The COVID-19 outbreak is impacting societies around the world in an unprecedented manner. However, not everyone, in every place, will be affected in the same way. Considering how the pandemic affects particular groups will help raise the effectiveness of containment efforts and minimize the potential negative impacts. This note focuses on one of such groups: Women and girls. Experiences from previous pandemics show that they can be especially active actors for change, while they can also experience the effects of the crisis in different (and often more negative) ways. Given that the COVID-19 is not gender-blind, the response to it should not be either. Based on the existing evidence and emerging trends the note summarizes key gender differentiated transmission channels and impacts on outcomes across the three areas of endowments, economic conditions, and agency. It also provides recommendations for action (see Table 1). This is a living document, to be completed as more data and analysis are made available.

Summary of key messages

**Gender implications and recommendations for health:**

- Health vulnerabilities are especially related to disease exposure in the short-term. There is a larger share of women in the health sector, and as home and family caregivers, which makes them more exposed to contagion. Occupational sex-segregation might also bring different levels of exposure. As an example, women are more present in client-facing roles while men concentrate in logistics or security. Providing protective equipment and materials and COVID-19 testing to higher-risk populations will be key to prevent their contagion.
- However, and likely in connection with differences in the incidence of chronic conditions, risky and preventive behaviors or in immune systems, men seem to be over-represented among the fatalities of COVID-19. This trend may also have gendered implications, for instance as the women and girls left behind face further difficulties.
- The shift in resources towards addressing the public health emergency can entail disruptions to key health services for women and girls, such as reproductive and sexual health services. There is for instance evidence of increases in both teenage pregnancy among out-of-school girls and maternal mortality due to lack of critical resources in similar crises. Pregnant women can be particularly vulnerable in this context.
- A minimum package of these services should be maintained during confinement, while virtual programs for adolescents can be considered. Pregnant women and maternity wards require particular attention during the containment phase. In the longer term, programs aimed at decreasing teenage pregnancy and encouraging girls to go back to school will be necessary, especially in contexts where pressures to drop out are higher.

**Gender implications for education:**

- Social and gender norms will play a role in educational investment decisions. Intra-household allocation of resources for home schooling and/or at the community-level might be redirected to boys over girls. These dynamics need to be considered in efforts aimed at offering home-schooling, and in related social messaging. Targeted measures for the most vulnerable girls (i.e. with no access to ICTs) will also be necessary.
The disruption of services with school closures can lead to an increase in the burden of care-related tasks - likely impacting girls more than boys in many contexts. This will affect their ability to stay engaged in education in the longer term. Among boys, pressure to contribute to the family income may also increase with the tightening economic conditions, leading to permanent school dropout. Financial incentive programs can help encourage families to send children back to school when the confinement phase is over. Adolescent empowerment programs have also shown to be effective in keeping girls in education.

**Gender implications for economic conditions:**

- Globally, women will likely experience a significant burden on their time given their multiple care responsibilities as school closures and confinement measures are adopted, possibly leading to reductions in working time and permanent exit from the labor market. In some contexts, and due to food insecurity, girls and women would decrease their caloric intake in favor of men and boys. Social messaging as part of the emergency response can contribute to a more balanced distribution of household responsibilities and resources.
- Especially in lower income countries, women are largely engaged in informal work and other vulnerable forms of employment (e.g. self-employment in small subsistence businesses, domestic work), which often leaves them out of formal social protection measures targeted to workers. Female cross-border traders and small-holder farmers can particularly suffer the consequences of the declines in food and crop production, increases in food prices and closed borders.
- Sex segregation in sectors and occupations will also lead to differential impacts depending on whether the jobs are sustained, for instance when they allow for telecommuting or are in counter-cyclical industries (government and education), or at higher-risk to be lost. Women are over-represented in some of the occupations that will be hardest hit, such as retail, travel, leisure and hospitality, and men in construction or manufacturing.
- The effectiveness of social protection responses to the crisis will improve if these gender dimensions are considered. Cash transfer programs to the most vulnerable groups including women only households (e.g., single mothers with children, widows or female farmers) will be necessary both as part of the emergency response and in the longer term. Specific programs to support women’s return to economic activity will also play a central role (e.g., public works, access to training and credit, direct provision of productive inputs to female farmers). Ensuring access to care support when work outside of the house is resumed will also be necessary.

**Gender implications for agency:**

- An increase in gender-based violence (and its severity and frequency) due to confinement can be observed across countries. The stretched capacity of response services might reduce the protection and support available, contributing to a heightened perception of impunity among perpetrators. In conflict or fragile countries some forms of violence such as sexual exploitation perpetrated by public officials, community members in charge of enforcing quarantine measures or by outsiders transporting goods are of particular concern.
- Protection and support services need to be in place and increases in the capacity may be required. Innovative solutions to provide reporting mechanisms for women victims and to accommodate them and their children will be necessary. Social awareness will be key, as well as engaging informal support networks and health workers.
1. Introduction: Gender and COVID-19

Evidence from infectious disease outbreaks similar to COVID-19 indicates that women and girls can be affected in particular ways, and in some areas, face more negative impacts than men. Gender gaps in outcomes across endowments, agency and economic opportunity persist across countries. The impact of the COVID-19 pandemic will be amplified by those pre-existing gender differences. For the most part, the negative impacts can be expected to exacerbate (i.e. more individuals are affected) and deepen (i.e. the conditions/disadvantages of some individuals worsen). Gender gaps will be affected differently depending on the context and specific characteristics of different groups of women (see above). In addition, those same differences may call for differential roles in the efforts to fight the crisis, especially in the first phase of prevention and containment, but also in the follow up. As an example, the role of women as caregivers in the households and communities, places them at a privileged position in communication and prevention efforts. Keeping the gender implications of COVID-19 in sight can therefore allow for a more effective response and action.

This note aims to systematize the lessons from the existing literature - from previous similar crises and the unfolding COVID-19 pandemic. Figure 1 presents the analytical framework used for the systematization exercise. Sections 2, 3 and 4 provide a more detailed description of both the main transmission channels and a summary of the relevant literature on the gender differentiated implications of public health crises for various outcomes that can serve as a reference for the response to COVID-19. They do so across the main areas covered by the World Bank Gender Strategy: access to economic opportunities – which, for the purpose of this note, combines both access to jobs and assets, as well as a broader view on economic conditions –, endowments (health and education), and voice and agency (capacity to make decisions and act on them). Table 1 at the end of this note offers a comprehensive summary of issues and recommendations that can be of particular use.

Figure 1: Gender differentiated transmission mechanisms and implications of COVID-19
2. Transmission channels and differential gender implications for health outcomes

**Transmission channels:**

Gender differential implications for health can be due to:

- **Pre-existing health conditions and physiological factors:** Women are over-represented among the elderly, which are more vulnerable to experiencing severe symptoms of COVID-19; on the other hand, men are more likely to have chronic conditions or smoke in some countries, which can make them more prone to die as a result. Men may also be at greater risk of dying from COVID-19 due to male-female differences in immunology. Physiological characteristics of pregnant women may also make them more vulnerable. Age also operates as a specific transmission mechanism, not only for health-related but also for economic outcomes.

