

A gender lens on the primary impacts of COVID-19



GENDER &
COVID-19



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Key messages

- Primary impacts of pandemics include vulnerability and exposure to illness, disease incidence, duration and severity, mortality and certain prevention measures.
- The interaction of biological, psychosocial, and behavioral factors – including sex and gender – influence primary impacts directly and indirectly.
- Examining disparities in COVID-19 risk and health outcomes through an intersectional gender lens is essential for disease prevention and control and can also help to address inequalities.

Pandemics tend to be accompanied by disparities in vulnerability and exposure to illness and health outcomes – including disease incidence, duration, and severity – between, and among men, women, and gender minorities.^{1,2,3,4} Individual and population health are influenced by biology (i.e., sex) as well as social environments, and different facets of identity – of which gender is a major component. Along with race, age, socioeconomic status and other drivers, sex, and gender play a significant role in shaping disease risk, transmission and health outcomes during pandemics.⁵

While we would like to explore the impacts of pandemics as it relates to trans people there is little evidence in this area and therefore the points made in this brief mostly relate to men, women, boys and girls.

Sex, gender and the primary impacts of pandemics

Vulnerability

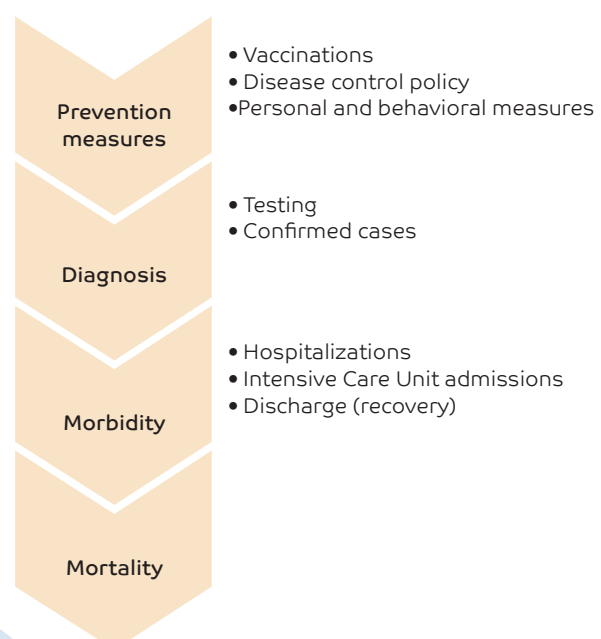
Sex differences (i.e., anatomical, genetic and life cycle differences) are associated with biological, physiological, hormone and immune response differences that can play an important role in the course of infectious disease. A key difference from a lifecycle perspective is the physiological changes that pregnant people experience which can impact the functioning of immune, respiratory, and cardiovascular systems – all of which can have important impacts on clinical outcomes during outbreaks.^{3,5,6,7}



Gender influences exposure to different environments and contacts, the division of labor, norms and behavior, access to and control of resources and patterns and timing of decision-making in response to both disease and disease control measures.^{5,6,7,3} Gender disparities in nutritional status and immunization rates can also impact resistance to infectious disease among men and women and boys and girls.³

Increased susceptibility to respiratory illnesses, including COVID-19, and worse health outcomes have been associated with pre-existing comorbidities (i.e., cardiovascular, and respiratory diseases) that tend to have a higher disease

Figure 1: Clinical pathway



burden among men. This higher burden may be linked to high-risk behaviors (such as drinking alcohol and smoking tobacco) that are linked to gender norms and tend to be more common among men globally.^{3,8,7} Men have also been found to be less likely to engage in health promoting and preventive behaviors like mask wearing, handwashing and physical distancing. Some of this has been explained by gender differences in perceived vulnerability.^{5,3}

Vaccination

While at the global level, roughly equal numbers of men and women are vaccinated against COVID-19,⁹ aggregation disguises some marked differences at the country level.¹⁰ The impact of gender on vaccination is very context specific. Among the factors that could explain gender imbalances in COVID-19 vaccination rates at the country level are which groups had early access to vaccination and age-group demographics (i.e., in the US senior citizens were one of the first groups to be eligible for the vaccine and women represent more than 55 percent of adults 65 and older), and the gender make-up of essential worker labor force. Also, one of the more common misconceptions about the COVID-19 vaccines is that they cause infertility in women. This may explain hesitancy among certain people.^{7,11}

It is also important to consider the social and political dynamics in which vaccines are delivered. In places where there is social or political unrest women are often among the more vulnerable. For example, during the Ebola outbreak of 2018-20 in DRC there were many reports of violence and sexual exploitation including male health care workers (HCWs) attempting to exchange health services, including vaccination, for sexual favors from women and girls.¹²

Exposure

Gender differences in exposure risk can be explained by many factors including the activities men and women tend to perform in different contexts and their resulting contacts.³

Gendered impact of the pandemic on the sector

Structural factors

Occupation is a gendered variable that is linked to disease exposure. Gender differences in labor force participation has the potential to greatly impact disparities in infection. For example, women, who represent 70% of paid employees in the global health and social workforce have been at increased risk of infection as frontline workers during the COVID-19 pandemic.



