A photograph of a woman in a colorful patterned dress and headscarf carrying a young child on her back. They are standing in a doorway or hallway. The image is partially obscured by a blue overlay at the bottom.

Reproductive, Maternal, Newborn and Adolescent Health During Pandemics

Lessons Learned for Practical Guidance

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Executive summary

This report is a review of major epidemics since 2003, including SARS-CoV, HIV/AIDS, Ebola, Zika and MERS-CoV. Often, responses to such outbreaks have had a negative impact on maternal, reproductive and child health services. Recognising how, and how much, epidemics affect women, children and other vulnerable populations is crucial if nations are to create effective and fair responses.

We have set out lessons learned from past epidemics, with an emphasis on how to ensure reproductive, maternal, child and adolescent health services continue effectively during the current COVID-19 pandemic.

Maternal and Newborn Health

The extent and severity of the Ebola outbreak (2013-2016) meant countries and health systems were in uncharted territories. The same is true with COVID-19. A few lessons learned from the response to the Ebola outbreak and other similar crises include the following:

- Consistent messaging is essential. It will help women and their families seek early advice and make timely decisions.
- It is also critical to ensure maternity wards are always perceived as safe places.
- Healthcare workers (HCWs) should have proper training in infection control and prevention practices, as well as in the proper use of personal protective equipment (PPE).
- Establishing a clear 'hazard incentive payment' can help boost the number of HCWs.
- In order to offer proper follow-up and protection, all pregnant women should be regularly tested as part of their antenatal care.
- Women who test positive for COVID-19, including those who are breastfeeding, should not be separated from their infants. Instead, they should heed precautions such as wearing masks when feeding their babies.
- Interventions should be developed supporting facilities, midwives and health personnel working privately in communities, so they become safe alternatives for women during crises.

Sexual and Reproductive Health

The diversion of both financial resources and healthcare providers to help address the pandemic may cause a shortage of doctors and other medical professionals providing sexual and reproductive health services. It is paramount that we implement measures NOW to lessen this disruption. Therefore:

- A Sexual and Reproductive Health (SRH) representative should have a seat at the table in COVID-19 response co-ordination teams.
- Access to contraception should extend beyond routine health facilities.
- The presence of skilled service providers may increase the uptake of services by adolescents and help prevent unwanted pregnancies.
- Health promotion campaigns can inform communities about contraception and how to access it.

Gender-Based and Domestic Violence

There is a high risk of GBV increasing during the current pandemic as movement restrictions trap women and children in their homes. Disease control measures that do not consider the gender-specific needs and vulnerabilities of women and children may also increase their protection risks and lead to negative coping mechanisms. Therefore:

- It is important to bolster violence-related first-response systems. First responders should anticipate a surge of GBV at the start of a pandemic outbreak and prepare accordingly, including through increasing staff and resources.
- We should explore how technology can support those in quarantine who need access to GBV services.
- We should ensure GBV is integrated into the responses of health systems. Healthcare providers should all be trained to identify women and children at risk of violence and be present in all testing and screening locations.
- We should collaborate with existing formal and informal social networks such as women's groups, community groups, civil society organisations and women's rights organisations.

Another important measure in the response to this pandemic, and to ensure we are adequately prepared for more of them in the future, is the development of reliable and rapid data collection methods followed by expert analysis and timely reporting. All these at the start of a pandemic are crucial in order to rapidly implement measures to tackle it. Furthermore, the development of an 'App' that can be used within the West and Central African region to collect all data related to COVID-19, as well as data specific to RMNAH, would be a welcome contribution in this epic battle.

Introduction

The new coronavirus, COVID-19, originating in China in December 2019, has now spread to virtually every country in the world. By May 14th, 2020, there were more than 4,248,000 cases and more than 292,000 fatalities, according to WHO. The virus is just the latest on a long list of infectious diseases to cause epidemics and pandemics with devastating effects.

For instance, there was the Black Death, a plague which caused more than 75 million deaths in the 14th century, followed by various cholera epidemics since the 17th century. Cholera still causes more than 2 million cases annually. There have also been many smallpox outbreaks, with a lot of deaths and suffering. Then there's the so-called Spanish Flu, in 1918, considered the worst pandemic in modern history. It killed more than 50 million people. And, since 1981, HIV/AIDS has caused more than 35 million deaths.

This report looks at major epidemics occurring since 2003 including SARS-CoV, HIV/AIDS, Ebola, Zika and MERS-CoV. What these epidemics have in common is their etiology, the exceptional nature of their occurrence and the severity of outcomes. Therefore, health systems need rapid and specific responses, guided by epidemiology and accompanied by global public health measures. If the epidemic was as severe in west and central Africa as it's been in Europe and the USA, the consequences would be devastating. Although some West African countries still have some health measures in place from the 2013 Ebola epidemic, the region includes some of the poorest countries in the world. In addition, many West African countries have poorly-resourced health systems, so are unable to quickly scale up their responses to epidemics.

Often, response measures have had a negative impact on maternal, reproductive and child health services. Recognising the manner and extent to which epidemics affect women, children and other vulnerable populations is crucial when creating effective and fair responses.



So far with COVID-19, the countries with the most successful responses are the ones that have learned from their past experiences.

