



The effect of male body mass index (BMI) on COVID- 19 disease infection

Poster Presentation

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Abstract

Introduction: Since the outbreak of COVID- 19 virus and the rise in concerns, researchers have been investigating risk factors of this disease. One of the factors affecting the hospitalization of influenza patients is high BMI; Due to the relation between Covid 19 disease and influenza, the aim of this study was to investigate the effect of BMI on the incidence and severity of COVID- 19 patients.

Methods: The height and weight of 128 men referred to the school were measured and a general questionnaire was completed by them. Then the men's BMI was calculated. According to the data, three groups of "appropriate weight", "overweight" and "obese" were identified and the prevalence and severity of their disease were recorded. For data analysis, chi2 test was used in SPSS26 software at a significance level of $p = 0/05$.

Results: Prevalence of COVID-19 infection in the group with "appropriate weight", "overweight" and "fat" were %56, %61 and %58 respectively. There was no significant difference between the infections. Mild infection was reported in the above three groups, 27%, 27% and 26%, moderate infection was 22%, 26% and 26% and severe infection was 7%, 8% and 5%, respectively. Also, there was no significant difference between the severities of infection in groups.

Conclusion: Obesity has a negative effect on the immune response and lung function, and the rate of hospitalization for the influenza is higher in obese people. But there was no significant difference between men with different BMIs in Covid 19 and the severity of the disease. However, due to the relation between obesity, cardiovascular disease, diabetes, and the vulnerability of these patients to the COVID-19 virus, as well as the vulnerability of obese patients to infection, serious attention is necessary to prevent these individuals from COVID-19.

Keywords

COVID-19; BMI; Obesity

Reference:

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