

COVID-19 infection in ethnic minorities: A systematic review of age and gender distribution

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Background:

Currently, there have been 135,646,617 cases of COVID-19 infection and 2,930,732 deaths in the world. Compared with the White populations, members of the ethnic minorities living in Europe and North America are disproportionately diagnosed, hospitalized and dying from COVID-19. The reasons for this relatively increased risk of infection and adverse outcome are poorly understood. The aim of this review is to summarise current epidemiological evidence on age and gender distribution in ethnic minority patients hospitalized with COVID-19 infection.

Methods:

Multiple electronic databases were searched. Data from studies, published in any language, reporting the risk factors, incidence and outcomes of COVID-19 infection in hospitalized White and ethnic minorities patients were extracted, reviewed and compiled.

Results:

36 studies reporting data on age and 26 on gender were included in the review. Ethnic minority patients hospitalized with COVID-19 were relatively younger than White patients. Within the different minority groups, a greater proportion of Black patients were female, whereas a greater proportion of Asian patients were male.

Conclusions:

This review confirms findings from individual studies that with regard to age, the ethnic minority patients hospitalized with COVID-19 infection are relatively younger than the White patients. There is also a disparity with regard to gender within the different minority groups.

Key messages:

- There is a disparity with regard to age and gender between the different ethnic groups affected with COVID-19 infection in Europe and North America.
- Potential factors for disparities are genetics, vitamin D deficiency, BCG vaccine, comorbidities, occupation, social gradient, housing, PPE access and understanding/compliance to protection measures.