The main Ebola outbreak, from 2013 to 2016 in West Africa, brought into sharp focus the need to address gender issues relating to the spread and control of infectious diseases. That is because gender adds another layer of susceptibility to infection. Women are reported to be disproportionately exposed to directly transmitted infectious diseases due to their traditional roles as caregivers.

So far with COVID-19, the countries with the most successful responses are the ones that have learned from their past experiences. South Korea learned the importance of preparation and laboratory testing the hard way, from its experience with MERS-CoV in 2015. Singapore was one of the worst affected areas in the 2003 SARS-CoV outbreak. Since then it has steadily prepared, including developing a national pandemic plan based on risk assessments and response measures proportionate to the risk.

This report shows some of the lessons learned from past epidemics, with an emphasis on how to ensure reproductive, maternal, child and adolescent health services continue effectively during the COVID-19 pandemic. We also suggest prevention, treatment, and management strategies, learned from previous experiences, that can be applied during the current crisis.



Major emerging and re-emerging infectious disease outbreaks

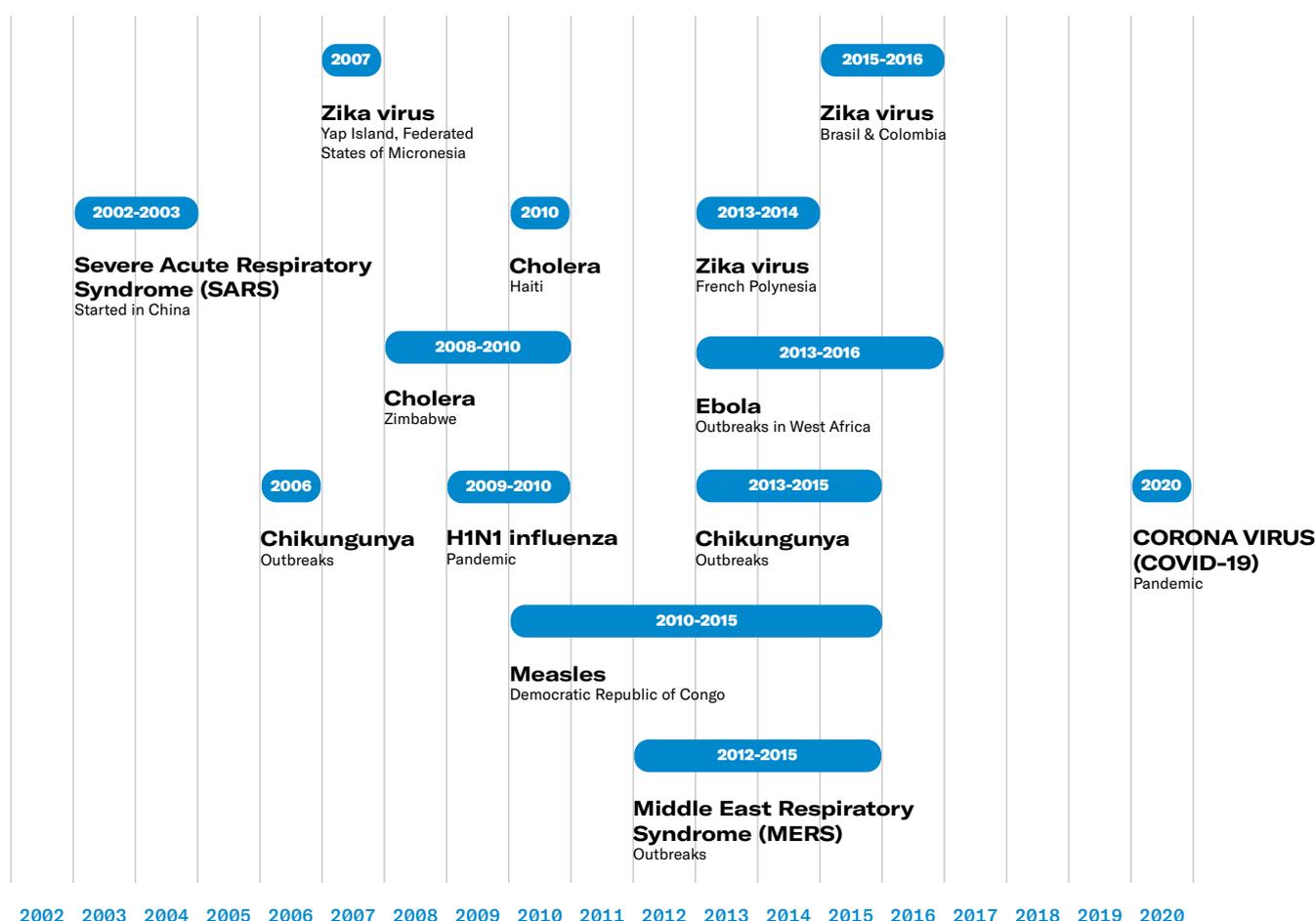


Figure 1
Major emerging and re-emerging infectious disease outbreaks, from 2002 to 2020.²⁵

SARS-COV

SARS is an infectious disease caused by a virus belonging to the coronavirus family, SARS-CoV. The animal reservoir of the SARS coronavirus has been identified as a bat.