- **Exposure to infection through work and care:** Women and men have different roles and therefore different levels of exposure in key activities during the containment phase, including as part of the front-line health staff (e.g. nurses, community health workers, birth attendants); as family and community caregivers to the ill and in burial rites; as employees in basic sectors and occupations that continue being active and require them to work outside the home and interact with other people during the containment phase (e.g., food or pharmacy manufacturing and sales, agriculture or food production and distribution, transportation and logistics, security and cleaning or sanitation).

- **Disruptions in service delivery:** As resources shift towards fighting the pandemic, some key health services may experience interruptions (e.g., maternal health, vaccination), with impacts on some groups with special needs, including women (e.g., adolescent girls, pregnant women, patients with chronic conditions).

- **Social norms and care responsibility:** The increase in care demands (see above) will likely increase stress levels and have a toll on (mental) health outcomes, especially when the distribution of care and work in the household is not balanced. Frontline health care providers are at risk of suffering emotional trauma.

**Gender implications:**

Recent data from China, Spain and Italy regarding the COVID-19 outbreak indicate that the share of men that are dying due to the infection is much higher than that of women. The majority of the fatalities across countries appear to be men. A study from China, for instance, found that the fatality rate among men with the virus was roughly 65 percent higher than it was among women.³ Although the reasons for this trend yet remain unclear, initial research points to the higher incidence of chronic diseases (i.e. hypertension), risky and or health-seeking behaviors (i.e. smoking) among men,⁴ as well as to immunological differences.⁵ Among SARS patients, males also appeared to be more severely affected by the disease than females, which may partly reflect gender differences in tobacco use.⁶ Likewise, gender differences in physical activity, eating habits, occupational exposure to smoke and dust, etc. and associated comorbidities could play a role. Animal studies (in mice) also show that males generate less robust immune responses than females to infections with SARS-CoV and perhaps other coronaviruses.⁷

**Age can operate as a mechanism for differential impacts.** Due to longer average life-expectancy, more of the elderly are women. Women constitute 55 percent of the +65 population and 62 percent of the 80+ years
old, globally, an age group for whom the effects of COVID-19 seem to be more severe. Many live alone and are widowed. In some countries (such as South Africa) many elderly women look after the children. Such women will be very vulnerable to dying if infected, which will also impact those they care for. However, they will also be more vulnerable to crime and theft, and not just if their husbands died from COVID-19, in the context of an economic shock. In addition, many who relied on remittances or private transfers from relatives will likely lose such sources of income with more restricted conditions for work and other economic impacts of the crisis.

**Women make up large parts of the health workforce, but they may have less decision-making capacity within the sector and less access to protective equipment in times of crisis compared to male health workers.** Globally, between 65 percent (Africa) and 86 percent (Americas) of nurses are female, while physicians are disproportionately male (except for some countries in Europe). In addition, the hierarchical relationship between nurses and doctors may undermine the perspective of (female) nurses. Nurses participating in focus group discussions conducted in Canada after the SARS epidemic argued that physicians’ non-compliance with infection control protocols jeopardized their health and safety. During the 2014 Ebola outbreak in Nigeria, nurses, traditional birth attendants, and cleaners/laundry workers in health facilities (most of whom were female) were not provided with the same amount of protective gear given to (male) doctors and other high-ranking hospital officials. Women are also vulnerable in more informal parts of the health workforce, such as home health care, aids or community health workers. Indeed, and as part of the response to the COVID-19 crisis, some countries are mobilizing large unpaid community health care forces.

Both women and men are present in specific sectors and occupations that remain very active and are especially exposed during the course of the pandemic (i.e. supermarket cashiers, hospital cleaners and pharmacists for women, security forces, transport and logistics among men). In Germany, as an example, 2.38 million women work in the retail industry compared to 1.23 million men, and almost 2 million women are employed in pharmacies compared to around 0.5 million men. Men, on the other hand, are at risk of infection due to their role in transporting the sick and other organized community response mechanisms. They are also clearly over-represented among the security forces, in most manufacturing sectors, and in logistics, which will also be crucial during the containment of the spread. During the 2013-16 Ebola outbreak in West Africa, for instance, male motorcycle taxi drivers faced a high risk of infection, which often resulted in new chains of transmission in previously unexposed villages. It must also be noted that women make a higher proportion of the trips on foot and using public transport across countries, while men make more trips by car and motorcycle. This will have differential implications during the lock-down, when their ability to move will be more constrained, and afterwards, when this may operate as a disincentive to resume economic activities outside of the house.

**Most primary caregivers to the ill are women, which further exposes them to the infection.** Women, traditionally responsible for caring for children and the elderly, often remain in charge of caring for the ill during the outbreak of a pandemic. During the 2013-16 Ebola outbreak in West Africa, social expectations that women and girls should care for sick family members and observe cultural practices of care for bodies after death put women and girls at a higher risk, while refusal to attend to the sick was regarded as a severe moral failing. Liberian women care providers suffered from psychological trauma due to being responsible for those infected with Ebola and to the fear of passing the virus onto their families. The crisis in West Africa showed that women and girls were more exposed to infection because of their role as caregivers and in burial rituals.
Gender differences may exist with regards to caregiving roles and preventive behaviors that need to be considered in community and public health messaging in certain contexts. There is evidence from the Ebola crisis that the public health messages recommending women not to provide care contradicted social norms regarding their role as caregivers; good mothers and wives were expected to attend to the sick and the deceased, which placed some women in a difficult position. During the SARS pandemic in Hong Kong, women were more likely than men to wear face masks, while gender gaps in hand hygiene practices have been identified during the SARS outbreak in 2003 and in Korea in the context of the H1N1 influenza.

Women may face specific constraints to access health services. In many high-income countries, women are more likely to seek health care than men, even after adjusting for reproductive care visits. Similarly, out of pocket spending on health is higher for women than for men in most developing countries. However, in particular contexts, social norms may prevent women from accessing health services on their own or when the providers are men. For example, during the 2013-16 Ebola outbreak in West Africa, Minor (2017) describes that in a specific district “leaving the family home, even to give birth in a hospital, is viewed as a sign of failure to fulfill their domestic responsibilities. Men do not carry out these chores in the absence of their wives and subsequently pressure them to remain at home rather than seek medical assistance.” Likewise, there is evidence from India that boys are more likely (and sooner) taken to a qualified health professional for treatment.

