Coronavirus-19,gender and health

Key points

- In 2020, COVID-19 became a global pandemic, with practically all countries and territories in the world affected: as of September 2020, approximately 32 million confirmed cases and almost 1 million deaths have been reported worldwide.

- Based on data from 38 countries and territories, there is a slightly larger proportion of boys and young men among cases of COVID-19 below the age of 20, (57% among boys aged 0—9 age and 53% among boys and young men aged 10—19). In age groups above 20 years, women account for a larger proportion of cases, for example, women represent 57% and 58% of cases in age brackets 40—49 and 50—59, respectively. Above the age of 80, women significantly outnumber men among those infected: for every single case of COVID-19 among men aged 80 and older there are 2 cases among women.

- COVID-19 has greatly increased mortality rates among men. Based on data for 38 countries and territories, men have a larger share of deaths across all age groups except among the population aged 80 and older. Between ages 20—80, men are significantly overrepresented among COVID-19 deaths: men represent above 60% of deathsin every age group, and 70% amongthe population aged 40—49.

- Although less likely to die from COVID-19, women face additional challenges related to the disease compared to men, including increased risk of domestic violence and abuse due to the isolation measures implemented by governments to curtail the virus spread. Women also comprise 69% of health professionals whoare now on the front lines in the battle against the pandemic, facing a higher risk of infection than men in the workplace.

- A range of medications and vaccines are under development or undergoing clinical trials. Given the nature of the disease it will be important that such trials include both women and men, older people and those with comorbidities.

Background

Coronaviruses are a family of viruses that may cause illness in animals and humans. In humans, several coronaviruses are known to cause respiratory infections, which range from the common cold to more severe diseases such as Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS). The most recently discovered coronavirus disease, COVID-19, was unknown before an outbreak that began in Wuhan, China, in December 2019. The most common symptoms of COVID-19 are fever, dry cough and tiredness. Other less common symptoms include aches and pains, nasal congestion, headache, conjunctivitis, sore throat, diarrhoea, loss of taste or smell, a skin rash or discoloration of fingers or toes.

COVID-19 has affected virtually all countries and territories, with about 32 million confirmed cases and almost 1 million deaths as of September 2020

Most people (about 80%) recover from the disease without needing hospital treatment. However, about 20% of people who contract COVID-19 become seriously ill and develop difficulty breathing. Older people and those

with underlying medical problems such as high blood pressure, heart and lung problems, diabetes or cancer, are at higher risk of developing serious illness.[1] Emerging studies also suggest that men are at higher risk for worse outcomes and death. [2] [3] [4] [5]

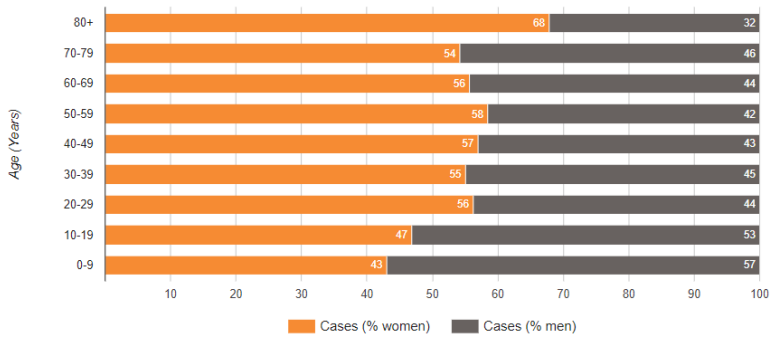
Recent data for 38 countries and territories suggest that while women above age 20 are more likely to be diagnosed with COVID-19, men in all age groups under age 80 are more likely than women to die from it

The limited availability of sex- and age-disaggregated data on COVID-19 infection and mortality hampers the analysis of the gendered implications of the disease in different age groups and the development of appropriate responses.[6] As at 6 May 2020, only 40% of globally reported confirmed cases of COVID-19 had been reported to WHO with age and sex information.[7] More recently available pooled data for 38 countries and territories (as of 15 September) suggest that boys and young men below age 20 account for a slightly larger share of cases of COVID-19 than women (on average, across countries with data, 57% of COVID-19 infections among those aged 0—9 are boys and 53% among those aged 10—19 are boys and young men), while between ages 20—80 women account for a slightly larger share, reaching as much as 58% of cases in the age bracket 50—59, followed by 57% in the age group 40—49 and, 56% among those aged 20—29, and 60—69.

Above age 80, the share of women with COVID-19 is significantly larger: 68% of cases at age 80 and older are women and 32% are men, meaning that for every male case of COVID-19 in that age group there are more than 2 cases among women (see figure I).