SARS-CoV first emerged in November 2002 in China's Guangdong province, before spreading to Canada, Singapore, and Vietnam by travellers passing through Hong Kong in February and March 2003.¹² **To date, 8422 people have been infected with SARS-CoV in 32 countries, and 919 (11%) of them have died.**

The major clinical features of SARS-CoV infection include persistent fever, chills, myalgia (muscle pain), dry cough, headache, general feeling of malaise and shortness of breath. Sore throat, runny nose, sputum production, nausea, vomiting and dizziness were less common. Watery diarrhoea became prominent in 40% to 70% of patients with SARS one week from the start of their illness. Most patients who died from the virus had other chronic medical conditions, were elderly or immunocompromised.

SARS-CoV-2, the virus responsible for the current COVID-19 pandemic, is primarily transmitted, like many respiratory viruses, in tiny droplets released from the nose and mouth of an infected person when they cough or sneeze. These particles can be propelled up to three feet (almost one metre) and land on people's faces and clothes (as well as on other surfaces), with some of the smaller particles remaining in the air for some time.

The virus can also be spread through shaking hands with an infected person, touching an infected object/surface, frequent touching of the nose or mouth or coming into contact with a carrier's faeces. "Hidden transmission", through asymptomatic infected individuals, who unknowingly transmit the virus to unsuspecting contacts, has also occurred.^{13,14}

EBOLA

Ebola viruses (EBOVs) belong to the Filoviridae family. The origin of this virus is unknown, but current evidence suggests fruit bats may be hosts.¹⁸

The first documented outbreak of an EBOV disease occurred in the town of Yambuku in the Democratic Republic of Congo (DRC) in 1976. Since then, these viruses have caused outbreaks of variable magnitude in several west and equatorial African countries. In the largest outbreak in West Africa, **between 2013 and 2016, about 28,000 cases were confirmed and up to 11,000 deaths were reported**, thus demonstrating the high mortality of this condition. The most recent (2018-2019) outbreak in eastern DRC is highly complex, with insecurity adversely affecting public health response activities.

Ebola is spread by human-to-human transmission, through broken skin or mucous membranes, via:

- Blood or other bodily fluids of a person who is sick with, or died from, Ebola
- Objects contaminated with bodily fluids (like blood, saliva, faeces, vomit) from a person sick with Ebola or the body of a person who died from Ebola

Healthcare workers have frequently been infected while treating patients with suspected or confirmed Ebola. This occurs through close contact with patients when infection control precautions are not strictly practiced. Burial ceremonies involving direct contact with the body of the deceased can also contribute to the spread of Ebola. People remain infectious as long

as their blood contains the virus while pregnant women who recover from the disease may still carry the virus in their breast milk, or in other pregnancy-related fluids and tissues. This poses a risk of transmission to the foetus as well as to other people. Women who become pregnant after surviving Ebola do not pass on the virus.¹⁷

MERS-CoV

Middle East Respiratory Syndrome (MERS) is caused by a new coronavirus, MERS-CoV, first identified in Saudi Arabia in 2012. Evidence points to dromedary camels as being host reservoirs.¹¹



The clinical features of MERS-CoV infection are extremely variable, ranging from an absence of symptoms to a flu-like syndrome, pneumonia and acute respiratory distress syndrome. The three most frequent symptoms are: fever (77%), cough (90%), and shortness of breath (68%). Many other secondary symptoms have been reported, such as sputum production, painful swallowing, digestive system issues, the coughing up of blood-stained mucus, muscle pain and headache. Like other respiratory diseases caused by coronaviruses, MERS-CoV tends to be more severe in older people, those with weaker immune systems, and those with chronic diseases like kidney failure, cancer, chronic lung disease and diabetes.

Enhancing infection prevention and control awareness and implementation measures are critical to preventing the spread of MERS-CoV, particularly in healthcare facilities. It is not always possible to identify patients with MERS-CoV early because some have mild or non-specific symptoms. Therefore, it is important that all healthcare facilities establish and implement clear triage policies for the rapid screening and assessment of potential MERS-CoV cases and, indeed, all cases of acute respiratory symptoms. It is also important for healthcare workers to apply standard precautions consistently with all patients, regardless of their diagnosis, in all work practices, all of the time. Precautions against droplets should be added to standard precautions when providing care to any patient with symptoms of acute respiratory infection.

Until more is understood about MERS-CoV, people with a higher risk of developing severe disease, as mentioned above, should take precautions when visiting farms or markets where dromedary camels are present (especially in the Middle East and Africa). These precautions include: avoiding contact with camels; not drinking raw camel milk or camel urine; not eating camel meat that has not been thoroughly cooked.^{9,10,11}

So far, there have been **more than 2000 cases with more than 800 fatalities**, throughout 27 countries.

ZIKA

Zika virus was first discovered in the Zika forest of Uganda in 1947 in Rhesus monkeys, but was not identified in humans until 1952 in Tanzania.

Since then, outbreaks have occurred sporadically in Africa, the Americas, Asia, and the Pacific. **Until 2007, only 14 cases had been documented in humans worldwide.**²²

The first large outbreak among people was reported on the island of Yap (Federated States of Micronesia, in the Pacific) in 2007. The most likely source of the outbreak was the introduction of the virus through travel or trade involving an infected person or an infected mosquito. Another large outbreak was seen in the Pacific Islands (French Polynesia, Easter Island, the Cook Islands, New Caledonia) in 2013/2014. This was the first outbreak where congenital malformations (such as microcephaly, where the baby's head is smaller than normal) and neurological complications, including Guillain-Barre syndrome (where the body's immune system mistakenly attacks part of the nervous system) were linked to the virus, although these associations were made retrospectively.

