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Obesogenic Environment In The Medical Field:

First-Year Findings From A 5-year Cohort Study

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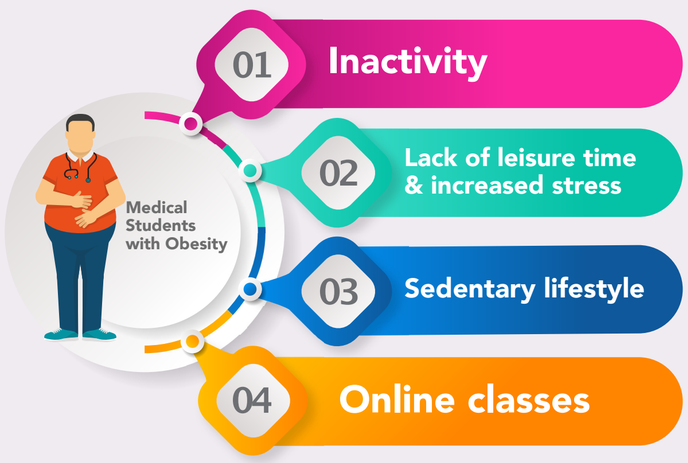
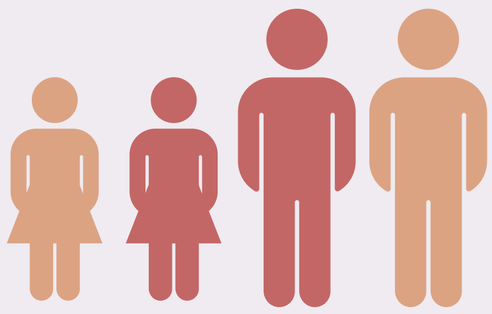
Introduction

Medical students are more prone to obesity and weight gain due to significant exposure to the obesogenic environment such as ***physical inactivity, lack of leisure time, sedentary lifestyle, and increased stress*** due to vast topics to learn as they progress towards clinical year. This situation is believed to worsen as the implementation of Movement Control Order (MCO), and online classes due to the pandemic have again favored the obesogenic environment and drive-up Malaysia's obesity rate to an alarming rate.



Today, ***every 1 out of 2 (50.1%) Malaysian*** are either overweight or obese, which showed nobody is immune to the obesogenic tendencies, ***including doctors and medical students.*** It is devastating yet important as medical students are future doctors who are the general community's role model to maintain a healthy lifestyle. Doctors with a normal BMI and healthy living habits have shown to be more confident and effective in providing realistic guidance and obesity management to their patients



Objectives

1. To determine the prevalence of obesity among Taylor's University year one medical student as they progress towards clinical year.
2. To compare the changes in BMI of the medical students over a year.
3. To study the effect of long-term online classes during MCO and risk factors associated with BMI among the medical students.

Methodology

1. Follow-up data were collected using a standardized self-administered questionnaire which includes socio-demography and anthropometry information, accommodation, eating behavior, stress and sleeping habits of the students. (n = 49)

2. Data analysis was done via IBM SPSS version 25.
   - Frequency, mean, and standard deviation were used to summarize the descriptive data.
   - GEE, ANOVA one-way and GLM multivariate analysis were employed to analyze analytical data

Results

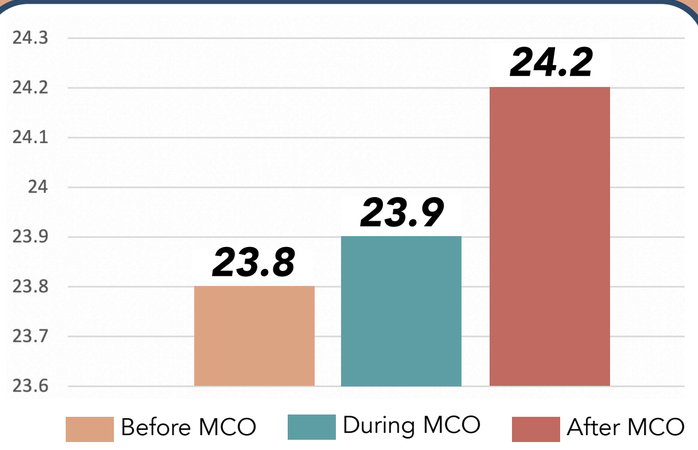


Figure 1: Increased BMI among the male medical students over the year.

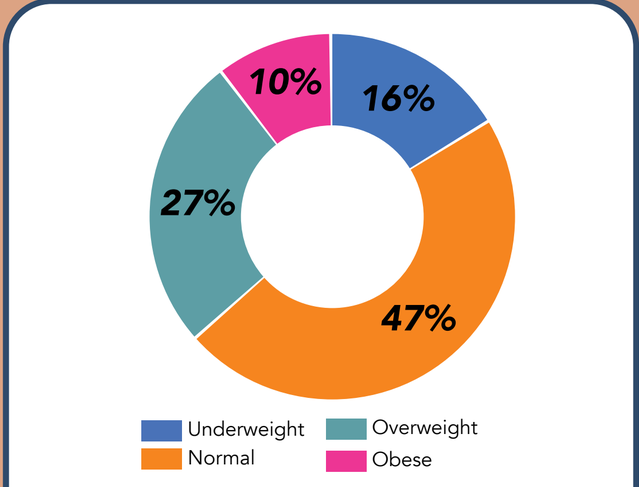


Figure 2: Total distribution of body weight based on WHO Asian cut-off value.

- 37% of the medical students in the cohort have become either obese or overweight in the one-year period.
- A statistically significant increase in BMI over the year was noted in the males (P = 0.008).
- Changes in accommodation, stress and sleeping habit were significantly associated with BMI changes (P < 0.05)

Conclusion

A year of follow-up suggests that the prevalence of obesity and overweight in Taylor's University year one medical student as they progress towards clinical year is considered high with 37%, which poses a significant threat as, throughout the three studies, the prevalence values were all above 30%. There is also an observed significant increase in male BMI over the year. The positive correlation between changes in accommodation, stress, and sleeping habit with BMI were being established in this study.

Therefore, we hope that all medical students can practice a balanced diet, healthy lifestyle, have adequate sleep and exercise regularly to reduce the prevalence of obesity and overweight in the future.

Acknowledgment

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