

## DETERMINATION OF IRON DEFICIENCY RATES IN MALE PATIENTS WITH DEPRESSIVE DISORDER: PRELIMINARY RESULTS

Merve Şahin Can, Rıza Gökçer Tulacı, Çiğdem Kaçkan

*Balıkesir University Health Practice and Research Hospital, Balıkesir, Türkiye*

**BACKGROUND AND AIM:** Iron deficiency may play a role in the aetiology of psychiatric disorders due to its role in neurotransmitter synthesis. Major depressive disorder is associated with low serum transferrin and iron levels. When the literature studies are analysed, there are few studies conducted in the adult male population. Generally, children, women and elderly populations have been focussed on. Therefore, with this study, we aimed to obtain data on young and middle-aged male individuals who are less studied.

**METHODS:** In our study, the files of 1348 male patients aged 25-60 years who applied to Balıkesir University Mental Health and Diseases Outpatient Clinic with various complaints between 01/01/2023 and 01/01/2024 were retrospectively scanned, 460 of them were diagnosed with depressive disorder and serum iron level was requested from 123 of them. Patients for whom Fe levels were requested were divided into young age (25-44) and middle age (45-60) as defined by WHO (2015) and compared in terms of the rates of concomitant low serum Fe levels. (Ethics committee approval: 02/04/2024- 2024/56)

**RESULTS:** The rate of being diagnosed with depressive disorder in young and middle-aged male patients admitted to psychiatry outpatient clinic was 34.1% (460/1348), and the rate of low Fe level was 39.8% (48/123) in 123 patients in whom Fe level was requested. This rate was 32% (24/32) in the 25-44 age group and 50% (24/48) in the 45-60 age group. There was no statistically significant difference between the groups in terms of the rate of iron deficiency ( $P>0.05$ ).

**CONCLUSIONS:** In our study in which we examined the relationship between depressive disorder diagnosis and iron deficiency in adult men, iron deficiency was found to be 40% and this rate was higher than the literature. In addition, it is noteworthy that there was no significant difference between the young male age group and the middle-aged male group. Therefore, it is recommended to add iron supplementation to the treatment in appropriate patients.

**Keywords:** Iron deficiency, major depressive disorder, young male patients.