In the last Zika outbreak, the first reports of locally-transmitted infections came from Brazil in May 2015, although there is data to suggest the virus originated there between October 2012 and May 2013. Since then, 86 countries, territories, and subnational areas have reported evidence of mosquito-borne Zika virus transmission. Transmission is ongoing in the Americas, the Western Pacific region, the Southeast Asia region, and Africa.²³

Zika virus is usually transmitted to people through the bite of an infected mosquito, the main one being the yellow fever mosquito (*Aedes aegypti*). The Asian tiger mosquito (*Aedes albopictus*) can also spread the virus.²⁴



Maternal and Newborn Health during pandemics

Tragically, maternal health is already a critical issue for many women around the world. WHO reports that more than half of maternal deaths occur in Sub Saharan Africa, with the majority of them in fragile states, many affected by conflict and recurring natural disasters.²⁶

In addition, it has often been observed that, during outbreaks, resources normally reserved for reproductive and sexual health are diverted to the emergency response. Such measures contribute to a rise in negative outcomes including maternal mortality, unsafe pregnancies and unsafe abortions. Numerous instances of preventable morbidity and mortality amongst children and pregnant women were documented during the 2013-2016 Ebola epidemic. These cases were mostly due to facilities directing their focus to treating Ebola, at the expense of other services.

For example, the closure of maternal health clinics consequently led to the maternal mortality rate in the region, already one of the highest in the world, increasing by a massive 70 percent. And, numerous unplanned pregnancies were reported in countries in West Africa impacted by Ebola, a consequence of non-Ebola health service providers closing during the outbreak, thereby significantly reducing access to family planning services. During the 2013-2016 West African Ebola outbreak, Médecins Sans Frontières (MSF) closed its obstetric and paediatric care facilities in affected areas, 'depriving the local population of essential services'.³⁷

Furthermore, many people also resisted using health facilities for fear of contracting Ebola. This was particularly the case amongst pregnant women who needed treatment or were about to give birth, posing a serious threat to maternal and neonatal health and leading to increased morbidity and mortality.



Maternal mortality rate increasing by a massive 70 percent

Decrease in the use of lifesaving health services translated to 3600 additional maternal, neonatal and stillbirth deaths

In South America, the Zika outbreak illustrates the importance of reproductive health services to effectively responding to disease outbreaks. In most cases Zika causes only mild infections. However, it can have severe reproductive health impacts and cause congenital defects in infants born to infected mothers. Consequently, family planning to ensure protective measures are taken prior to and during pregnancy is the best way forward.

It has also been reported that in areas affected by Ebola, women giving birth were often 'triaged' out of the formal and into the informal health system as health workers, unsure who was and was not infected, were scared of contact with any bodily fluids from pregnant women.³⁷

A study looking at the indirect impact on maternal and neonatal deaths of the Ebola epidemic in Sierra Leone, concluded that the indirect mortality effects of a crisis in the context of a health system lacking resilience may be as important as the direct mortality effects of the crisis itself. The researchers found that antenatal care coverage suffered the largest decrease during the epidemic, followed by the use of family planning, facility delivery and postnatal care services. This decrease in the use of lifesaving health services translated to 3600 additional maternal, neonatal and stillbirth deaths in 2014-15.⁴¹

In 2003, a community outbreak of SARS in Hong Kong resulted in a significant number of pregnant women being infected. Some subsequently needed emergency caesarean sections as their health deteriorated. As no neonatal clinician had any experience in looking after these kind of high risk infants, stringent infection control measures to prevent cross infection between patients and staff were important to safeguard the wellbeing of the workforce and avoid any nosocomial (originating in hospital) spread of SARS within the neonatal unit.¹⁴

Pregnancy and COVID-19

More than 200 million pregnant women around the world are potentially at risk of infection with COVID-19. MERS and SARS are both known to cause adverse pregnancy outcomes including miscarriage, premature birth, foetal growth restriction and maternal death.

Currently, experience of COVID-19 in pregnancy is limited. But some studies are beginning to shed light on the degree of danger that the virus represents to pregnant women and newborns. The initial data is cautiously reassuring, but many more and larger studies are necessary to better understand the effects of this new virus on pregnancy and pregnancy-related outcomes. This is absolutely vital as a growing number of pregnant women are seeking to avoid giving birth in hospitals due to the perceived risk of exposure to COVID-19.

In general, pregnant women are more vulnerable than many people to respiratory infections, which makes them more susceptible to a coronavirus and puts them at risk of COVID-19.⁴⁹ Numerous studies conclude that there is no evidence of intrauterine vertical transmission. However, delivering with COVID-19, as with any respiratory illness, can make other complications more likely, particularly premature births.⁴⁹

Similar to the general population, a lack of symptoms in pregnant women with COVID-19 has also been reported. Pregnancy and perinatal outcomes of women with COVID-19 should receive more attention. It is probable that many pregnant women diagnosed after delivery with COVID-19 had no fever beforehand. Their primary initial manifestations were, in many instances, merely a low-grade postpartum fever or mild respiratory symptoms.⁵⁰

In addition, isolation and quarantine measures universally taken as a response to COVID-19, on top of the challenges inherent to pregnancy during complex situations, make pregnant women susceptible to post-traumatic stress disorder. Therefore, there should be more awareness regarding this group of the population as targets for psychological support, and prompt and continuous psychosocial intervention.

