Gender Differences, Psychiatric Impact of Covid-19 Infection: A Prospective Study

Mondino Claudia¹, Bartolomei Giuseppe¹, Lorenzini Luca¹, Isabella Luisa¹, Gramaglia Carla Maria^{1,2}, Zeppegno Patrizia^{1,2}

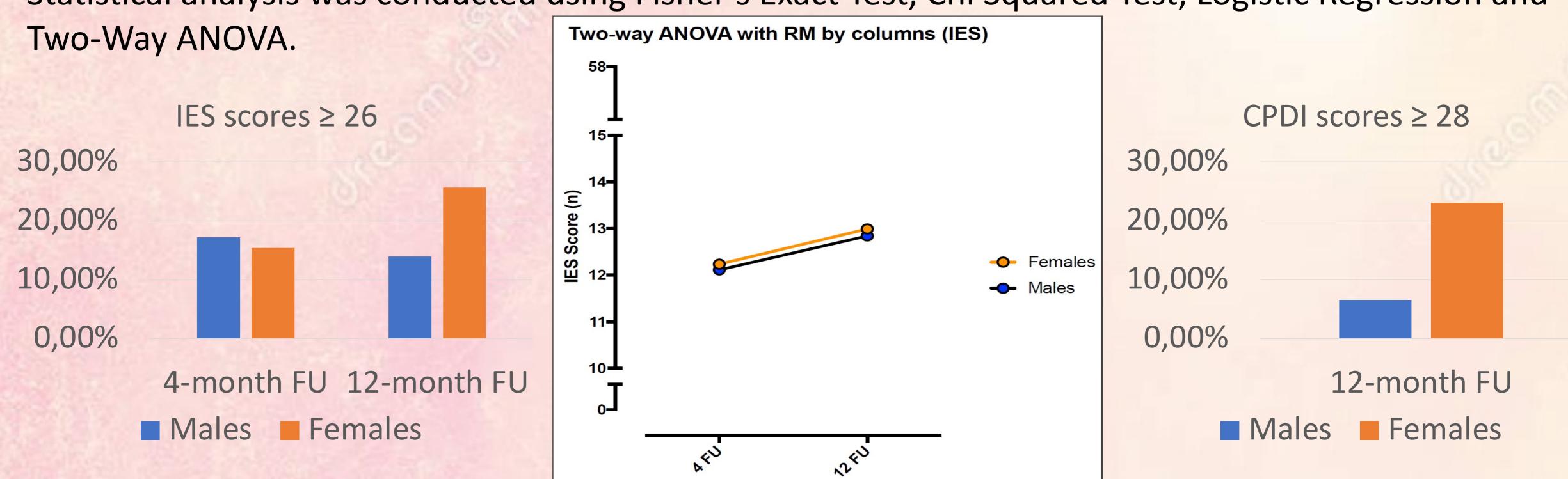
¹Translational Medicine Department, Piemonte Orientale University, Italy; ² SC Psychiatry, AOU Maggiore della Carità, Novara, Italy

Background: In addition to the primary clinical manifestations of Coronavirus disease (COVID-19), psychiatric symptoms are common and can last after full recovery from physical manifestations ¹. Moreover, psychiatric symptoms seem to affect more females than males ²; ³. The aim of this study is to investigate sex differences in mid- and long-term mental health outcomes of patients recovered from COVID-19, at follow-ups of 4 and 12 months after discharge from the University Hospital Maggiore della Carità, Novara, Italy.

Methods: We collected data at 4-month and 12-month follow-ups, using:

- Clinical interview performed by an experienced psychiatrist, trained in the use of the Mini-International Neuropsychiatric Interview to assess the presence of anxiety and depressive symptoms;
- Impact of Event Scale (IES);
- Covid-19 Peritraumatic Distress Index (CPDI);

Statistical analysis was conducted using Fisher's Exact Test, Chi Squared Test, Logistic Regression and



Results: Prospective study involving 200 individuals recovered from COVID-19, of whom 78 were females, mostly aged >30 years-old and with a proportion of depression-anxiety diagnosis (prior to Covid-19 infection) between female and male respectively of 7:1. As the IES is concerned, at 4-month follow-up 15.38% of women showed moderate to severe impact scores (cut-off = 26), compared to 17.21% among men's group; this result is not reconfirmed at 12-months follow-up, in which 25.64% of women had moderate to severe IES scores, compared to 13.93% in men. Furthermore, the progression of the totality of IES scores (from 4 to 12 months) in men and women –considered as two different populations-- resulted not to be significatively different. Regarding CPDI at 12-month follow up, 23.08 % of women resulted to have mild to severe Covid-19-related distress (cut-off=28), compared to 6.56% of men. We also analyzed the psychiatric interview at 12-month follow-up, which revealed that female gender was positive predictor of anxious symptoms (p<0.05). Female gender was also correlated to the presence of depressive symptoms (p<0.05), although gender variable appeared to have less impact on the presence of depressive symptoms than it has for anxious ones, as showed by logistic regression.

Conclusions: It appears that, 12 months after Covid-19 infection, women are more likely to present signs of traumatic impact distress, as well as anxious and depressive symptoms compared to men. Although men and women show a similar increasing trend of impact scores from 4 to 12 months after Covid infection, among those with moderate to severe scores, only men present a descending trend, indicating clinical improvement. These results indicate that women have a more important risk of maintaining psychiatric sequelae of Covid-19 infection at mid- and long-term follow-ups than men.

References:

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Contatti: claudiamondino2@gmail.com patrizia.zeppegno@med.uniupo.it