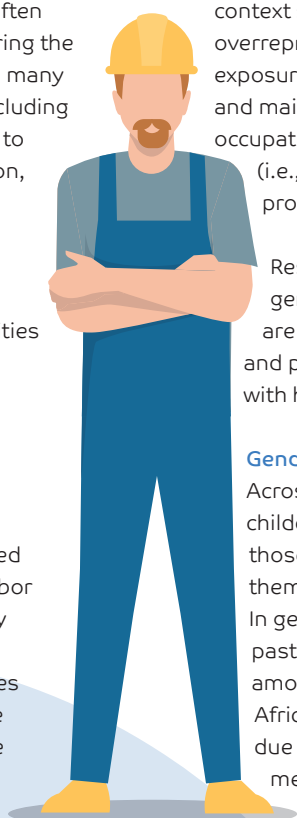
Despite representing the majority of HCWs worldwide, in past pandemics in many countries, women's comparative lack of authority (i.e., working as nurses, traditional birth attendants, community health workers etc. vs. physicians) translated into them not receiving appropriate or sufficient PPE.^{3,13,14}

It is important to note that the gendered risk associated with occupational exposure during pandemics is highly context specific. In the US for example, men are highly overrepresented in certain occupations with high risk of exposure during the pandemic (i.e., agriculture, construction, and maintenance) while women are the majority of some occupations where work could be performed remotely (i.e., administrative work and teaching) which may have provided them with some protection from infection.¹⁵

Residence is another driver of exposure with gendered implications. For example, in the US men are overrepresented among both the incarcerated and persons experiencing homelessness – settings with heightened risk of exposure to COVID-19.¹⁵

Gender roles and norms

Across societies women tend to provide the majority of childcare and caregiving in households which (even for those who may have been able to work remotely) can put them at significant risk for infection during pandemics. In general, caring for children who may lack immunity from past illness episodes has resulted in increased incidence among caregivers. During the Ebola outbreak in West Africa (2013-16), women and girls were at higher risk due to the direct contact they had with sick family members and their participation in burial practices.^{14,15}





Clinical outcomes

As was the case in prior outbreaks of coronaviruses (i.e., SARS and MERS), early reports from the COVID-19 pandemic showed worse clinical outcomes among men – namely that men were dying at higher rates than women. This led many to consider the role that biological sex-related factors (i.e., hormone and immune responses) might play in vulnerability to the SARS-CoV-2 virus.^{15,8}

As timely care seeking is a key factor in mitigating disease transmission, severity, and duration, context specific gender differences in care seeking and response to illness were also considered. Commonly cited barriers to care seeking for women include imbalances in decision making power, economic resources and knowledge, as well as disrespectful treatment towards women in health care settings. Studies have also shown that in certain contexts caregivers are more likely to seek medical intervention (i.e., consultation, medication) for boys. Among adults we also see different patterns in health-seeking behavior which are also very context driven. In some cases, women are more likely to have regular contact with health care settings because of their caregiving responsibilities for children and because they may visit providers during pregnancy. However, in other settings women lack the agency or resources to make independent decisions about care seeking.³

The final global report from the Global Health 50/50 COVID-19 Sex-Disaggregated Data Tracker (November 2021) which included all available data from 205 countries accounting for 99.9% of all COVID-19 confirmed cases and reported deaths worldwide, showed that some

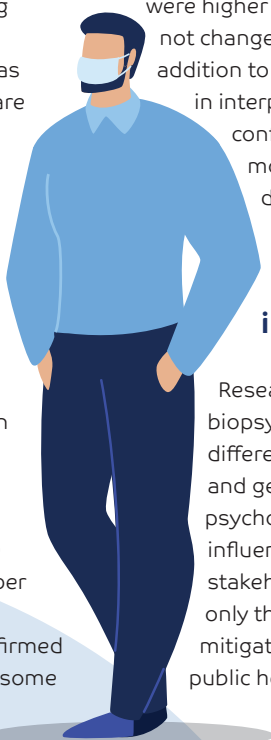
differences in gender were apparent at different points along the clinical pathway. While men were less likely to be tested (44%), they comprised a nearly equal number of cases (51%).¹⁶ Some researchers speculated that higher testing rates among women might be explained by the prioritization of testing for pregnant women and HCWs (of whom women comprise the majority) as well as a tendency for women to use health care services more readily.¹⁷

