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Letter to the Editor

Covid-19 mortality in Italian doctors



Dear Sir,

Ye et al. have shown in this Journal that Healthcare Workers are exposed to SARSCoV2 (Covid-19) both from the environment and from the patients themselves.¹ It is well known that the current Covid-19 epidemic in Italy is causing thousands of fatalities, and even prompted to recruitment of elderly, retired doctors. Shortages of high-quality personal protective equipments (PPE) were reported in the first weeks, arising concerns of possible excess mortality in Doctors facing this dramatic epidemic. We thus reviewed the data on Covid-19 attributable deaths of Italian Doctors, and here we report them. Public, searchable databases (ISTAT census data; Civil Protection; epicentro.iss; Medscape.com; FNOMCEO) were accessed.^{2–6}

We captured data on population, licensed doctors/dentists, total Covid-19 attributable deaths, Covid-19 attributable deaths in Doctors/Dentists, for all Italy and separately for each Region. Covid-19 mortality rates were then calculated for general population and for Doctors.

Updated information about the number of Covid-19 cases and fatalities in Italy was obtained from the Istituto Superiore di Sanità (ISS.it) and the Epicentro database. The Italian National Federation of Orders of Doctors and Dentists (FNOMCeO) website publishes an updated honour list of deceased physicians, reporting age, medical specialties, status in service or retired, region. This list was cross-checked with the Medscape.com webpage reporting all deceases of Doctors worldwide.

We recorded 23,660 Covid-19 deaths occurring in 60,560,000 Italians, including 133 out of 291,500 Doctors/Dentists (Table 1). In

Italy, Covid-19 mortality rates are similar in the general population and in Doctors (0.039 and 0.045, respectively). When clustering the data for Regions, Lombardy features the highest mortality rates both for the general population (0.119) and for Doctors (0.121). In this Region, the chance of Covid-19 death for Doctors, although high, is the same as the general population. However, it is worth pointing out that although the infection-mortality rate in this region is equivalent to the general population, the infection rate in Healthcare Workers may be higher than in the general population.

Outside Lombardy, mortality rates have wide variability. Rates in general population range between 0.067 (Emilia) and 0.003 (Sicily). Rates in Doctors, too, show high variability, ranging between 0.057 (Marche) and 0.009 (Lazio). However, some Regions (e.g., Piedmont, Emilia, Veneto) have mortality rates 3-to-4-fold lower in Doctors, whereas others (e.g., Southern and insular Regions) have a relatively higher proportion of Covid-19 deaths in Doctors compared with the general population. These findings raise concerns. The Italian National Healthcare System (NHS) is organized and budgeted on federal basis, thus every Region has large autonomy in strategic decisions impacting ultimately on the quality of the services provided. Different policies of screening, detection, cohorting and management of infected individuals have been adopted by different Regions during the Covid-19 epidemics, with some (e.g. Lombardy) prioritizing hospital screening, and others (e.g. Veneto) trying to intercept Covid-19 patients before their referral to Hospitals. We wonder whether these different strategies have impacted on the mortality rates also of Doctors, ultimately determining different relative risks due to a questionable use of human medical resources by the NHS in some Regions.

Table 1
Main Results.

Region	Total Population (in thousands)	Total cases of Covid-19	Total deaths for Covid-19	Covid-19 Mortality rate in Covid-19 cases	Covid-19 Mortality rate in general population	Covid-19 Deaths in Doctors	Covid-19 Mortality rate in Doctors
Italy	60,359	178,972	23,660	13.2	0.039	133*	0.045
Lombardy	10,060	64,135	11,851	18.4	0.119	58	0.121
Piedmont	4356	21,144	2379	11.2	0.054	6	0.032
Emilia	4459	22,560	3023	13.4	0.067	6	0.026
Veneto	4905	15,374	1026	6.7	0.021	2	0.011
Tuscany	3729	8110	602	7.4	0.016	1	0.005
Liguria	1550	5668	785	13.8	0.051	3	0.034
Marche	1525	6575	582	8.8	0.038	4	0.057
Lazio	5879	5524	332	6.1	0.005	3	0.009
Campania	5801	3951	293	7.4	0.005	4	0.015
Puglia	4029	3327	307	9.2	0.007	3	0.016
Sicily	4999	2627	190	7.2	0.003	2	0.007
Friuli	1215	2.675	220	8.2	0.018	1	0.016
Sardinia	1639	1178	86	7.3	0.005	2	0.021

* complete demographic and geographical data available for 95 out of 133.

Disclosure statement

All Authors have nothing to disclose related to this article.

Declaration of Competing Interest

None.

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