Key services such as sexual and reproductive health may be interrupted during public health emergencies, with negative consequences for women. In the Ebola outbreak in the Democratic Republic of Congo it was difficult to deliver specific sexual and reproductive health services including care for survivors of family violence. In general, across countries women were often unable to access reproductive care services, which increased maternal mortality. Those who were suspected to be infected were denied care. In Sierra Leona, even more women died of delivery complications than of the infectious disease. Korkoyah and Wreh (2015) report that anecdotal evidence suggests that women and small children were affected because a lack of access to routine maternal and child health services, including pregnant women being denied access to clinics and having to resort to riskier homebirths. Similar results were observed with regards to SARS in Asia, which was associated with a high incidence of maternal and neonatal complications. In South Africa 65 percent of the fatalities of H1N1 were women of reproductive age, of whom almost half were pregnant. There are already estimations that indicate that COVID-19 may leave millions of women and girls out on vital family planning services this year.

Pregnant women, even when they access services, may face particular risks. The female body undergoes major changes during pregnancy, which go in hand with changes in the immune system, and some diseases are particularly severe during pregnancy. There is evidence that both SARS and Ebola have been transmitted in obstetric care facilities, where there may be a lower level of awareness of possible infection. This is complicated by the fact that some infectious diseases have atypical presentations during pregnancy, which can delay diagnosis. There were no clinical guidelines for providing reproductive care to pregnant women infected with Ebola, midwives routinely lacked protective equipment and pregnant women often had to be carried in hammocks as all ambulances had been seized by the Ebola response taskforce. All pregnant women who were infected died, and the disease was a common cause of miscarriage. Incipient research on the impacts of the COVID-19, however, indicates that there are fewer adverse effects for pregnant women in this case. In addition, there is no evidence that confirms vertical transmission from mother to child.
2. Transmission channels and differential gender implications for education outcomes

**Transmission channels:**

Gender differential implications for education can be due to:

- **Gender and social norms combined with the disruption of services:** May determine unequal access to ICT and other materials needed to keep up with distant or home-schooling learning.

- **Family expectations (and social norms) related to care:** May lead to girls’ disproportionate time use for care and domestic work and boys to work outside of the home – and, in some cases, to permanent school drop-out.

- **Lack of education among women in some contexts:** May prevent them from gaining necessary information on the illness and its prevention.

**Gender implications:**

The educational impacts of a public health crisis of these dimensions can be especially large for girls in some countries, although boys will also be affected. Due to the closure of schools and confinement measures, home-schooling or distance learning will be necessary for children to keep up with the program and materials. Existing gender inequalities in the use of digital resources and IT will therefore affect access to education for girls vis-à-vis boys over that period. As an example, across low and middle-income countries, women are still 8% less likely than men to own a mobile phone, and 20% less likely to use the Internet on a mobile, which would limit their capacity to keep up with home-schooling materials. At the same time, girls in some middle- and low-income countries will be expected to take on household and family care duties, which will leave them with less time for learning at home.

Moreover, the closure of schools as part of the containment efforts may lead many girls that already experience pressure to drop-out to stay out of education permanently. This was often the case after the Ebola crisis in Western Africa, as a result of which gender gaps in access to education increased. Girls in the control group of an impact evaluation study in Sierra Leone, for instance, experienced a 16 percentage point persistent drop in school enrolment post crisis. It has been reported that the closure of schools and the fact that most orphaned girls turned into the main caregivers at the household “risks the creation of a ‘lost generation’ deprived of formal education.” At the same time, and as a side-effect of the crisis, boys may be forced out of schooling to contribute to income generation activities for the household. However, evidence from the 2008-2009 financial crisis also indicates that the gender gap in education widened to the advantage of boys in lower income countries.

**Box 1: The costs of not educating girls**

Nine in ten girls complete their primary education globally, but this ratio decreases to only three in four at the lower secondary level. In low income countries these percentages are even lower: Despite the progress registered over the last two decades, less than two thirds of girls complete their primary education and only one in three completes lower secondary schooling. This poor educational attainment shapes the life-long opportunities of girls in various ways. Low educational attainment can reduce the expected earnings in adulthood, as it leads to poorer employment outcomes. In addition, when girls drop out of school prematurely, they are much more likely to marry as children, and have their first child before...
the age of 18, which can negatively affect their future prospects. Low educational attainment is also associated with worse health and nutrition outcomes for women and their children, leading for instance to higher under-five mortality and stunting. Girls who drop out of school also suffer in adulthood from a lack of agency and decision-making ability within the household, and in society more generally. They are also less likely to report engaging in altruistic behaviors or helping others. Finally, when girls and women are better educated, they may be better able to assess the quality of the basic services they rely on and the quality of their country’s institutions and leaders.


Adult women in developing countries are typically less well educated than men and less well plugged into information networks. There should therefore be special efforts made to reach them with information about COVID-19 (stages of disease, symptoms, what to do if sick), and its prevention (handwashing, wearing masks, isolating). Taking into account gender dynamics could help save lives through, for instance, targeted messages to women and/or men (depending on the context) about the importance of using protective measures in and outside the home. An evaluation of Medecins Sans Frontieres’ Ebola response in Guinea concluded that awareness and education programs had limited impact because they lacked an understanding of local norms. The role of trained women in prevention efforts in their communities and families is central, as proven by previous experiences in epidemic outbreaks (see section on agency).

3. Transmission channels and differential gender implications for economic conditions

Transmission channels:

Gender differential implications for economic opportunities and income or consumption can be due to:

- **Sectors and occupations and types of work (and access to social protection):** Sectors and occupations where women and men are represented to varying degrees will be affected differently by the confinement measures, the closure of borders and the slowdown of economic activity prompted by the COVID-19 crisis. Women or men may also be affected differently due to gaps in their engagement in vulnerable forms of employment, such as informal or part time work, self-employment, domestic work or waste picking. First, due to the most immediate impacts on their work situation; and second, because they lack basic formal social protection.

- **Prevalent social norms and bargaining power within the household in managing conflicting work and care demands:** With the closure of schools, the heightened vulnerability of the elderly and the increasing number of ill people that cannot access health services or COVID-recovery patients there will be a surge in the demand for care within households. The prevalent social and gender norms and the bargaining power of men vis-à-vis women in the household will determine how balanced the distribution of this growing care need is. In any case these conflicting demands will very likely lead to reductions in working time or decisions to prioritize one job in the household. Patriarchal social norms determining access to assets, for instance related to land use, inheritance or finance, also need to be considered in this context.

- **Other (non-labor) market shocks:** Travel restrictions, border closures or disruptions to public transport may result in declines in international (and domestic) remittances. Proper identification of which types of households depend on remittances and their composition is critical. For domestic workers or small-
scale traders increases in prices and restrictions to mobility can also have a negative impact on their livelihoods.

