

The mystery of “missing” visits in an emergency cardiology department, in the era of COVID-19.; a time-series analysis in a tertiary Greek General Hospital

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Main findings

Daily number of visits at the EDC and admissions to Cardiology Wards and Intensive Care Unit of a tertiary General Hospital, in Athens, Greece, were retrieved from hospital’s database (January 1st – April 30th 2018, 2019 and 2020). A highly significant reduction in the visits at EDC of the hospital during March and April 2020 was observed as compared with January and February of the same year (p for linear trend <0.001); in particular the number of visits was 41.1% lower in March 2020 and 32.7% lower in April 2020, as compared to January 2020. As the number of confirmed COVID-19 cases throughout the country increased (i.e., from February 26th to April 2nd) the number of visits at EDC decreased ($p=0.01$), whereas, the opposite was observed in the period afterwards ($p=0.01$).The number of acute Myocardial infarctions (MI) cases in March 2020 was the lowest compared to the entire three year period ($p<0.001$); however, the number of acute MI cases in April 2020 was doubled as compared to March 2020, but still was lower than the preceding years ($p<0.001$).

Figure 1. Monthly unscheduled visits at the EDC of a tertiary General Hospital, during January 2018 – April 2020 (p -values derived from linear trend analysis, lines derived from fractional polynomials per year of study); time-series line (bottom right) represent the

confirmed COVID-19 cases in Greece, from February 26th to April 30th, 2020 (*note: the peak observed on April 21st is due to a series of cases observed in a refugee/immigrants campus*).

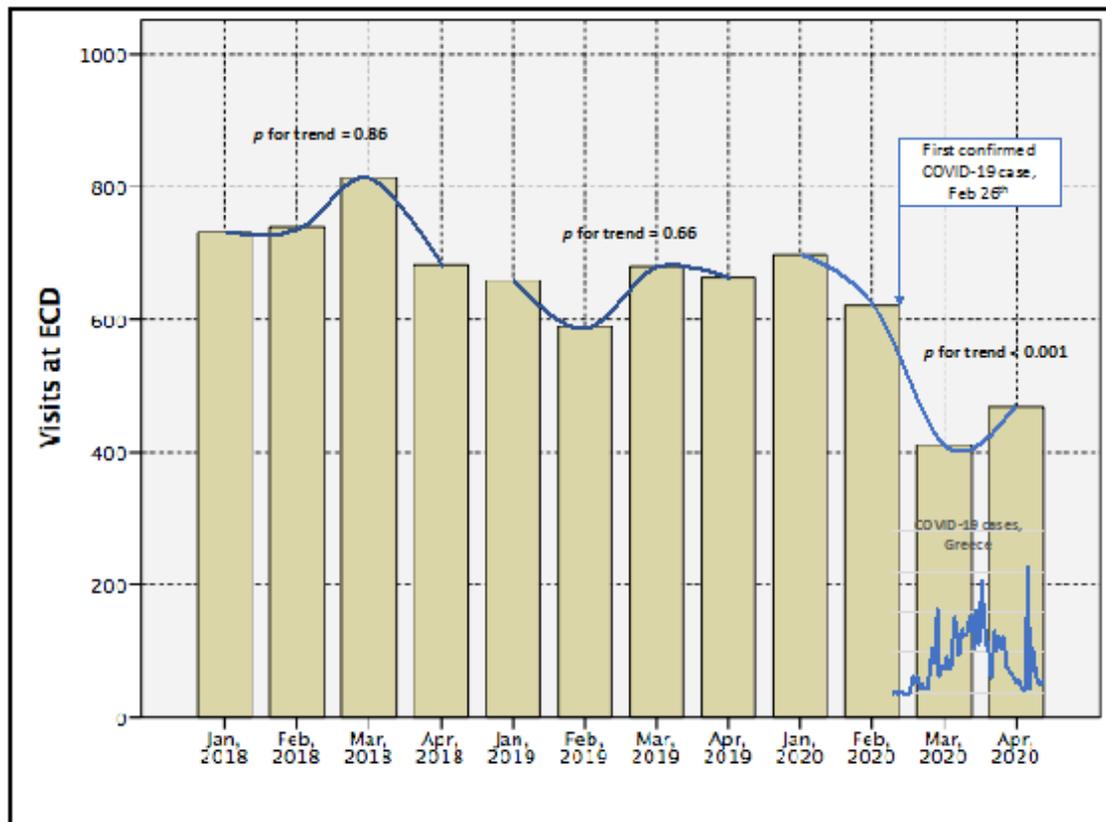


Figure 2. Pattern of the presenting complaints among unplanned visits in the ECD of a tertiary General Hospital, in Athens, Greece, during January 2018 – April 2020.

