

Fitness behavior related with body mass index and oxygen saturation level during new normal stage

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ABSTRACT

This study aims to determine the relationship between living habits during new normal period on (1) body composition and (2) blood oxygen levels after cycling while wearing a mask. This research is a multicenter study between Indonesia and Malaysia, where the data presented here comes from Indonesia, especially DI Yogyakarta region, involving an analytical observational study using a cross sectional approach. The study was obtained as many as 71 research subjects. The instruments used to collect data were fitness behavior during the pandemic (exercise frequency and duration), anthropometric and oxygen saturation measurement after cycling during pandemic. Body composition is obtained through a BMI formula that involves height and weight. While the level of oxygen levels during cycling is measured by Pulse Oximeter FOX-1(N), Elitech Technovision. The largest percentage of cycling is twice a week (42.25%), followed by three, one, fifth and fourth times a week. With the majority of the duration being on cycling for 120 minutes (35.21%), then followed by a duration of 180 minutes, 60 minutes, 30 minutes, and so on. Oxygen saturation data shows that most subjects have oxygen saturation of 98% (47.8% of respondents), none of them have 100%, but 97% saturation, 96% occupying the second and third distributions. From primary data that has been obtained in Indonesia, only saturation and duration of cycling have a very significant relationship ($0.009 < 0.01$), while other variables do not have an enormous correlation from another potential components such as BMI and cycling frequency. It can be concluded that there is a significant relationship between exercise or cycling duration toward oxygen saturation in Indonesian subjects.

Kata Kunci: cycling, physical activity, fit behavior, body composition, oxygen saturation, exercise and pandemic.