**Gender implications:**

*Sex segregation in sectors and occupations will lead to differential economic impacts over the short, medium and long term.* The impact on men vis-à-vis women will depend on whether their jobs will be sustained during the containment phase, for instance those allowing for telecommuting or in counter-cyclical industries (government and education) or will be at a higher risk of disappearing. Leisure, travel, hospitality, textile and apparel manufacturing and retail sales (other than supermarkets and pharmacies) are some of the economic activities that are likely to be most adversely affected (see Figure 2). For example, about half of the employed women in Bangladesh work in textile or ready-made garment manufacturing. Already, millions of garments workers, mostly women, have been sent home without further pay due to COVID-19. It has been reported that out of the 700,000 jobs that were eliminated in the first wave of the pandemic in the USA, 60 percent were held by women. Generally over half of the employees in these occupations are women. Women are also over-represented among the self-employed and small business owners (e.g., restaurants and shops), which can also be expected to be especially affected by the crisis. On the other hand, male dominated sectors such as construction and manufacturing are also likely to be severely impacted. Jobs such as food vendors may adjust to greater mobility demands (as individuals travel house-to-house during a lockdown), and shift towards being male-dominated. On the other hand, women may also have access to new income generating activities such as sewing masks, making hand sanitizer, delivery of tests/medicine, new manufacturing jobs, or greater involvement in agriculture if hired labor is not an option.

*Figure 2: More women than men work on the frontlines*

![Figure 2: More women than men work on the frontlines](image)

The over-representation of women among the inactive population, and in vulnerable forms of work (such as informal employment or domestic work) heightens their vulnerability to poverty in times of crisis. The low levels of female labor force participation in MENA and some SAR Countries (e.g., Bangladesh, Sri Lanka, Maldives, India, and Pakistan) may be exacerbated by COVID-19. In most countries, regardless of their income level, women tend to be more present than men in all forms of vulnerable employment, such as informal and domestic work. This largely leaves them out of coverage of social protection mechanisms, including for instance assistance targeted at workers during crises. As an example, during the COVID-19...
outbreak women migrant workers in Asia, especially those engaged in domestic work, saw their income generation capacity and ability to support their families adversely impacted. The decrease in income and livelihoods as a result of the slow-down in economic activity combined with the absence of adequate safety nets may force households to engage in negative coping mechanisms, such as reductions in food consumption by girls and women or early marriage.

Box 2: Child marriage, factors and impacts

Factors driving early marriage include socio-economic aspects, such as poverty or a lack of educational and employment opportunities for girls, and cultural factors, as well as social norms. In some societies, it is often an “either/or” option between getting married or remaining in school. When poverty makes it hard for a household to send all children to school, boys may receive preferential treatment for household investments in schooling, at least at the secondary level. Moreover, girls may be kept home from school to help with care or housework. Parents in traditional societies may place a lower value on girls than boys.

While girls from poorer socio-economic backgrounds are more likely to marry early, marrying early may lead to a higher likelihood of being poor later in life. The negative impacts of child marriage and early childbirth are indeed diverse and large. The largest impacts of child marriage are related to increases in fertility and population growth, poorer educational and health outcomes (of mothers and children) and lower lifetime earnings. Impacts in other domains, from violence to labor force participation or decision-making, are also observed throughout a woman’s life depending on other factors, such as widespread gender inequality.

Source: Wodon et al. (2017)

In lower-income contexts, women are particularly vulnerable to poverty and the negative effects of food scarcity as a result of a public health emergency. Poor households and those living in slums, camps or similarly vulnerable situations will be particularly exposed to the health crisis and its economic impacts. While globally the proportion of men and women living in poor households is similar, gender differences emerge in specific contexts. Women are more likely to live in poor households with a large number of children and fewer earners. Elderly women who live alone and/or rely on nearby family and community networks are overrepresented among the poor in some regions (e.g. ECA, LAC), similar to single mothers (LAC). In South Asia and Sub-Saharan Africa households with small children tend to be poorer, and more women in their peak productive and reproductive years are likely to live in those households. All these may lead to a disproportionate effect on women and girls. In addition, the higher mortality of men as a result of COVID-19 increases the probability to lose a (likely) income earner in affected households, leading to heightened economic vulnerability for the women and children left behind.

Other (non-labor) market disruptions can disproportionately affect women and girls. Evidence from the 2008 financial crisis shows that fluctuations in prices of staple and other foods can have especially negative effects for women and girls in some of the most vulnerable households. Women smallholder farmers, for instance, were disproportionately affected across low income countries largely in connection with pre-existing structural inequalities in access to resources. Women and girls were generally more vulnerable to the negative consequences of food insecurity and were more often driven to adopt extreme coping mechanisms. In countries where women are mainly responsible for subsistence crops, more of them may be used to smooth consumption or be sold on local markets, generating lower returns. During the Ebola outbreak in Western Africa, female smallholder farmers and cross-border traders were severely affected by
their loss of income as a result of declines in food and crop production, steep increases in food prices, declining food security and closed borders. During the outbreak in Liberia most self-employed women were engaged in food businesses and the sale of perishable goods such as fruits and vegetables, which went to waste because of customers fears that they would contract Ebola. Men were involved in businesses that dealt in non-perishable goods and were able to continue their businesses or immediately reopen once the situation improved.

Overall, and as a result of the outbreak and the response to the quick spread of COVID-19, women will likely experience a significant burden on their time given their multiple care responsibilities. The closure of schools affects women disproportionately, since they are mostly in charge of all informal care in the household and may see their work and economic opportunities further constrained as a consequence (see Figure 3). In addition to caring for their children, they are likely the ones taking on major care responsibilities for the elderly, which are particularly vulnerable to COVID-19, and the sick, as observed in previous and similar crises across countries. This burden will be even higher in lower-income contexts and especially among families living in slums, camps or similarly poor conditions where morbidity as a result of COVID-19 and other diseases can be expected to increase. In the absence of any alternative support mechanisms, many families across higher-income countries may be confronted with the need to choose to prioritize the highest-paid job in the household - most often corresponding to men. More broadly, and in contexts where the male-breadwinner bias persists and priority in times of scarcity of jobs tends to be given to men, women are more likely to stay out of the labor market as the crisis hits. At the same time, and in some contexts, opposing forces may ultimately promote gender equality in the labor market: Businesses are rapidly adopting flexible work arrangements that may persist, while fathers now take responsibility for childcare, which may erode the current social norms.

Figure 3: Women carry the burden of care work

The outbreak of an infectious disease may also amplify gender differences with regards to access to productive assets and property in specific contexts. Women who become widowed face the risk of disinheritance and loss of property in some countries. In Sub-Saharan Africa widows are generally a highly vulnerable population group as women’s property rights are often conditional on marriage. However, there
is little evidence of how these dynamics play out during or after a major infectious disease outbreak. Participants in focus group discussions conducted during the 2013 Ebola epidemic in Liberia generally felt that the customary system protected widows and orphans from being disinherited by relatives of deceased husbands or fathers, but this may not necessarily apply to all contexts. During the 2013-16 Ebola outbreak in West Africa, men were more likely to borrow from friends and family members, while women relied more heavily on savings and lending clubs. As a result, men had more leverage to negotiate more favorable interest rates and repayment terms. The financial capital of women’s savings and loans groups in Liberia was severely affected since members were not able to pay back their loans.