It is too early to speculate as to the reasons for this age-sex pattern. The reduced share among young women could be due to their higher innate immunity or their tendency to take fewer risks than young men. The higher share of diagnosis among women later in life (after age 20), could stem from higher level of exposure among women-dominated occupations. Above age 80, larger shares are most likely due to thefact that women make up the majority of the population.

Figure I: Share of COVID-19 cases by sex and age group, 2020 (Percentage)



Source: Global Health 5050, African Population and Health Research Center and International Center for Research on Women: the COVID-19 Sex-Disaggregated Data Tracker (https://globalhealth5050.org/) includes data for 38 countries and territories (data obtained on 15 September 2020).

Recent data for 38 countries and territories also suggest that COVID-19

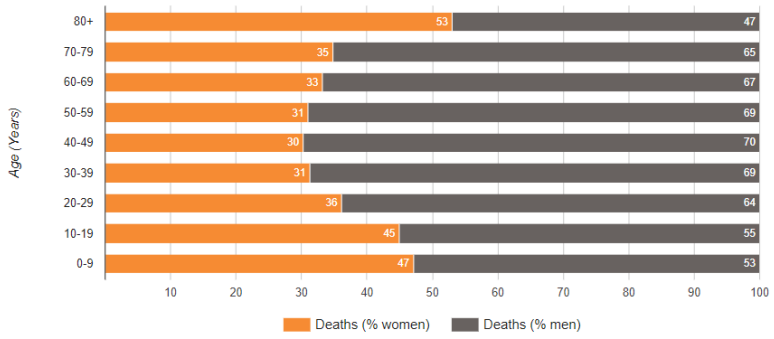
has greatly increased mortality rates among men. Men have a larger share of deaths across all age groups except among the population aged 80 and older

Countries with large older populations are at greater risk of having large numbers of deaths due to COVID-19 relative to their population size. Men have a larger share of deaths across all age groups, except among the population aged 80 and older (see figure II). The share of men among deaths due to COVID-19, particularly between ages 20—80, is significantly higher than that among women (above 60% in each age group), reaching 70% for men aged40—49,69% for men aged 30—39 and 50—59, and 67% for menaged 60—69.

After age 80, women account for slightly more than half of deaths (53%), probably due to the smaller male population in that age group.

The higher shares of men among COVID-19 deaths are especially remarkable given that women account for larger shares among those diagnosed with COVID-19 across all age groups, except for the population under age 20 (see figure I). In other words, adult women are more affected than men by COVID-19 infections, but they are able to recover, while men are more likely to succumb to the disease. Poor health outcomes in both women and men have been linked to underlying health conditions, such as pre-existing cardiovascular disease, diabetes, being on steroid therapy or being overweight. Traditional masculine norms which may inhibit men from seeking health care could be related to the poor outcomes observed in men. Improved outcomes in women have also been linked to enhanced immune responses.[8]

Figure II: Share of COVID-19 deaths by sex and age group, 2020 (Percentage)



Source: Global Health 5050, African Population and Health Research Center and International Center for Research on Women: the COVID-19 Sex-Disaggregated Data Tracker (https://globalhealth5050.org/) includes data for 38 countries and territories (data obtained on 15 September 2020).

The disruption to health services caused by COVID-19 has affected the utilization of health services and consequently outcomes for other health-related conditions

Countries that have sufficiently sensitive and timely civil registration systems have noted an increase in the number of deaths from all causes. While a high proportion of excess deaths have been attributed to COVID-19, there also appears to be an increase in the number of deaths from other causes.[9] [10] A full accounting of lives lost during the pandemic will require an extensive analysis of excess deaths across the globe in order to identify

COVID-19 deaths not reported as such,[11] as well as deaths from other causes that may be indirectly attributable to the disease. The latter category includes excess deaths that occur because people do not seek or cannot obtain medical care when needed during the ongoing pandemic, whether for chronic diseases, injuries, complications of pregnancy or other conditions. The precise magnitude and patterns for this trend remain to be determined.

Access to sexual and reproductive health and reproductive rights for women and girls may be reduced during the pandemic

Governments and health-care facilities are making choices about prioritizing the provision of some health services and scaling back others.[12] Experience and evidence from previous outbreaks (including the Ebola epidemics in the Democratic Republic of the Congo, Guinea and Sierra Leone and the Zika virus disease) and other humanitarian emergencies indicate that sexual and reproductive health services,including pregnancy care, contraceptive services, sexual assault services and safe abortion, are likely to be scaled back.[13] [14] [15] This can result in an increased risk of maternal mortality, unintended pregnancies and other adverse sexual and reproductive health outcomes among women and girls.[16]

Efforts to control COVID-19 have differing effects on women and men, but the emotional impact of the pandemic is disproportionately falling on women's shoulders.

