Others

[MSB-63]

The Demographic Impact of Coronavirus Disease 2019 on Open Heart Surgery: A Cardiac Center Perspective

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Objective: This study aimed to present the demographic changes from the pre-COVID-19 (coronavirus disease 2019) pandemic period to the postpandemic period.

Methods: In this retrospective study, 12,409 cases of adult open heart surgery performed between March 2018 and March 2024 were reviewed. The cases were divided into three groups: the pandemic group spanning from March 2020, when the pandemic was declared, to March 2022, when pandemic restrictions were lifted in Türkiye; the prepandemic group from March 2018 to March 2020; and the postpandemic group from March 2022 to March 2024. The cases were statistically analyzed based on parameters such as age, sex, weight, height, body mass index, body surface area, surgical timing, and procedure type.

Results: Statistically significant increases in mean age were observed for cases before, during, and after the pandemic (p<0.05). In the pandemic group, the proportion of male patients, isolated coronary bypass surgeries, and emergency surgical procedures were significantly higher compared to the prepandemic and postpandemic groups (p<0.05). Additionally, the rate of combined complex surgery with coronary bypass significantly increased after the pandemic compared to before and during the pandemic (p<0.05).

Conclusion: The age of cases undergoing open heart surgery has advanced over time. The increase in the rate of emergency surgical procedures and coronary bypass surgeries after the pandemic suggests both direct and indirect effects of COVID-19.

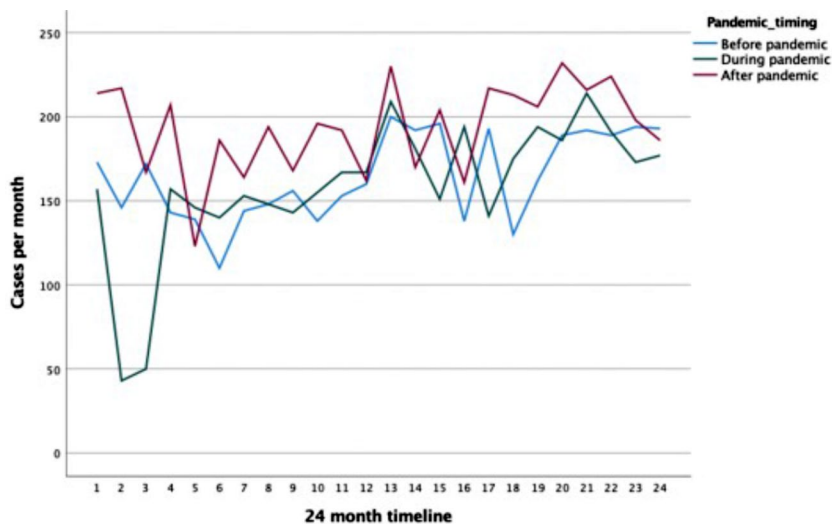**Keywords:** Cardiac surgery, COVID-19, demographic.

Figure 1. Case count by timeline.