4. Transmission channels and differential gender implications for agency related outcomes

**Transmission channels:**

Gender differential implications for agency can be due to:

- **Pre-existing gaps in agency, for instance with regards to gender-based violence, combined with confinement measures and increased stress levels:** All these combined may lead to an upsurge in domestic violence. For victims of such forms of violence its intensity and frequency may increase. The exposure to members of the security forces, outsiders transporting goods or even community members may heighten the risk of violence, abuse and exploitation when those are in charge of enforcing confinement measures, particularly when in vulnerable contexts.

- ** Interruptions to key protection and support services:** The shift in resources may contribute to this trend, heightening the feeling of helplessness by victims or survivors and the perception of impunity by perpetrators.

- **Pre-existing gaps in agency restricting access to information and decision-making spheres by certain groups:** Barriers to access to information among certain groups, including women, may undermine the effectiveness of the prevention and response efforts while strengthening or widening existing unbalances in the distribution of power and inequalities in outcomes.

- **Prevalence of traditional social and gender norms affecting coping strategies and decision-making processes:** With the closure of schools and economic difficulties teenagers may be at a higher risk of early marriage and pregnancy as a result of the adoption of negative coping strategies by themselves and/or their families.

**Gender implications:**

Women experience increased risks of gender-based violence in the context of public health emergencies. A recent review of literature found that this was the case in all past epidemics, with the most common forms being intimate partner violence and sexual exploitation and abuse. Indeed, current reports from many of the countries affected by COVID-19 (Spain, China, France or Germany) indicate that gender-based violence may have been on the rise, likely in connection with the combination of increased tension, stress and confinement conditions in the household. As an example, a steep increase in calls to helplines has been reported across countries since the start of the pandemic. There are also increased risks of violence and harassment against frontline health female workers. Reports from Singapore and China indeed show high
levels of intimidation and aggression towards female health professionals, especially nurses, in the current crisis. Increases in violence in the context of pandemics can be due to economic stress, quarantines and social isolation, the potential breakdown of societal infrastructures or family separation in conflict or fragile contexts, reduced access to services, or the inability to escape abusive partners, among others.

Access to essential protection and support services may be more restricted, leading to an increased perception of impunity by perpetrators. The growing strain on the health system as well as the social distancing measures taken in several countries due to the spread of COVID-19 may lead to disruptions in care and support services for women survivors of gender-based violence. Despite the fact that this type of support services are very demanded in these situations, their availability is likely to be more limited. Other crucial services related to safety, security or justice may also be disrupted as government institutions shift resources to the public health crisis. Service provision (i.e. medical, justice) for victims of gender-based violence broke down during the Ebola outbreak. All these, combined with the forced confinement in the household as part of the measures to contain the spread, may lead to a higher perception of impunity by perpetrators.

Some forms of violence are of particular concern in lower-income or more fragile contexts. The risk of sexual exploitation of women and girls by health workers and outsiders transporting goods has for instance been reported to increase during epidemics in such contexts. Adolescent girls also appear to be at further risk of early marriage, abuse, and of sexual exploitation as schools close -especially when the adults in the home are hospitalized or deceased, and children stay alone or under the care of strangers. As an example, the risk of early marriage increased as a result of the closure of schools in the fight against Ebola in Sierra Leone. The death of the adult male family members may also leave women and girls in the household particularly vulnerable and exposed. Moreover, reports from the Ebola crisis in Sierra Leone and Democratic Republic of Congo indicate that sexual exploitation was common by state officials and community members in charge of enforcing the quarantine.

Teenage pregnancy can increase substantially during the outbreak of an infectious disease due to increased sexual violence or as negative coping strategy by girls. Teenage pregnancies increased during the 2013-16 Ebola epidemic in West Africa, in some communities by as much as 65 percent. Multiple factors may explain this surge. Blame was directly placed on girls for having unprotected sex. On the other hand, women’s rights organizations pointed to a rise in sexual violence against teenage girls. Girls may look to engage in relationships as a channel for financial support, particularly with older men, which were sometimes exploitative. The higher exposure to exploitative relationships due to changing demographics has also been documented in the HIV/AIDS pandemic, or in the aftermath of the Ebola outbreak in Western Africa, where around 10,000 children lost one or both parents.

Women may be disadvantaged in access to critical information due to lower education levels, exclusion from male networks/power structures and societal limitations on women's mobility. During the 2013-16 Ebola outbreak in West Africa women appeared to be excluded from meetings where information was shared, particularly as leaders were the ones receiving information on Ebola prevention and treatment messages. In addition, and given that women were less likely than men to have power in decision making, their needs were largely unmet. Limitations on women’s mobility undermined their direct involvement in Ebola prevention and treatment efforts, which in turn undermined the success of these interventions. During the most recent Ebola crisis in the DRC, women have been distrustful of male information providers, due to the ongoing armed conflict in the area. One of the main responses to the Zika crisis in LAC was
advising women of reproductive age that they should not get pregnant, which widely ignored the existing structural inequalities in the region, while references to abortion access were absent. This measure implied that the sole responsibility to self-manage their risk profile was on women, suggesting that men do not have any responsibility for pregnancy and creating an unequal gender dynamic to the outbreak.83

Female health care workers and survivors may also face stigmatization in some specific contexts. During the 2013-16 Ebola outbreak in West Africa, female health care workers were often confronted with suspicions that they had brought Ebola to the community.84 In some instances their houses were demolished or burned by the local authorities. Similarly, surviving women faced stigmatization and were blamed for the illness and/or death of their family members. There are also reports that orphaned children were stigmatized and subject to ill-treatment across African countries. Women affected by Zika in Brazil were also subject to harassment and discrimination in public.85 Stigmatization is already being reported among older people infected with COVID-19 in some European countries.

Women have a crucial role to play in the response to the crisis, especially in the prevention and containment phase, but also during follow up. Previous experiences show that women are a central part of the solution. Female community references can for instance help to transmit key messages to the relevant population. In DR Congo female community healers proved to be trusted sources of information at the community level in the prevention and containment efforts during the Ebola outbreak. Women organizations and female leaders can bring important insights, and relevant differences in messaging and crisis management. In the DR Congo, the WHO worked with the Collectif des Associations Feminines (CAF), an umbrella association of about 45 local groups to train 132 women leaders about the disease who conducted an intensive two-week information campaign in 30 neighborhoods in Beni city.86 It is also reported that in Liberia, Guinea and Sierra Leone, local women’s groups have played a vital role in the fight against Ebola. Although women account for the majority of frontline healthcare workers, which places them at a privileged position to identify trends on the ground, they are still largely under-represented in national and global health leadership positions.87

5. Conclusions

Gender inequality begets gender inequality, and this process is only exacerbated in times of crisis or in the face of major shocks such as the outbreak of COVID-19. In understanding the impacts of and designing policy responses to the current crisis it will be especially important to (i) pay attention to existing gender differences and how they are likely to mediate gender impacts and roles, and to (ii) formulate policies that take pre-existing conditions into account to provide a tailored approach. In addition, given women’s greater involvement with the care of children and the elderly, as well as their home-based activities – and the reality that the home is typically the domain of women –, governments should be pro-actively reaching out to them for help with dealing with the pandemic. Women’s empowerment during this time could therefore be even more valuable due to their potential contribution to the response efforts.