Treatment for COVID-19 currently involves managing respiratory illness and other symptoms associated with the disease, with around 20% of diagnosed patients requiring intensive care. Women comprise the majority of the health-care workforce, especially nurses, and therefore have greater levels of exposure. Based on latest available data as of 2019 for 121 countries (excluding China and India), globally, women comprise 69% of health professionals, including medical doctors and nursing personnel.

Emerging evidence from the Asia-Pacific region[17] highlights that, although data show that men are more likely to contract and die from the COVID-19, the emotional impact of the pandemic is disproportionately falling on women's shoulders in most countries. Increases in unpaid care and domestic work, job and income loss and the effects of the lockdown and the confinement at home, which has been associated with a potential increased risk on intimate partner violence, are among the factors that may be contributing to higher levels of stress and anxiety among women.

A range of medications and vaccines are under development or undergoing clinical trials. Given the gender component of the disease spread and related mortality, it will be important that such trials include both women and men, older people and those with comorbidities.[18]

About the data

Definitions

- **Share (%) of Coronavirus disease 2019 (COVID-19) cases by sex**: Share (%) of cases over total number of cases by age and sex.
- **Share (%) of Coronavirus disease 2019 (COVID-19) deaths by sex**: Share (%) of cases over total number of cases by age and sex.

Coverage

Women and men of all ages.

Availability

Data are available for 74 countriesand territories by sex and for 38 countries and territories by sex and age group. The availability of data is critically limited; there is urgent need for more disaggregated data to facilitate gender analysis, in addition to sex and age, such as data on occupation, underlying conditions including pregnancy, testing and hospitalization.

Footnotes

1. World Health Organization (WHO), Health Topics, Q&A on coronaviruses (COVID-19), WHO, Health Topics, Coronavirus disease (COVID-19) pandemic.

2. Xie, J., Tong, Z., Guan, X., Du, B., and Qiu, H., "Clinical Characteristics of Patients Who Died of Coronavirus Disease 2019 in China", JAMA Network Open, 10 April 2020.

3. Guan, W.J., Ni, Z.Y., Hu, Y., et al., "Clinical Characteristics of Coronavirus Disease 2019 in China", New England Journal of Medicine, vol.382, 30 April 2020.

4. Banerjee, A., et al., "Estimating excess 1-year mortality associated with the COVID-19 pandemic according to underlying conditions and age: a population-based cohort study", The Lancet, 12 May 2020.

5. Nikpouraghdam, M., et al., « Epidemiological characteristics of coronavirus disease 2019 (COVID-19) patients in IRAN : a single center study », Journal of Clinical Virology, June 2020.

6. WHO, Gender and COVID-19, advocacy brief, 14 May 2020.

7. Ibid.

8. Zeng, F., et al., "A comparison study of SARS-CoV-2 IgG antibody between male and female COVID-19 patients: A possible reason underlying different outcome between sex", Journal of Medical Virology, vol. 92, Issue 10, May 2020.

9. Holmes, J.L., et al., "Emergency ambulance services for heart attack and stroke during UK's COVID-19 lockdown", The Lancet, vol. 395, No. 10237, 13 May 2020.

10. The Economist, Tracking covid-19 excess deaths across countries, 15 July 2020.

11. Reporting by individual countries of the percentage of COVID 19 cases and deaths that are being accurately identified and reported as such is varied. Preliminary studies indicate that COVID-19 deaths reported by some countries comprise no more than half of the "excess deaths" observed during March, April and May 2020, when the number of deaths was far above what would have been expected based on the average number of deaths in previous years (The Economist, "Tracking covid-19 excess deaths across countries: In many parts of the world, official death tolls undercount the total number of fatalities".

12. WHO, Gender and COVID-19, advocacy brief, 14 May 2020.

13. Smith, J., "Overcoming the 'tyranny of the urgent': integrating gender into disease outbreak preparedness and response", Gender & Development, vol. 27, Issue 2, June 2019.

14. McKay, G., Black, B., Mbambu Kahamba, S., Wheeler, E., Mearns, S., Janvrin, A., "Not all that bleeds Is Ebola: How has the DRC Ebola outbreak impacted Sexual and Reproductive Health in North-Kivu", International Rescue Committee, 2019.

15. Camara, B.S., Delamou, A., Diro, E., Béavogui, A.H., El Ayadi, A.M., Sidibé, S. et al., "Effect of the 2014/2015 Ebola outbreak on reproductive health services in a rural district of Guinea: an ecological study", Transactions of the Royal Society of Tropical Medicine & Hygiene, vol. 111, Issue 1, January 2017.

16. WHO, Gender and COVID-19, advocacy brief, 14 May 2020.

17. United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women), "Surveys show that COVID-19 has gendered effects in Asia and the Pacific", April 2020.

18. Lithander, F.E., et al., "COVID-19 in older people: a rapid clinical review", Age and Ageing, vol. 49, Issue 4, July 2020.