The impact of COVID-19 lockdown on admission to gynecological emergency departments: results from a multicenter Italian study

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Abstract

Objective: To evaluate the impact of COVID-19 lockdown on admissions to gynecological emergency departments (ED). Design: Retrospective study. Setting: 3 different Ob-Gyn EDs of University Hospitals with a similar catchment area: Modena (Emilia-Romagna), Sassari and Cagliari (Sardinia), with different COVID-19 incidence rates. Population: Women who have performed a gynecological ED admission. Methods: Evaluated periods were November 2019 (1st-30th) (N2019) and March-April 2020 (11th March-9th April) (MA2020). Main Outcome Measures: number, indication and management of ED admissions in N2019 and MA 2020. Results: A total of 691 women (mean age: 38.3±14.3 years old) have been included. The relative decrease in the number of women evaluated in MA 2020 in comparison to N2019 was: -56.6% (95% CI 52.2%-61.1%), similar between Modena [-62.5% (95% CI 55.4%-79.4%)] and Sassari [-65.6% (95% CI 57.7-72.9%)] (p=0.68), significantly milder but still present in Cagliari [-36.2% (95% CI 27.9-45.2%)] (p=0.001). Time in ED was also significantly longer in N2019 in comparison to MA2020 (p=0.02). The most evident decrease was observed for pelvic pain indication [-68.9% (95% CI 60.3-76.7%), -91 cases], the mildest for problems related to first trimester of pregnancy [-33.6% (95% CI 25.9-41.9%)]. The management of women suggests a more effective use of ED by patients, with higher rates of hospitalization (p=0.001) and recourse to emergent surgeries (p=0.005), lower rates of discharge at home (p=0.03). Conclusions: COVID-19 lockdown greatly reduced the admission rate to gynecological EDs but the real urgencies were filtered from the more deferrable ones.

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