Table 1 below provides a summary of specific recommendations by context and specific groups affected. These are based on the existing evidence on how to articulate a response that will take gender inequalities – and the risks of broadening those in times of the COVID-19 pandemic and after – adequately into consideration by area. The summary differentiates between measures in the emergency response (immediate prevention and containment phases), and in the medium to longer term (recovery and
As noted in the table, the differential gender implications of the crisis will be heightened in particular contexts and among especially vulnerable groups. In vulnerable contexts – poor areas with limited access to water, rural communities, slums, refugee camps – the impacts described might be exacerbated due to faster and/or stronger transmission mechanisms. Similarly, specific household demographic compositions – single parent, extended households with children and elderly, widows – might show stronger impacts on women (particularly due to care-related tasks allocation and demand). Women and girls who face multiple layers of inequality – i.e. disability, ethnicity, etc. – may be more vulnerable. COVID-19 widows and orphans, in particular, will require special attention.

The potentially gender-differentiated impact of the COVID-19 crisis also needs to be considered for poverty measurement and projections. Much can be done already with administrative data and existing household and labor force surveys to profile poor households, including those were women are more at risk of poverty. Existing data can be used to identify (a) households at risk of job and income losses, (b) households at risk of increased care demands, (c) households that are demographically vulnerable (e.g. single-parent/caregiver households that might require safety net or income transfer support, elderly only households, etc.), (d) remittances-dependent households without a (physically present) adult male, or (e) households with pregnant women requiring reproductive care services. This can allow for visibility of these households and ensure that the direct and indirect age and gender effects of the COVID-19 are taken into account.

For new data collection efforts, prioritizing the collection of accurate and complete sex-disaggregated data to understand how COVID-19 impacts individuals differently will also be important. There are several rapid-surveys and data collection efforts being designed to look at impacts on poverty, income, and inequality. Most of these surveys will be household-level based (therefore reflecting impacts at the household level). Phone and online surveys have the added challenge that they are to be short, might be biased to those that have access or own the technology, and reinforce challenges of data collection revolving around the identified household head. To assess gender-differentiated impacts, efforts will be required to ensure critical questions are asked (e.g. a labor income module for each household member). Some specific insights can be gained from re-interviewing existing respondents in other surveys (e.g. DHS, which focuses on women of reproductive health), and/or follow-ups or booster samples with a secondary respondent in the household.

A research agenda on gender-related impacts of COVID-19 is needed in the short, medium, and longer term across identified and new channels of impacts and effects. While this note aims to be comprehensive, new evidence is being generated rapidly. Indeed, a broad research agenda is needed for a better gender-informed response, recovery, and resilience-building for this crisis, as well as for future ones. Based on the evidence summarized here, the following research areas will be particularly important:

- **Health**: Research should assess outcomes directly related to COVID-19 (e.g. contagion, fatalities), by sex, age, income and living conditions, and for specific groups of women (e.g. pregnant women). It should also involve an assessment of other outcomes affected by the re-direction of medical resources to the COVID-19 response (e.g. reproductive and maternal health, mental health), and the implications for groups with already limited access to services (the poor, those living in rural areas, as well as for women with social and normative restrictions). Learning on nutrition-related impacts might also be valuable, particularly on food access and intra-household allocations in light of food scarcity or limited food access.
- **Education**: It will be important to assess whether and how the large gains on girls’ education access and enrolment across countries will be affected by the crisis, and how re-entry to education and survival rates
in secondary education will evolve post-confinement (including the potential growth in the share of boys out of school).

- **Poverty and living conditions:** An assessment of how and via which channels different households were affected by COVID-19 (e.g. single parents, widows, extended households), and how impacts on their income generating activities present gender-differentiated patterns will be crucial. Whether gains or reversals on women’s economic activity (employment, entrepreneurship, agricultural production, others) will be observed is another key area of interest.

- **Response effects:** Impact evaluations of the different initiatives that are being developed and implemented across countries should also consider the gender dynamics highlighted in this note, with a particular focus on differences in benefiting from said interventions (and potential explanations behind those differences).

- **Active participation:** The role men and women across communities have taken in prevention, containment, surveillance and recovery efforts should also be properly documented and researched, in order to better understand their differential contributions to the response, and with the objective of improving its effectiveness in this and future similar crises.
### Table 1: Summary of transmission channels, gender implications and recommendations by country and groups

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>COVID-19 TRANSMISSION CHANNEL AND IMPACTS ON OUTCOMES</th>
<th>COUNTRY/GROUPS</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
</table>
| Endowments: Health | Higher exposure to contagion among women disproportionately represented among some of the most exposed groups: health sector workers, supermarket staff, cleaners and caregivers. | All | Emergency response:  
Provide priority support to women on the frontlines by for instance ensuring access to adapted protective equipment, hygiene products, COVID-19 testing when necessary, or arrangements for those with care responsibilities. Examples from India (and other countries) show that women’s groups are playing a key role in the production of protective material.  
• Recognize the gendered dynamics in communication efforts, which can raise the effectiveness of communication and prevention efforts.  
• Include women and girls in community response mechanisms.  
• Provide psychosocial support to health workers and caregivers.  
• Ensure equal representation of women in clinical trials. |
| | Higher risk of death among men possibly due to differences in the incidence of intervening conditions and behaviors and in immune systems. | All | |
| | Limited access to health services by some women in certain contexts due to the prevalence of patriarchal gender norms. | Countries, contexts with stringent patriarchal gender norms (MENA, Sahel region, parts of South Asia). | |
| | The propensity to contagion by men can be higher due to their lower adherence to prevention measures or health care services utilization. | All | |
| | An increase in unwanted pregnancies, especially among teenagers, or in maternal mortality can stem from the interruption of sexual and reproductive services as resources concentrate on the public health emergency. | Especially challenging in lower income contexts. Relevant among teenagers and women victims of violence. | Emergency response:  
• Make a minimum emergency package of sexual and reproductive health services available for women and adolescents.  
• Properly communicate any changes in referral systems for GBV.  
• Include menstrual hygiene products in hygiene kits issued to quarantined population groups. |
| Pregnant women are especially vulnerable to contagion due to their contact with health facilities and potentially complications (although the later has not been confirmed by research). | All, but especially important in poor contexts. | **Emergency response:**  
- Pay special attention to respiratory illnesses in pregnant women due to increased risk of adverse outcomes, even if evidence about this is still scarce in the context of COVID-19.  
- Prioritize infection control in maternity settings  
- Provide psychological support to pregnant women who are infected.  
- Issue clinical guidelines on how to treat pregnant women with COVID-19 infection. |
|---|---|---|
| As care demands and responsibilities grow, a higher burden on women’s time and higher stress levels with confinement measures and fear of the situation may lead to poorer (mental) health outcomes. | All. | **Emergency response:**  
- Address growing mental health and psychosocial needs through targeted responses that cater to the needs of specific groups. The barriers for women and girls to access this type of services need to be considered. The new technologies and social media offer potential for access, although many of the most vulnerable will have no access to the required devices and/or the Internet (i.e. lower income women and the elderly). |
| Food scarcity and negative coping mechanisms such as reductions in food intake combined with patriarchal social norms may have a disproportionate effect for women’s and girls’ health outcomes. | Especially important in lower income countries. | **Emergency response:**  
- See section on economic conditions. |
| Endowments: Education | Given patriarchal social norms and the increase in the burden of care many girls leaving schools with confinement measures may do it permanently. | Especially in low income contexts and those with stringent patriarchal gender norms. Orphaned girls are more vulnerable. | **Medium to longer term:**
- Adopt measures that provide **financial incentives** for families and girls to resume their education when the confinement ends. In particular CCTs and scholarship programs have shown to be effective in keeping children, and especially girls, in education across countries (Cambodia, Mexico), also in the context of the 2008-2009 crisis (Madagascar).  
- Interventions aiming to **educate, inform and support younger women** such as the *Empowerment and Livelihood for Adolescents (ELA)* in Sierra Leone could have a positive impact.

