COMMENTARY

Characteristics of doctors’ fatality due to COVID-19 in Western Europe and Asia-Pacific countries

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Summary

Under the coronavirus disease 2019 (COVID-19) pandemic, the deaths of healthcare professionals have been increasingly reported worldwide. We performed a cross-sectional, observational study using news reports on the websites among selected countries as of April 2020. We found 120 dead medical doctors due to COVID-19 in Western Europe and Asia-Pacific countries; 67 in Italy (47 in the Northern part), 34 in China (22 in Hubei), 6 in France, 4 in the UK, the USA and Spain and 1 in South Korea, respectively. Among them, 90% were men, and specialties were reported as general practitioners for 30% and as physicians for 11.6%. The overall proportions of dead medical doctors amounted to 1.9 per 10 000 confirmed cases and 30.2 per 10 000 dead cases, respectively. Proactive measures are warranted to protect doctors especially who often encounters with COVID-19 patients.

Introduction

Under the coronavirus disease 2019 (COVID-19) pandemic, healthcare professionals have been endangered by the risk of nosocomial infections. Actually, the deaths of healthcare professionals have been increasingly reported worldwide, which prompted us to survey the reported characteristics of medical doctors’ deaths due to COVID-19.

Materials and methods

We performed a cross-sectional, observational study concerning medical doctors’ deaths due to COVID-19 using published news reports on the websites. We selected the following 11 countries in Western Europe and Asia-Pacific regions based on data availability and a relatively large population size; Germany, the UK, France, Italy, Spain, the USA, Canada, Japan, China (except Taiwan and Hong Kong), South Korea and Australia. Keyword searches (doctors died due to COVID-19 in ‘a given country’) using Google in English were performed by an author (I.Y.) on 3 April 2020. The first 100 web pages displayed, excluding the advertisement area, were used for further evaluation. We additionally used the websites that listed dead medical doctors in their own language including Italy, France and China (Supplementary Table S1).

We collected data on the country of origin, areas, sex, age and specialty based on the description in the original source and duplicated reports were aggregated by checking the names of medical doctors. Using the number of the confirmed and fatal cases among the general population published by the World Health Organization, we calculated the proportion of dead medical doctors out of the 10 000 confirmed cases and out of the 10 000 dead cases, respectively.

Results

As shown in Supplementary Tables S2 and S3, we identified 120 dead medical doctors due to COVID-19; 67 in Italy (47 in the Northern part), 34 in China (22 in Hubei), 6 in France, 4 in the UK, the USA and Spain and 1 in South Korea, respectively. There...
was no reported death in Australia, Canada, Germany and Japan. Among them, 108 (90.0%) were men, and the median age was 65 years old (range, 21–93). By specialty, 36 (30.0%) were reported as general practitioners, 14 (11.6%) as physicians, 7 (5.8%) as surgeons and 6 (5.0%) as pulmonologists, respectively.

In total, dead medical doctors amounted to 1.9 per 10 000 confirmed cases and 30.2 per 10 000 dead cases, respectively. Figure 1 shows the proportions of fatality in each country. China except Hubei had the highest number of doctors’ deaths per confirmed and dead cases, followed by Italy and Hubei. The numbers were relatively lower in other countries.

Discussion

We found that approximately one doctor’s death occurred in every 5000 confirmed and in every dead cases with COVID-19 in Western Europe and Asia-Pacific regions. Notably, deaths were common among general practitioners or physicians, suggesting a higher risk of deaths among doctors who may have repeated encounters with COVID-19 patients. Similar to the deaths among the general public, most of fatality were seen among elderly male doctors.

The proportions of deaths in Italy and China were significantly higher compared to other countries. The reason is not clear, but at least in Italy, it might be because retired elderly physicians reportedly joined to care COVID-19 patients to help burdened medical staffs. Conversely, lower proportions were observed in Australia, Germany, Canada and Japan, which would reflect the lower risk of deaths in the general population among these countries.

There were several limitations in this study. As we surveyed on the websites, unpublished or obscure cases could not be captured, leading underestimation of doctors’ deaths. Also, situation of diagnostic testing varied in each country, hampering strict comparisons among countries. Still, because some active measures are considered for precautions, more efforts should be taken to protect high-risk medical doctors from COVID-19.

Supplementary material

Supplementary material is available at QJMED online.

Conflict of interest. None declared.

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