Outbreaks of SARS and MERS, two other diseases caused by coronaviruses, were small enough that little data was collected on pregnant women, although some of that data was worrying. Those with SARS were more likely to require mechanical ventilation and had a higher death rate than non-pregnant patients. Both viruses were associated with higher rates of miscarriage and premature birth.

A study estimating the potential impact of COVID-19 on sexual and reproductive health in low and middle income countries projected that a 10% decline in service coverage of essential pregnancy-related and newborn care will result in 1,745,000 additional women experiencing major obstetric complications without care; 28,000 additional maternal deaths; 2,591,000 additional newborns experiencing major complications without care; and 168,000 additional newborn deaths.⁴³

Lessons learned for practical guidance



The epidemic that most resembles COVID-19 is the 2013-2016 Ebola outbreak in West Africa. Even though the viruses that cause them differ, and they do not have the same modes of transmission, their similarities reside in their impact on the regular functioning of health services and the most vulnerable people in society. The extent and severity of the Ebola outbreak meant that countries and their health systems were in uncharted territories. The same is true with COVID-19.

The Ebola outbreak attracted particular attention to the need to address gender issues relating to the spread and control of infectious diseases. Lockdown measures to keep people in place were enacted to limit the spread of Ebola. These measures were effective, but the force with which they were applied created a lot of anxiety and helped to reinforce the stigmatisation of those infected. Thus, it is clear that movement restrictions relating to COVID-19 must account for the needs of different vulnerable

The epidemic that most resembles COVID-19 is the 2013-2016 Ebola outbreak in West Africa, their similarities reside in their impact on the regular functioning of health services and the most vulnerable people in society

groups, as quarantine and lockdown measures may prevent pregnant women from accessing care. In addition, the domestic responsibilities of women make them more vulnerable and increase their risk of being infected.

The mortality rates of pregnant women with Ebola before the West African epidemic was up to 90%, and 100% among newborn babies. However, with access to supportive treatment, the survival rate among the women was reported to be 46.8%, more or less the same as any women of reproductive age, and there was one surviving newborn.⁴²

It is essential that lessons learned incorporate the significance of gender in the spread and control of diseases. In the Ebola context, the ethical quandaries of health workers included the overlap of symptoms of Ebola and pregnancy complications. This hinders a health worker's ability to differentiate between a woman with an obstetric emergency requiring lifesaving care and an Ebola case, where invasive procedures must be limited.

Communication efforts should make use of community leaders and any available community media in order to have better and more personalised access to the targeted population.

Because of the novelty of this virus and the many unknowns around COVID-19, there should be visible campaigns to sensitise and reassure people about the safety of healthcare facilities for pregnant women during the pandemic. These efforts could include women who have already had positive experiences and outcomes. At the community level, pregnant women who are already using healthcare facilities can be used as champions to motivate other women to use them too.

It is essential that there is consistent messaging. This will help women and their families seek early advice and make timely decisions. This is particularly important for women in areas of quarantine, in self-isolation, or with reduced transport options. For women who have complications during pregnancy, getting medical attention too late can have serious consequences.

It is also vital that maternity wards are always perceived as safe places.

- Healthcare workers (HCWs) are a critical part of the fight against COVID-19, just as they were for Ebola. They should undergo proper training in infection control and prevention practices, as well as in the proper use of personal protective equipment (PPE). They must have confidence in guidelines and case management practices for the care of pregnant women. These should include clear messages on how to explain all safety and procedures to patients, and how to project utmost confidence in the safety and effectiveness of PPE.
- Healthcare workers suffered from a high infection and mortality rate from Ebola, which translated into a high dropout rate among staff at the beginning of the epidemic. Similar trends are noted in the fight against COVID-19. In addition to infection control, prevention measures and the availability of PPE, a 'hazard incentive payment' was highly motivating. Establishing this during the current pandemic could help boost availability of much-needed HCWs.

- Early detection and quick action is critical in efforts to control COVID-19. This is even more important for pregnant women with respiratory illnesses, because of their increased risk of adverse outcomes. The majority of people infected, including pregnant women, are asymptomatic. In order to offer them proper follow-ups and protection, all pregnant women should be regularly tested as part of their antenatal care.
- Ensure pregnant women with suspected, probable, or confirmed COVID-19, including women who may need to spend time in isolation, have access to women-centred, respectful skilled care, including obstetric maternal screening tests, fetal medicine and neonatal care, as well as mental health and psychosocial support with readiness to care for maternal and neonatal complications.
- All maternity units must prepare dedicated areas for pregnant women with COVID-19 to give birth in.
- In order to ensure antenatal and postnatal care services continue, regardless of the extent or severity of the pandemic, dedicated antenatal and postnatal care facilities/mobile clinics can be established and adequately staffed, including remote consultations and follow-ups.
- It is crucial to develop clear clinical guidelines on how to care for pregnant women with COVID-19. Healthcare personnel, including midwives, should have access to and be trained on such guidelines. Annex 1 is a detailed protocol for the management of possible and proven cases of COVID-19 in pregnant women, developed by French doctors.
- It is equally essential to ensure the availability of all required supplies at all times. All facilities should be fully stocked, including medicines and PPE. HCWs should not have to fear at any point that they might run out of supplies if there is an increase in cases. As part of its Ebola response, UNFPA provided the three countries affected with thousands of infection control kits, clean delivery kits, universal precaution kits, blood transfusion kits, post-rape kits and equipment for emergency obstetric neonatal care.
- No evidence of the virus has been found in the breast milk of women with COVID-19. Therefore, a breastfeeding woman should not be separated from her newborn, but should heed precautions including wearing a mask when feeding.
- Midwives play an important intermediary role between the public and private spheres. During Ebola they helped fill the gap in service delivery, despite often lacking training. Interventions should be developed to support private facilities, midwives and health personnel working privately in communities during times of crisis. Then they will hopefully be seen as safe alternatives for pregnant and labouring women.