| Burden of care on girls and differentiated access to virtual home-schooling (i.e. less time, access to ICT) may lead to barriers to keep up with materials during confinement and over the time when schools are closed. | Lower socio-economic groups or more vulnerable households and contexts. | **Emergency response:**
- Consider this **differentiated impact/access in social messaging and responses** to provide for the lack of physical schooling.
- Adopt **targeted measures for the most vulnerable girls**, who are likely to lack access to digital materials and/or time.

| Economic conditions | The likely increase in care demands and responsibilities will have consequences for women’s availability to work and generate income. | All. | **Emergency response:**
- Provide **safety nets to women who are vulnerable** during the crisis (e.g., single mothers, domestic workers out of social protection coverage, refugee women and girls, adolescents who lost their parents, widows, women with disabilities).
- **Cash transfer programs** should be explored to mitigate the impact of the outbreak and confinement measures for all women affected. A cash transfer program in Burkina Faso reached half a million beneficiaries, mostly women, and piloted an adaptive modality to enhance resilience against food insecurity. Income support in the form of childcare vouchers or allowances are being provided in Italy and South Korea. It must be noted in this regard that cash transfers that target women are more likely to be invested in children.
- **SMS or radio messages** combined with cash transfers can lead to a more balanced distribution of household resources and labor.  

| The increase in unemployment and worsening working conditions will hit hardest sectors and occupations that are predominantly female (e.g., fashion, retail, hospitality, travelling, leisure, etc.), or male (construction, manufacturing).  
Female entrepreneurs may be at a disadvantage to resume operations after the crisis due to lack of access to finance, their disproportionate engagement in the sale of perishable products [fruits, vegetables] that went to waste during the crisis, etc. | All, middle and higher income. |  |
<table>
<thead>
<tr>
<th>Agency: capacity to make decisions and act on them</th>
<th>Increased risk of intimate partner gender-based violence and exploitation for women and girls with confinement measures and higher stress levels, interruptions to support and protection services for women victims and survivors, including security and access to justice and increased perception of impunity among perpetrators.</th>
<th>All. Especially vulnerable: women and children victims living with aggressor.</th>
<th>Emergency response:</th>
</tr>
</thead>
</table>
| Medium to longer term: | • Adopt mechanisms to support the economic empowerment of women with high-load unpaid care roles low-paid work roles during this crisis after the spread is under control and economic activity resumed.  
108 | • Ensure access to formal caregiving support when economic activities outside of the household resume. | • Increase social awareness and response to this phenomenon. This includes the use of communication technologies for social messages and healthy conflict resolution and parenting, as an example. It is important to target informal support networks (i.e. friends or family who may be able to seek help on behalf of isolated victims).  
114 |
|  | • Public works or cash for work programs have shown some potential to generate female employment in specific contexts.  
109 110 | • Explore targeted measures to help self-employed women to re-start their businesses. Women who receive cash transfers are more likely to start businesses. Cash transfers to women could be bundled with the provision of mobile phones.  
111 Other measures include training and coaching provision, incentives for formalization, business plan competitions, and lines of credit for women-owned firms.  
112 | • Have protection and support services in place for to women and girls’ survivors of violence. Increasing staff or temporary operations for existing violence prevention and |
|  | • Adopt measures that support women farmers, such as providing productive inputs directly to them encouraging couples to create joint action plans to include women in higher-value agricultural activities. Explore digital extension services provision.  
113 | • Offer longer-term support to specific population groups (e.g. COVIID 19 widows and orphans, etc.) that may be in need. |  
|  | Due to patriarchal social norms women have often weak property rights, conditional on marriage and are therefore at risk of property loss if their husband dies. | | |
response hotlines and outreach centers could be necessary. Campaigns such as Mascarilla-19 (Mask-19) in Spain encourage women victims to ask for a Mask-19 at the pharmacy, which would trigger the reporting process.

- Provide **accommodation to women and children victims** (e.g., increasing funding for organizations offering emergency shelter).  

- Provide **minimum care standards** to ensure that health systems and first responders are prepared to deal with situation in pandemic contexts and offer training for health staff to identify women at risk in screening or testing.

- Make **psychological support** available for women survivors affected by the pandemic. Facilitate the engagement of potential victims with informal (virtual) networks.

- Properly designed **cash transfers** could also help reduce levels of intimate partner violence.

**Medium to longer term:**

- Adopt **cash transfers or other income support programs** (either universal and/or targeted to children and adolescents who lost their parent(s)) that can reduce the need for adolescent girls to engage in relationships as a means to achieve financial security.

**Emergency response:**

- Ensure that **adequate protection systems** exist to address violence and harassment against female health workers.

- Provide **safe transportation, psychosocial support and mechanisms to report abuse**.

