

COVID-19: A briefing note for African contexts

Professor Mukesh Kapila
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BACKGROUND

What is COVID-19?

Coronavirus Disease or COVID-19 is an infectious condition caused by a new virus named SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2). This virus is part of a family of coronaviruses (so-called because they have crown-like spikes on their surface) that cause the common cold as well as more serious conditions such as SARS (severe acute respiratory syndrome) and MERS (Middle-East Respiratory Syndrome).

SARS-CoV-2 is thought to have originated in animals (bats and pangolins are implicated) before transmitting to humans, and then among humans. The virus seems to be mutating as it spreads around the globe as the virus adapts to new and diverse populations. Three different types of SARS-CoV-2 have been identified to date and more may emerge. The viral genome differences observed so far appear to be small, and their clinical implications are currently insignificant, though this could have a bearing for how the virus behaves in different populations, and for future drug treatments and vaccines. However, it is too early to tell if the virus will, over time, mutate significantly into more aggressive or more benign types.

The new disease was first detected in Wuhan, China in December 2019 but probably arose somewhat earlier. It then expanded to other regions in China and moved to neighbouring countries before spreading worldwide. As around mid-April, 210 countries and territories had reported nearly 2 million cases including over 120,000 deaths. These numbers are an under-estimate because testing for the virus is not widespread; the number of infections is likely to be much greater, perhaps 10-20 fold.

The World Health Organization (WHO) has designated COVID-19 to be a *public health emergency of international concern* under the International Health Regulations. This an intergovernmental agreement that obliges countries to collaborate to protect public health. WHO has also declared that COVID-19 is now a *pandemic* because it has spread widely across several continents and many countries, and has established itself within numerous communities.

How does it spread?

The virus spreads mostly by inhaling droplets from an infected person when they cough or sneeze. These droplets often land on nearby objects and surfaces on which the virus can survive for several hours (or longer) depending on the type of surface, temperature, and humidity. Other people can then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth. The virus is also present in some cases in the faeces of infected persons but spread through this route is not known to be significant.

The incubation period of COVID-19 i.e. the time between catching the virus and having symptoms of disease, ranges between 2 -14 days, most commonly around 5-6 days. An infected person is most contagious when they have symptoms, and they are, therefore, the most important source of transmission. But asymptomatic people can also spread the virus because they can also shed virus particles and continue to do so until they are symptom-free. Despite widespread public concern, spread from asymptomatic people is a relatively small proportion (perhaps 10%), compared to spread from sick people.

The basic reproduction number (Ro) of the virus is currently estimated at around 2.5 i.e. between 2 and 3 people may, on average, be infected by a carrier of the virus when no protective steps are taken. The overall Ro needs to reduce and eventually fall below 1 to stop population transmission. To date, that has not been achieved anywhere at a national level although it has been achieved at the level of localised outbreaks.

How serious is COVID-19?

The disease may cause no or mild symptoms in 80% of cases. For the remainder, it can be a moderate or severe illness in 15% of cases and critical in 5%. The overall death rate is approx 3% among known infections; this may lower to 0.5-1.0% or thereabouts when widescale testing is adopted and a lot more of the milder or asymptomatic infections are recorded in the statistics.

The median time from onset of symptoms to clinical recovery for mild cases is approximately 2 weeks and is 3-6 weeks for patients with severe disease, and could be even longer for people who have been critically ill.

All ages are affected but the more severe manifestations tend to occur in older people (more than 60 years) where case fatality rates of 6% have been recorded increasing to over 20% in the 80s. Those with chronic underlying conditions such as cardiovascular disease, cancer, respiratory disease, diabetes, and kidney disease are also at much more risk of serious disease and death, at all ages. Obesity is increasingly recognised as a risk factor.

It appears that men, especially among seniors, are more likely to have severe forms and die from COVID-19. That may be because they have more underlying conditions. More recent data from Europe and US also suggest that the proportion of infected and seriously sick people who are of black and Asian origin is higher. Whether that is due to their greater social and occupational/ environmental vulnerability in those contexts or there are genetic factors at play linked to ethnicity, is not yet clear.