Sexual and Reproductive Health during pandemics

The impact of the pandemic on sexual and reproductive health is not always immediately clear in the chaos. But we soon see that disruptions in supply chains can cause shortages of things like contraceptives, antiretrovirals for HIV/AIDS and antibiotics to treat STIs. The shutdown of drug manufacturing plants in China has also contributed to delays in the availability of supplies.



Furthermore, the diversion of financial resources and healthcare providers to help address the pandemic may cause a shortage of clinicians who can provide sexual and reproductive health services. These reductions in services have a greater effect on patients relying on free or subsidised care, particularly women, girls, and/or other marginalised groups living in poverty and/or those already facing other barriers.⁵¹

In 2016, after the initial cases of neurological disorders in the babies of mothers affected by Zika virus during pregnancy, WHO declared a health emergency. Several countries in Latin America advised women to delay getting pregnant. In the United States, the Center for Disease Control and Prevention recommended women should discuss family planning with their healthcare providers.²³ In many poorer countries, advice to postpone pregnancy has limitations as most people depend on national health systems for free contraception. It is therefore crucial for governments to take special measures to ensure access to high quality contraception for everyone, at all times. Also, school closures often lead to increased sexual activity amongst teenagers. A lack of access to contraception can result in an increase in unwanted pregnancies and higher demand for abortion services.



Another worry is that mistrust of healthcare workers and government facilities negatively impacted care-seeking behaviour during the 2013-2016 Ebola outbreak. People reported being scared of going to facilities to receive injections or implants for family planning, worried they would be injected with Ebola.⁵² Similarly, because of persistent rumours of ‘vaccines’ being deployed to reduce the African population during the COVID-19 pandemic, people might not visit facilities for reproductive health services.

It is absolutely paramount that we implement measures immediately in order to lessen any disruption to sexual and reproductive health services.

Lessons learned for practical guidance

Health systems are increasingly strained; this was the case during the 2013-16 West Africa Ebola outbreak, where sexual and reproductive health and rights were sidelined. It was also the case during the 2015-2016 Zika crisis, where draconian restrictions on reproductive rights hampered Brazil’s response, and where increasing restrictions on movement and requirements to “stay at home” further aggravated barriers to sexual and reproductive healthcare.³⁸

Nevertheless, the response to the Ebola outbreak in the Democratic Republic of Congo in 2018 included significant lessons learned from the 2013-2016 West Africa outbreak. However, lessons on how to maintain access to and keep using reproductive health services were less systematically applied.³⁹

- One of the major lessons learned from the Ebola response is that sexual and reproductive health needs and services must be embedded in the COVID-19 response from the very start.
- A Sexual and Reproductive Health (SRH) representative should have a seat at the table in COVID-19 response co-ordination teams. Ensuring SRH is a priority during any outbreak is challenging, given that the main focus is on ending transmission of the virus or disease. Therefore, the role of the SRH coordinator must be to ensure that SRH needs assessments take place and that SRH access is considered and planned for in strategic decision-making.
- Access to the full range of contraception for those who choose it should be prioritised and be part of the response. This should include health promotion campaigns informing communities of what contraception can be accessed and where to get it.
- Access to contraception should extend beyond routine health facilities.
- It is important to ensure there is always an adequate supply of different kinds of contraceptives. The Logistic Management Information System (LMIS) can be used to monitor stock levels.
- Limitations on face-to-face appointments because of isolation measures can create another barrier to accessing oral contraceptives as they require an appointment to get the first prescription as well as appointments for subsequent refills.
- Consider giving essential hygiene and sanitation items (e.g. sanitary pads, soap, hand sanitisers, etc.) to female health workers and other women and girls, particularly those quarantined for prevention, screening and treatment.
- In countries struggling with a heavy COVID-19 burden, support the Ministry of Health so it can provide adequate and effective online screening, education and reproductive health and contraception counselling services, using mobile phone messaging apps like WhatsApp.
- Rumours and misunderstandings must be eliminated and trust built between community members and healthcare workers. This will help to remove barriers limiting women's use of SRH care.
- Ensure measures are in place to prevent, protect and mitigate the consequences of all forms of violence, stigma and discrimination against adolescents and youth - especially girls and young women - during quarantine and self-isolation processes and procedures.