**Medium to longer term:**

- Include **messaging preventing stigmatization** in public campaigns.
| Increased risk of early marriage as a negative coping strategy with growing strain on income and the closure of schools. | Contexts where this practice is socially accepted. | **Medium to longer term:**
- Make sure that legal prohibitions are in place and consider this risk in the response.
- Ensure that girls go back to school as soon as possible and offer financial support to families that may see early marriage as a coping strategy.
- Interventions such as the *Empowerment and Livelihood for Adolescents (ELA)* in Sierra Leone could have a positive impact (see above). |

| Exclusion of women from decision-making spaces and restrictions on their access to information with patriarchal social norms and structures. | All. Especially important in MENA countries and those with very patriarchal gender norms. | **Emergency response:**
- Establish mechanisms that allow reaching out to all women – i.e. through mass media, community-based organizations, etc. – with information on prevention and response that they can understand – i.e. local languages – and considers local norms and practices – i.e. hygiene.\(^\text{124}\) Consider distributing mobile phones directly to women.\(^\text{125}\)
- Adequately incorporate women’s voices to decision making spaces for the prevention, detection and surveillance of the infection.\(^\text{126}\) Giving voice to women who have frontline interaction with communities will improve effectiveness. Examples are offered by the training of women leaders by WHO in DR Congo\(^\text{127}\) and efforts by women’s organizations in other Western African countries during the Ebola crisis. In India, women’s self-help groups are playing a key role in reaching out to populations as part of prevention efforts in the COVID-19 crisis.\(^\text{128}\) They are also running community kitchens to provide meals in a context of massive livelihood and food chain disruptions.\(^\text{129}\) |
6. References


GIHA – Gender in Humanitarian Action (2020). The COVID-19 Outbreak and Gender: Key Advocacy Points from Asia and the Pacific.


IRC (2020). Not All That Bleeds is Ebola — how the DRC outbreak impacts reproductive health.


OXFAM (2019). Gender Inequalities and Food Insecurity. Ten years after the food price crisis, why are women farmers still food-insecure?


RCCE (2020). COVID-19: How to include marginalized and vulnerable people in risk communication and community engagement.


Notes

1 Previous experiences such as Ebola in Africa, SARS in Asia, H1N1 worldwide or Zika in Latin America and the Caribbean showed that women and girls are often more exposed to the various potential negative impacts of such crises. No other previous infectious disease has posed a similar challenge to health services or required the large-scale confinement measures that COVID-19 is demanding, and therefore lessons from those experiences need to be interpreted with caution. The evidence from the Ebola epidemic, despite focusing on Western Africa, offers special insights since lockdown and school closures were also adopted during the containment phase in the worst hit countries.


3 EP (2020)
4 Liu et al. (2017)
5 EP (2020)
6 Karlberg, Chong and Lai (2004)
7 Channappanavar et al. (2017)
8 WHO (2007)
10 Buniol et al. (2019)
11 O’Sullivan and Amaratunga (2009)
12 Fawole et al. (2016)
13 Carter, Dietrich and Minor (2017)
14 World Bank (2020c)
15 RCCE (2020); UNFPA (2020); O’Donnell (2020)
16 UNDG (2015); Minor (2017)
17 Abramowitz et al. (2015)
18 EP (2020)
19 Smith (2016)
21 Fung and Cairncross (2007); Park et al. (2010)
22 Bertakis et al. (2000)
23 World Bank (2011)
24 RCCE
25 WHO (2007)
26 IRC (2020)
27 UNDP (2015); Seymour (2016)
28 RCCE (2020); Adams et al. (2016)
29 Lam et al. (2004); Wong et al. (2004)
30 Klein et al. (2010)
31 WHO (2007); Sappenfield, Jamieson and Kourtis (2013)
32 Ibid
33 Korkoyah and Wreh (2015); Smith (2016)
34 EP (2020)
35 Qiao (2020); Zhu et al. (2020)
36 These results need to be interpreted with caution, since evidence so far comes from a single country – China.
37 UNFPA (2020)
38 GSMA (2020)
39 O’Donnell (2020)
40 UNDP (2015)
41 Bandiera et al. (2018)
43 Ibid
Materials advising against touching and cleaning up after those who appeared infected were irrelevant to women who were responsible for caring for the ill. See Minor (2017) and Carter, Dietrich and Minor (2017) for a detailed discussion drawing on the experience of the 2013-6 Ebola epidemic in West Africa.

Farole et al. (2017)


GIHA (2020); Wenham (2020)

CARE (2020)

RCCE (2020); CARE (2020)

Muñoz Boudet et al. (2018); World Bank (2018)

Antonopoulos (2009); OXFAM (2019); Quisumbing et al. (2011)

Quisumbing et al. (2011)

OXFAM (2019)

UNDP (2015); EP (2015); Korkoyah and Wreh (2015); Seymour (2016)

Korkoyah and Wreh (2015)

IASC (2020); Alon et al. (2020)

Alon et al. (2020)

van de Walle (2013); Gaddis, Lahoti and Li (2018)

Korkoyah and Wreh (2015)

UNDP (2015)

RCCE (2020); UNFPA (2020); O’Donnell (2020)

Fraser (2020)

Ibid

Peterman et al. (2020)

RCCE (2020)

Fraser (2020)

RCCE (2020)

UNDP and Irish Aid (2015)

Fraser (2020)

Ibid

Fraser (2020); https://plan-international.org/blog/2015/05/forced-marriages-rise-time-ebola

Risso-Gill and Finnegan (2015)

UNFPA (2020)

Fraser (2020)

Rissa-Gill and Finnegan (2015); UNDP and Irish Aid (2015); Peterman et al. (2020)

Minor (2017)

Onyango et al. (2019); Rissa-Gil and Finnegan (2015)

Peterman et al. (2020)

Carter, Dietrich and Minor (2017)

Harman (2016)

Minor (2017)

Peyton (2019)

Wenham et al. (2020)

Minor (2017)

Peterman et al. (2020)


Wenham et al. (2020); RCCE (2020); O’Donnell (2020)


See Himelein et al. (2020a) and (2020b) for a summary of evidence from previous experiences and lessons learned.


RCCE (2020)

World Bank (2020)

O’Donnell (2020)
As an example, in the context of Ebola pregnant and breastfeeding women were typically excluded from experimental studies - which in some high fertility countries would mean that most of the women are excluded from the trial samples.

UNFPA (2020)
World Bank (2020b)
Bandiera et al. (2018)
UNFPA (2020)
Ibid
Ibid
UNFPA (2020); IASC (2020)
World Bank (2020)
World Bank (2013)
Bandiera et al. (2018)
Vandeninden et al. (2019)
Rutkowski (2020).
World Bank (2020b)
Davies et al. (2020)
Ibid
Rutkowski and Bousquet (2019)
Ibid
Peterman et al. (2020)
Ibid
Peterman et al. (2020)
World Bank (2020)
Bandiera et al. (2018)
World Bank (2020)
Ibid
GIHA (2020)
Ibid
World Bank (2020b)
Peterman et al. (2020)
World Bank (2020)
Bandiera et al. (2018)
World Bank (2020)
Ibid
GIHA (2020); Wenham et al. (2020); IASC (2020)
Ibid