

Pattern of SARS-CoV-2 infection among dependant elderly residents living in retirement homes in Marseille, France, March-June 2020.

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Abstract

Background. SARS-CoV-2 infection can cause significant mortality among dependant elderly residents living within medical retirements homes.

Objectives. To report the results of SARS-CoV-2 PCR-based screening campaigns conducted in dependent elderly resident in retirement homes in Marseille, France and the follow-up of positive cases.

Methods. Data of 1690 elderly residents and 992 member staffs were retrospectively collected through interview of the medical team of 23 retirement homes and electronic health recording system of the hospital.

Results. Elderly residents were predominantly female (64.8%) with a mean age of 83 years old. SARS-CoV-2 detection in residents (226, 13.4%) was significantly higher than in staff members (87, 8.8%), with $p=4.10^{-4}$. Of 226 infected residents, 37 (16.4%) were detected on a case-by-case basis because of COVID-19 symptoms and 189 (83.6%) were detected through mass screening; 84.0% had possible COVID-19 symptoms, including respiratory symptoms and signs (48.5%) and fever (47.2%); 118 (52.2%) patients received a course of oral hydroxychloroquine and azithromycin (HCQ-AZ) for at least 3 days; and 47 (20.8%) died. In multivariate, death rate was positively associated with being male (31.5% vs. 13.4%, OR=4.33, $p<10^{-4}$) and being older than 85 years (26.1% vs. 15.7%, OR=3.01, $p=0.005$) and negatively associated with being diagnosed through mass screening (16.9%, vs. 40.5%, OR=0.20, $p<10^{-4}$) and receiving HCQ-AZ treatment for at least 3 days (14.4% vs. 27.8%, OR=0.41, $p=0.017$).

Conclusion. Our data shows that early diagnosis and care of COVID-19 patients at retirement homes can be effective in saving lives.