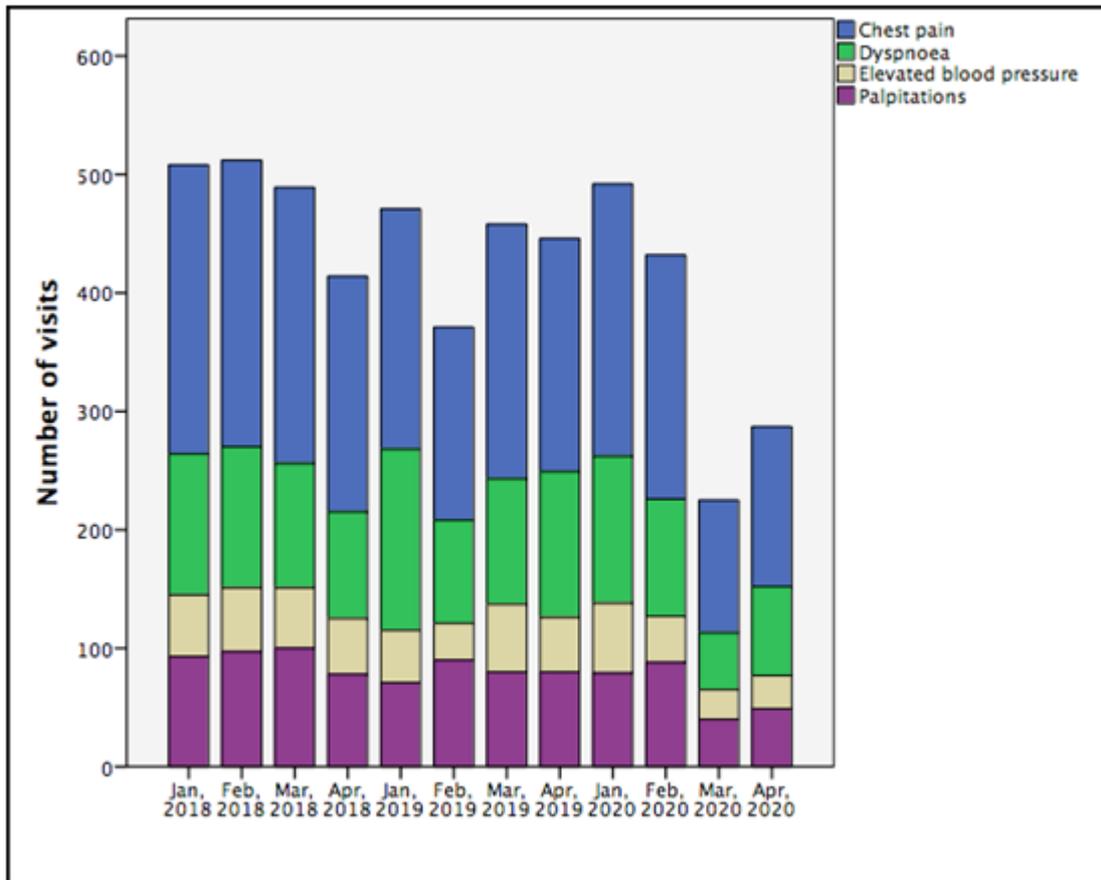


Figure 3. Pattern of major discharge diagnoses: acute coronary syndromes (ACS), heart failure (HF) and other coronary artery disease (CAD) which includes chronic atherosclerotic disease, stable angina and semi-elective percutaneous procedures of the patients who admitted to the Cardiology Wards of a tertiary General Hospital, in Athens, Greece, during January 2018 – April 2020.

