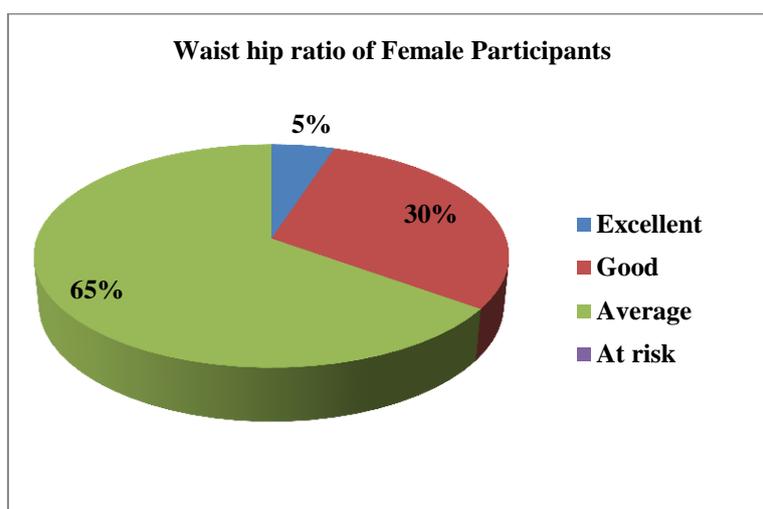


Fig 6: Waist: Hip ratio of Female Participants

Figure 6 is a pie chart of waist hip ratio of female participants. Out of 54 female participants, not a single had excellent waist hip ratio. Only 5% (3) of them had good ratio while 30% (16) females had average waist hip ratios. And whopping 65% (35) females participants had >0.86 waist hip ratio, they were falling into risk category.

DISCUSSION

Knowledge, attitude Practice (KAP) study of participants was undertaken. A questionnaire was presented to the participants and their perception of being healthy, underweight, obese were as follows. 2.5% (3) of the participants considered themselves to be obese. But on examination 5% of the individuals who underwent BMI assessment were obese. 18% (22) considered themselves to be overweight whereas after assessment there were 24.16% of the participants who were actually overweight. 71% (85) participants had a perception that they were healthy but after actual assessment of BMI 64% fell in the normal range. Only 8% (10) of the participants felt that they were underweight but after actual assessment they were 7.5% of the total members who had BMI less than 18.5 showing difference between perception & reality. Snehideep *et al.*; [5] also found difference between perception & reality of obesity in his study. 48% (58) of the study subject's diet consisted of vegetarian food and 52% (62) had a preference for non-vegetarian food showing slight higher preference for non-vegetarian diet. Suresh *et al.*; [6] found almost equal preferences for veg & non-veg food in his study.

22.5% (27) Participants perceived that there was obesity running in their family and 77.5% (93) participants considered that their family members were of normal weight. This analysis was specifically done to find out whether those who consider themselves to be obese/overweight are actually obese/overweight because of their family having a specific diet. And most of them who considered they to be obese also felt that their family members were obese. This may partly be due to continuation of wrong eating habits from your parents. Kevin *et al.*; [7] also found similar findings in their study.

It was observed that, 24% (29) participants eat fast food once a week. 33% (40) participants have junk food 1-3 times a week and 31% (37) people have junk food 3-5 times a week. And 12% (14) participants have junk food every day. Kumar *et al.*; [10] also found similar findings. In contrast, Nisar *et al.*; [9] found 96% of medical students consuming junk food. These are the ones who are more prone to develop obesity in future.

This questionnaire was specifically set up to find out that in spite of being health professionals how many actually implement on the knowledge they possess. Fast-food meals often provide energy-dense, nutrient-poor food, cheaper in cost food.

The attitude and practice of the students and the interns on eating habits was determined by their healthy food choices. 49% (59) of the study members sometimes made healthy food choices. And 39% (47) of the study members frequently tried to include nutritional food in their diet in order to gain energy and prevent themselves from nutritional deficiencies. Only 12% (14) members always made it a point to include healthy food in their diet which contained a balanced diet. Gopalakrishnan *et al.*; [11] also had similar findings. The increased prevalence of obesity/overweight was attributed to their increased junk food consumption. Dietary habits have a great influence on morbidity and mortality in life and due to the cumulative effect of adverse factors throughout life of an individual.

We found out that, considerable number that is, 74% (89) of the total participants made it a point to start their day with heavy breakfast in order to boost their immunity whereas only 26% (31) started their day without having a breakfast. This data was an indicator about their practice of having healthier diet as people who eat breakfast on a regular basis tend to eat a healthier diet overall. In contrast to our study, Sajjad *et al.*; [12] found it other way round. Skipping breakfast has been associated with lower nutritional status and an increased risk of developing cardiovascular diseases and obesity in the future. Breakfast is often the most important meal of the day as it is known to provide energy for the brain and improve learning [13]. It is also known to contribute significantly to the total daily energy and nutrient intake. Skipping breakfast may affect performance during the rest of the day. We have to advise them to do life style modifications by inculcating good eating habits to control overweight & obesity.

Orchid Number: ORCID ID. orcid.org/0000-0002-0658-5033

Acknowledgement: We sincerely acknowledge Mr. Abhiram Behera for his statistical assistance. Interns Dr. Ibrahim, Dr. Neha, Dr. Sania, Dr. Chetan, Dr. Mitul, Dr. Hareesh for their timely help.

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