The transition of nutritional status at first year medical students during e-classes

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Backgrounds and objectives: The second wave of COVID-19 pandemic is resulting in second lockdown at Indonesia. This results in classes to only be allowed in online. It may lead to obesogenic situation. Obesity is the first comorbid factor for COVID-19 complications dan mortality. We aim to investigate the nutritional status and its related factor at medical students after a year of e-classes.

Methods: It was a cross sectional study at Faculty of Medicine Universitas Islam Indonesia. There were a total of 100 eligible subjects. First, all subjects received some procedures by zoom meeting. The three days food record was used to assess dietary intakes. Global physical activity questionnaire (GPAQ) was distributed to assess their physical activities.

Results: Most of students got a positive transition of nutritional status. There were 63% gained weight, 31% lost weight, 6% did not have weight change. Median of weight change was 3 (-24 – 30)kg in March 2020-May 2021. The number of obesity raised to 11%. The intakes of energy, protein, lipid in students were higher than RDA. For all, their sedentary time was 9 (4-23) hours per day and 55% students did light physical activity. All of raised weight students ate more (p<0,05) energy and lipid, either lower physical activity rate.

Conclusion
The nutritional status of students worsened during e-classes. The follow-up assessment of nutritional status might be needed in six-month or one year later. In the meantime, the healthy lifestyle promotion to students studying online may be necessary.

Keywords: obesity, covid-19 pandemic, young adults

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