

COMMENT

COVID-19 cumulative mortality rates for frontline healthcare staff in England

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Figure 1

We aimed to determine the mortality rates of the main groups of frontline healthcare providers (HCPs) with COVID-19.

Data on deaths of frontline HCPs in England with COVID-19 were collected through searches of news media reports^{1,2}. HCPs were categorized as doctor, nurse, or other (including ambulance, scientific, technical, and support staff, and direct care staff in general practices). We used December 2019 data for the corresponding numbers of registered HCPs in each occupation category^{3,4} and calculated crude cumulative weekly mortality rates per 1,000 for each category, as well as for the general population^{5,6}. We were unable to stratify analyses by ethnicity as the ethnic composition of each occupation category was not available.

Of the 147 frontline HCPs in England who died from COVID-19 between 25 March 2020 and 13 May 2020 for whom we had data, doctors accounted for 19.1% (n=28, including 10 general practitioners), nurses 42.9% (n=63), and other HCPs 38.1% (n=56). Doctors experienced the earliest reported deaths among HCPs, but the cumulative mortality rate for nurses was comparable to doctors by the week of 18 April. The cumulative mortality rates were 0.15 per 1,000 doctors, 0.17 per 1,000 nurses, and 0.10 per 1,000 other HCPs, compared to 0.74 per 1,000 people in the English general population (Figure 1). From the available information, 35 out of 97 (36.1%) were aged 60 years or more, 68 out of 147 (46.3%) were male, and 97 out of 128 (75.8%) were from non-white ethnic backgrounds. The mean age of white HCPs was 59.2 years compared to 54.6 years for non-white HCPs.

Although frontline HCPs may have had greater exposure than the general population, the relatively lower mortality rates in the HCP groups may be due to a number of factors: greater access to professional protection equipment (PPE), lower rates of co-morbidity and fewer very elderly than the general population, although levels of non-white ethnicity are higher in HCPs. COVID-19 mortality has been under-reported, but over one third of the doctors in our list were

general practitioners despite rises in remote consulting. The increased risks to community-based HCPs should not be overlooked.

References

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Author contributions: KK conceived of the idea; KK, WH, and LSL acquired the data; LSL and BC carried out the statistical analysis. All authors reviewed the final letter. LSL had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

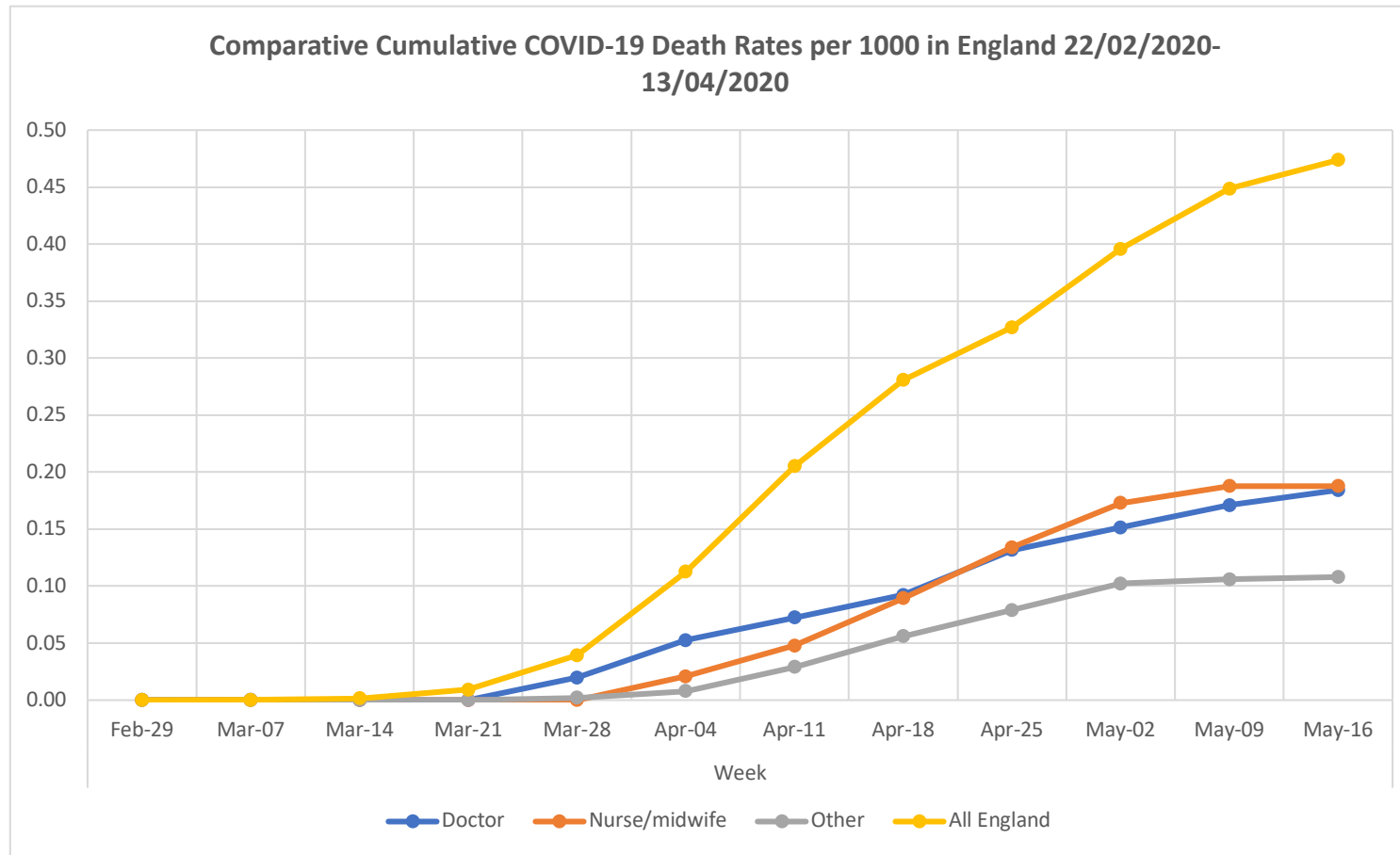
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Ethical approval and informed consent: All data used were within the public sector and no ethical approval was required. Summary data are presented so no individuals are identifiable.

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Figure 1



Date is the last day of the week for which data are included.