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Letter to the Editor

Letter to Editor: Association of body mass index with COVID-19 related in-hospital death

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Dear Editor,

We carefully read the article by Bouziotis and colleagues describing the importance of body mass index (BMI) in Coronavirus Disease 2019 (COVID-19)-related hospital deaths with great interest [1]. According to the results of the study, being obese, overweight, and normal-weight were associated with decreased risk of in-hospital mortality when compared to being underweight. While there are numerous studies in the literature examining the relationship between BMI and the risk of death in hospitalized COVID-19 patients, this study emphasized the protective effect of being overweight, unlike previous information [2]. However, there may be some residual confounding factors when interpreting the results of the study.

Even though the mean age of the participants of the study was 60 ± 16.2 years, the authors didn't provide the details of the proportions of the patients aged 65 years and older in each BMI group. Two consequences of this situation should be considered when evaluating the study. First, the most common group that died due to COVID-19 is the advanced age group [3]. Second, in Europe, which provided the highest patient contribution to the present study, the ratio of death due to COVID-19 in older adults (≥ 70 years) is 86.6% [3]. Considering that the mean age of the study was 60 years and the primary outcome was death, underrepresentation of the geriatric age group may have affected the results.

Another important issue is the possible coexistence of sarcopenia and obesity. Sarcopenic overweight and sarcopenic obesity (SO), which are important subheadings of sarcopenia, can be seen in all age groups, especially in older adults [4]. It is stated that SO could be associated with the severity of the disease and death in COVID-19 patients [5]. Muscle mass and muscle strength, which are the components of sarcopenia, should be used together with BMI, and it should be taken into account when evaluating the results of the study.

In brief, this impressive report provides the data showing the role of BMI in assessing the risk of death in hospitalized COVID-19 patients. With the clarification of the specified points, the results of the study will be interpreted more accurately.

Author contribution

Serdar CEYLAN: Methodology, Writing, Original Draft Preparation, Review.

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Conflict of interest

The authors declare that they have no conflict of interest.

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