- The presence of skilled service providers may increase the uptake of services by adolescents and help to prevent pregnancy. Such providers should be trained on how to reduce and eradicate stigma. They can then encourage adolescents, especially very young ones, to go to health centres in early pregnancy to prevent complications.
- It is critical to protect health workers in order to maintain services. It is also important to organise safe and respectful hospital wards so people maintain confidence in their health system.
- Complementary strategies must be pursued to respond to the specific needs of adolescent populations.

The Minimum Initial Service Package (MISP) for Reproductive Health has set out six key activities to reduce SRH morbidity and mortality during a humanitarian crisis.

The six are:

1. **Identifying an agency to lead the implementation of the MISP**
2. **Preventing and managing the consequences of sexual violence**
3. **Reducing transmission, mortality and morbidity from HIV and other STIs**
4. **Preventing excess maternal and newborn morbidity and mortality**
5. **Preventing unintended pregnancies**
6. **Planning for comprehensive SRH, integrated in primary healthcare services**

Gender-based and Domestic Violence during pandemics

Requirements for social distancing and increasing “shelter in place” orders are needed to combat the spread of the virus, but often have the unintended consequence of trapping people in violent and abusive relationships. For these individuals, violence often increases in times of crisis but leaving home can feel impossible.



Crises exacerbate age, gender, and disability inequalities and place women, girls, and other vulnerable populations at increased risk of gender-based violence (GBV) and intimate partner violence (IPV). In fact, IPV may be the most common type of violence that women and girls experience during emergencies.³⁷

Recognising the extent to which disease outbreaks affect women and men differently is a fundamental step to understanding the primary and secondary effects of a health emergency on different individuals and communities, and creating effective and fair policies and interventions.

One way the vulnerable (usually women and children) are additionally affected during pandemics is Sexual Exploitation and Abuse (SEA) by development and humanitarian personnel. Overall, SEA has begun to be better recognised and addressed but remains a serious concern, pandemic or no pandemic. Statistics on the prevalence of SEA are often lacking and vary in different places and contexts, but it can certainly cause serious emotional and physical health complications. Evidence from the 2013-16 West Africa Ebola outbreak and the 2018-2020 outbreak in the Democratic Republic of Congo sadly suggests SEA incidents do increase during public health emergencies.

Another worry is that the economic effects of an outbreak can lead to exacerbated sexual exploitation risks for women and children. This happened during Ebola. Today, as families face heightened tensions, financial uncertainties and other pressures, women and girls are increasingly vulnerable.³⁹

This year, women's rights activists in China reported that domestic violence cases have risen dramatically as people across much of the country have been quarantined, potentially with abusers, during the coronavirus outbreak. Statistics show that 90% of this violence is related to the COVID-19 pandemic.⁵³

There is a high risk of GBV increasing during the COVID-19 pandemic as movement restrictions trap women and girls. Potential loss of income due to self-isolation, a potential lack of information regarding which GBV services remain available, and fears of contracting the virus at service points create multiple barriers. Women and girls may find themselves in an apparently impossible situation: unable to seek support, unable to access services, and unable to leave their abusers.



Crises exacerbate age, gender, and disability inequalities and place women, girls, and other vulnerable populations at increased risk of gender-based violence (GBV) and intimate partner violence (IPV).

Figure 2 summarises conclusions from a study conducted by the Center for Global Development, which identifies at least nine ways in which the consequences of, and responses to, pandemics like COVID-19 can lead to, or increase, violence against women and children.⁵⁴

Economic insecurity and poverty-related stress: These correlate with poor coping strategies (e.g. substance abuse) and can lead to increases in IPV and the mistreatment of children.

Quarantine and social isolation: Close quarters, especially those tied to stressful conditions, are linked to more stress, fear, poor mental health and disorders. These can, in turn, increase the likelihood of violence.

Disaster- and conflict-related unrest and instability: Pandemics can break down social infrastructure, compounding existing weaknesses in conflict and disaster settings. This may lead to increased family separation, intra-familial violence, and exposure of women and children to unsafe conditions like sexual violence and harassment when they try to get basic goods, including food, firewood, and water.

Exposure to exploitative relationships due to changing demographics: Higher mortality rates mean extended family networks find themselves caring for children whose parents have died. This puts new strains on households and risks youngsters not being cared for as well as they should be, even facing violence.

Reduced availability of health services and access to first responders: Health providers and emergency first responders are often the first point of contact for survivors, as well as sources of short-term physical protection for women and children. With all hands on deck needed to respond to pandemics, first responder resources and referral pathways survivors rely on may not always be available.

Virus-specific sources of violence: During the COVID-19 pandemic we have already learned how some people are using virus-specific misinformation, scaremongering tactics and controlling behaviour to withhold safety items. In other pandemics, including HIV/AIDS, violence has been linked to serostatus disclosure (whether someone has antibodies in their blood or not). People may also be at increased risk of lifelong exposure to violence because of disabilities arising from some viruses, such as microcephaly due to the Zika outbreak.

Inability of women to temporarily escape abusive partners: Women already face complex decisions and a wide range of barriers preventing their ability to safely escape abusive partners. During pandemics, when mobility is constrained, social distancing measures are imposed, economic



Potential loss of income due to self-isolation, a potential lack of information regarding which GBV services remain available, and fears of contracting the virus at service points create multiple barriers.

vulnerability increases, and legal (social services) are scaled back, meaning challenges involved in escaping from abusive partners are exacerbated.

