

GENDER ANALYSIS ON COVID-19 DATA IN PIEMONTE: THE VIRUS PREFERS MEN

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BACKGROUND: Several important gender differences in clinical manifestation and response to treatments for many diseases are known since a long time, although they continue to be underestimated and not really considered in clinical practice. The recent Covid-19 pandemic has provided a further evidence of the importance of gender-based approach. Many fields of study, such as medicine, law, psychology, sociology, as well as sciences applied to data analysis, highlight the importance of a gender perspective in studying the effects of the Covid-19 pandemic, and the actions to contain it. The gender factor is present also in this health crisis: Covid-19 mainly affects men, with a worse symptomatology and a general exacerbation of the disease. Mechanisms underlying these gender differences are varied (including socio-behavioral, immune and viral factors) and not yet fully clarified. Aim of the work was to analyze data on Covid-19 testing in Piedmont region, northwest of Italy, from people admitted to Amedeo di Savoia hospital, regional referral center for infectious diseases.

METHODS: Data are referred to a period of two months (March-April 2020), i.e. the beginning of pandemic. We performed analysis on 38018 testing records: 77.99% was suitable (N = 29653) and 22.01% (N = 8365) was not evaluable (empty, not received or still awaiting results).

RESULTS: Among suitable sample, N = 21466 was negative for Covid-19 testing (about 72.3%) and N = 8187 was positive for Covid-19 testing (about 27.7%). Of suitable sample, N = 26361 was attributable to unique subjects; on this number we performed disaggregation by sex: 10208 were males (about 38.7%) and 16153 females (about 61.3%). Median age for males was 57 (range 0-101); median age for females was 54 (range 0-111). At the symposium we will show analyses performed on the suitable sample concerning local distribution of data, recurrence of Covid-19 testing in the same person and correlation of testing with motivation for hospital admission (i.e. first symptoms, health surveillance, disease monitoring), always in a gender perspective.

CONCLUSIONS: Time is ripe: gender approach should be recognized as pivotal part of the medical knowledge. Medicine without any categorization by sex and gender is methodologically incorrect. National and international health policies are still likely to be flagged as partial and discriminatory if they do not take account of the cultural and scientific implication of gender-specific medicine. A gender-based approach to clinical practice also in the context of this pandemic seems to be mandatory, as it could significantly contribute to health promotion by improving the effectiveness of diagnostic and/or therapeutic approaches and, therefore, leading to important benefits primarily for the patients but also for the sustainability of the National Health System.