How does it affect the body?

The virus primarily affects the lungs. In cases of greater severity, other organs such as the heart, kidneys, and liver are also damaged, leading to progressive organ failure.

Symptoms can begin gradually, the most common being fever, tiredness, and persistent dry cough. Some patients may have loss of smell and taste, aches and pains, nasal congestion, runny nose, sore throat or diarrhoea. More serious symptoms include breathing difficulties which may signify pneumonia and, in extremis, lead to death.

The extent to which a person is affected by COVID-19 depends on a range of factors. First, the viral load i.e. how much of the virus is inhaled. Second, how their body responds to fight off the virus. That depends on the strength of their immunity. Because this is a new virus, no one in the world was immune to it. Older people and people with chronic diseases have reduced immunity and hence they are more at risk of getting severe versions of the disease.

Immunity develops when a person catches the disease and recovers. They should not then catch it again. However, we don't yet know how long such immunity lasts – whether for the season only or for longer.

There is no known treatment specifically for COVID-19 although several clinical trials are studying if existing anti-viral and other medicines may have some value, even in terms of reducing the severity

and length of the disease. Otherwise, the only treatment is symptomatic eg paracetamol to reduce fever and pain, and support for failing organs such as oxygen and mechanical ventilation in serious cases of lung failure.

The survival rate of persons put on ventilators is low – perhaps 50% in the best medical centres. Their recovery also takes much longer and, post-ventilation, they may have long-term or permanent respiratory problems, as mechanical ventilation is a highly intrusive intervention.

Reducing COVID-19 spread through personal action

To reduce spread requires personal action by everyone to minimise their own exposure to the virus and, if they do catch the virus, to reduce the chances of spreading it to others.

They can do this through thorough and frequent hand washing with soap and water or cleansing with a hand rub (sanitiser) that contains at least 60% alcohol. They should also avoid touching their face, and cover their mouth and nose when coughing or sneezing. Regular cleaning of domestic surfaces and objects with which there is frequent contact eg work surfaces, mobile phones needs to be practiced.

They should also practice ‘physical distancing’ (also known, less helpfully, as ‘social distancing’). This means maintaining a distance of at least one metre from other people who are not part of their own household. They should also avoid unnecessary trips or travel, and stay away from large groups of people.

They should also refrain from smoking as that weakens the lungs. They should maintain as healthy a lifestyle as they can with a balanced diet, some physical activity, and psycho-social stress management, to keep their immune system strong.

It is prudent to further shield the aged (greater than 70 years) and people with underlying chronic conditions as best as individual circumstances allow.

If someone is unwell with symptoms of COVID-19, especially fever above 38 C, a new dry persistent cough, or especially if there is loss of smell/taste, they should stay at home and immediately isolate themselves as much as feasible under the circumstances of their living conditions. They or their carers should be aware of what to do to seek healthcare if their condition worsens. They should not go to health centres or hospitals without prior arrangement as they could spread the virus to other vulnerable people and health workers.

Masks can be useful under specific circumstances only. Medical-standard masks made to set standards (ASTM F2/100, EN 14683) should be reserved only for healthcare workers, and persons with symptoms and their home carers. Home carers should also wear, if available, gloves, aprons and goggles when engaged in caring activities that may expose the carer to the bodily fluids of the sick person. There is worldwide shortage of medical masks and they should not be wasted by people who have no need to use them.

There is no current evidence to make a recommendation for or against the use of non-medical masks by otherwise healthy people. There is also a risk that they may provide a false sense of security if users neglect other self-hygiene measures.

However, non-medical masks could be considered in riskier environments, for example, crowded settings such as buses and slums/camps where physical distancing is not feasible. Also, they could be

used nearer older people and those with underlying diseases who are more vulnerable. Non-medical masks do not have any set standards. In their selection, consider multiple layers of fabric/tissue, water-repellence, breathability, as well as closeness of a comfortable fit to cover mouth and nose. Masks need to be taken off, and used masks disposed in a safe manner.