The gender gap in clinical outcomes grew more pronounced further down the clinical pathway where men comprised the majority of COVID-19 hospitalizations (55%), ICU admissions (63%) and deaths (57%) globally. The report noted that while there was a wide range of variation in outcomes by country, proportions for each country did not vary widely over time.¹⁶

Despite these continued reports of higher mortality rates among men later in the pandemic, a pioneering longitudinal study of more than 30 million COVID-19 cases from across the US found that although aggregate mortality rates were higher among men, this gender disparity showed significant variation across states and time. The study concluded that differences in mortality rates were more likely attributable to a range of other factors (i.e., timing of surges, local public health policies, SES, race, occupation, pre-existing health status and gender) than biological sex, highlighting the importance of context, interrelated factors and multifaceted analysis.¹⁸ The study team also noted that gender disparities in pre-existing health conditions (i.e., heart disease) which are associated with poorer COVID-19 health outcomes and all-cause mortality were higher among US men before 2020 – a dynamic that did not change over the course of the COVID-19 pandemic.¹⁵ In addition to these findings, researchers have advised caution in interpreting sex disparities in COVID-19 deaths among confirmed cases as variables like testing, case, and mortality counts at given points of time may distort differences.^{15,17}

Incorporating a gender lens in health research

Researchers and decision-makers should take a biopsychosocial approach to understanding the differences in primary impacts among men, women, and gender minorities. By considering the biological, psychological, behavioral and social factors that influence prevention, risk, morbidity and mortality stakeholders will be better positioned to consider not only the biomedical interventions that might help to mitigate disease severity and death, but also effective public health measures.⁵ Importantly, it should be



remembered that a gender lens also acknowledges that the interplay of the combined aspects of social identity (i.e., age, race, ethnicity, sexual orientation, disability, education etc.) influences experiences of discrimination and privilege.

Data driven responses

Bridging the global gender data gap needs to be a priority to allow critical analysis of emerging trends before, during and after pandemics. Epidemiological data, disaggregated by social stratifiers such as race, age, class, and sexual orientation allows for identification and prioritization of interventions for populations at increased risk for infection, disease and death. Disaggregated data can also provide a reliable basis for making complex decisions about how to tailor effective policies and allocate limited supplies, investments and resources. Reliable and timely data should also be used to monitor the performance of pandemic related services and programs. For this information to be useful for decision-making there then needs to be a feedback loop to policy makers.

In addition to prioritizing the ethical and safe collection of multi-level, disaggregated data, data need to be analyzed in a way that takes into account vulnerable groups and intersectional needs. An intersectional approach to health research means not only expanding key variables to include in analysis, but also looking at interactions between these variables and the discriminatory social (i.e., racism) and structural (i.e., policies) processes that contribute to adverse health outcomes during pandemics.¹⁹ For example, as COVID-19 clinical outcomes have been shown to vary across not only sex and gender, but also race, ethnicity, SES, occupation and housing location and status, intersectional analysis of COVID-19 health disparities provides a more accurate understanding of disparities.¹⁵ An intersectional approach to analysis can also help to prevent discrimination and improve equitable access and appropriate implementation.

Analytical tools (i.e., lenses, frameworks, approaches) can be used to promote gender-related considerations and highlight how gender dynamics influence experiences for different groups during a pandemic.¹⁹

Highlights from the Gender and COVID-19 Project

The Gender Analysis and COVID-19 Matrix highlights the interplay of gendered domains of life (i.e., access to resources, roles, beliefs, laws etc.) with different groups experiences with responses to COVID-19 as it relates to risk, illness, health services, and social, economic, and security factors.



Engagement

To properly address the primary impacts of pandemics decision makers will need to engage meaningfully with key stakeholders at all stages of prevention and response. Decision-makers should strive to make partnerships multi-level, multi-sectoral, diverse and representative. Key strategies that can be employed to develop effective partnerships include stakeholder mapping, establishing technical working groups, and employing participatory approaches to community partnerships. This includes partnerships with trusted community leaders as well as local health service providers (i.e., community health workers, pharmacists etc.) who are uniquely positioned to provide accurate information to their communities that can help to counteract misinformation and improve acceptance and uptake of recommended interventions that will help to reduce infection, morbidity and death.¹³

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