Exposure to violence and coercion in response efforts: There have been documented cases of aid workers responsible for helping vulnerable populations in times of crisis committing acts of violence against women and children. Unequal power dynamics open up possibilities for those meant to be helping including, as seen in the Ebola response, health workers, taxi drivers, and even burial teams—to pressure people into exploitative relationships in exchange for transport, food, cash, and vaccines.

Violence against healthcare workers: Women make up nearly 70 percent of the global health workforce and are regularly subjected to abuse and harassment from colleagues and patients. Risks may be heightened in pandemic settings, harming women themselves and crippling the effectiveness of health systems.



Figure 2
The nine pathways linking pandemics and violence against women and children

Lessons learned for practical guidance

Although it is hard to measure issues such as gender-based violence in outbreak settings, accounts from frontline workers have described specific risks related to sexual violence. In Sierra Leone, a number of girls were sexually assaulted during the Ebola epidemic by community members supposed to be enforcing quarantine, as well as by taxi drivers transporting goods and people. Disease control measures that do not consider the gender-specific needs and vulnerabilities of women and girls may increase the risks they face and lead to negative coping mechanisms. Children and families who are already vulnerable due to socio-economic exclusion or those who live in overcrowded settings are particularly at risk.

The development of digital data collection methods will also provide the ability to capture information on women and girls in high risk situations. Such 'Apps' will help accelerate detection, reporting, active surveillance and rapid responses, with referral to the proper authorities.

Overall:

- Plan for an increase in GBV cases, and/or an increase in vulnerability and needs of GBV survivors, and strengthen and fill gaps in the provision of local GBV survivor-centred referral systems and services.
- Ensure the clinical management of GBV can be done through forensic kits, cervical and vaginal tear kits, post-rape treatment kits and dignity kits.
- Bolster violence-related first-response systems. First responders should anticipate a surge of GBV at the outset of a pandemic and prepare accordingly, including through increasing staff and support resources. Wherever possible, free, virtual options for mental health support should be provided.
- Explore how technology can support those in quarantine who need access to GBV services. Build on existing initiatives that provide online support for legal aid and psychosocial support, noting gender disparities in access to technology.
- Engage with existing formal and informal social networks such as women's groups, community groups, civil society and women's rights organisations, to support their efforts as first responders and their efforts to prevent social isolation.
- Ensure GBV is integrated into the responses of health systems. Healthcare providers trained to identify women and children at risk of violence should be present in all testing and screening locations. They must assess safety while recommendations for "self-quarantine" or "shelter at home" are made. In parallel, health systems must protect female health workers, mitigating the risk of sexual harassment and violence.
- Expand and reinforce gender-sensitive social safety nets, such as proposals for direct cash or payments-in-kind.

- Expand shelter and temporary housing for survivors. There is a need to ensure there is housing available for women and girls at high risk of violence in their homes during pandemics. For example, the Canadian government announced an aid package which included increases in funding for gender-based violence shelters and refuges for victims of sexual assault.
- Ensure messages consider age appropriateness and are informed by an understanding of sociocultural conditions and behaviour related to knowledge and perceptions of the virus or disease, prevention and control measures, and care-seeking patterns.
- Recognise that messages aimed at adults may also be seen and heard by youngsters who might not be developmentally or emotionally ready to understand their content. Work with other sectors to ensure lifesaving messages, even those aimed only at adults, are phrased in a manner that avoids causing undue distress to children or their carers.
- Establish systems to monitor the situation of girls who may be at increased risk of violence, abuse and neglect, such as those with disabilities, chronic illnesses or albinism; child victims and survivors of the relevant virus/disease; and children with family or household members who have contracted the virus/disease.
- Train teachers to support the social reintegration of students once schools reopen and provide opportunities for these young people to face up to difficulties they have experienced, including grieving for family and friends lost to the virus/disease.
- Identify girls whose so-called excluded status makes them especially vulnerable during an outbreak. This might include children without family care and children living and/or working on the street in close proximity to transmission sources.



Conclusion

The COVID-19 pandemic kills, ravages health systems, disrupts economies and disturbs the lives of everyone.

As the virus continues to spread from one country to another, it is becoming increasingly obvious that our lives will no longer be the same.

National decision makers must respond to both existing and emerging needs of populations, including the health and rights of women and girls. In this perspective, lessons learned from emerging and re-emerging infectious disease outbreaks are instructive, particularly regarding the continuity of reproductive, maternal, newborn and adolescent health services and the practical guidance for achieving them.

Indeed, we must learn from the Ebola epidemic of 2013-2016 or the Zika crisis of 2013-2016, during which sexual and reproductive health and rights were not given enough attention. Many situations affect the health of women and girls, including unwanted pregnancies, STIs, unsafe abortions, maternal deaths and a lack of timely care for high risk pregnancies.

To remedy this, as part of their response to the COVID-19 pandemic, countries and their development partners must:

- 1 ensure continuity of reproductive, maternal, newborn and adolescent health services, including the protection of health professionals;**
- 2 address gender-based violence and harmful practices; and**
- 3 ensure the supply of vital reproductive, maternal, newborn and adolescent health products, including modern contraceptives.**



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