Reducing COVID-19 spread through public health action

The key debate among policy makers is on the balance between allowing the pandemic to run its inevitable course or intervening to slow it down. In the former case, high levels of serious illness and death will have to be endured due to healthcare capacities being overwhelmed, but the benefit will be a build-up of population immunity to reduce the occurrence or scale of future epidemics.

In contrast, proactive interventions could slow down epidemic progression by flattening the epidemic peak and allowing time to build up the emergency capacity of hospitals to look after the rising tide of seriously ill people. However there is a high social and economic cost to these measures, and the risk is that there will be less population immunity built up which could lead to epidemic recurrence when the controls are lifted. Most countries are now opting for the latter approach citing scientific evidence, ethical and political justifications i.e. the moral necessity and public demand to save as many lives as possible *now*, weighed against *future* theoretical or un-proven trade-offs.

Eastern Asia, subsequently Western Europe, and now North America, have been bearing the brunt of the pandemic so far. The principal measures adopted by governments in most places have included a variable mix of very stringent measures such as closing borders, shutting-down domestic and foreign travel, closing workplaces, schools, colleges, places for socialisation such as pubs, clubs, and restaurants as well as non-food shops. These have been accompanied by prohibitions on public gatherings. People have been asked to strictly stay at home except for essential purposes such as food shopping, limited exercise, or for looking after vulnerable people. Complete curfews in some cities for a large part of the day and night have also been brought in.

Such “lockdown” measures have been paralleled by a reduction of new infections in China, and more recently in Southern Europe. But there is debate on whether there is a direct cause-and-effect relationship. Reduction may also have come from scaled-up testing efforts followed up by the diligent tracing of contacts, and the strict isolation /quarantining of proven and suspected COVID-19 cases, as in South Korea and Singapore. However, new infections continue to occur in these places.

Meanwhile, many outbreaks have also been recorded among closed populations such as in prisons and care homes. In the latter case, large proportions of older, vulnerable people have caught the virus and died.

All countries that have been ravaged so far by COVID-19 have struggled to provide adequate care for patients that have been sick enough to need hospitalisation. The critical gaps have been in the area of intensive care beds with mechanical ventilation equipment, and supplies of personal protective equipment (PPE) for the doctors and healthcare workers needing them. A significant proportion of infections and deaths have been among health workers – further exacerbating shortages of trained personnel. Special field hospitals have had to be constructed with military help in many countries and retired health workers asked to return to work.

Meanwhile, as lockdowns have been prolonged, their negative impacts have come to the fore including from poverty, food insecurity, mental health problems and social dysfunctions. The gender dimensions are complex. As mentioned earlier, men are more acutely affected and suffer more seriously. But the wider impacts of the disease and the impacts of control measures are also

gendered, especially with movement restrictions and restrictions in socio-economic activity. Thus men are more at risk of suicide while women are more exposed to infection in their greater role in caring for the sick. They are also more prone to intimate partner violence, sexual exploitation, and other negative coping strategies.

What will happen to the global pandemic?

On current trends, the virus will infect tens of millions of people in all countries with hundreds of thousands of deaths. However, like other infectious diseases, it would eventually decline when sufficient numbers of people have acquired the infection (perhaps 60% of the population) and achieved some immunity (known as herd immunity) thus reducing the remaining pool of susceptible people.

Herd immunity could also be acquired if sufficiently large numbers of people are vaccinated. However, such a vaccine (which must be effective enough to protect at least 70-95% of those injected) does not exist and while researchers are working fast to make one over a projected period of 12-18 months, there is no guarantee that they will succeed over that short a timescale. If an effective vaccine is, indeed created, it will take more time to finance, manufacture, distribute, and administer the billions of doses required simultaneously in all corners of the world.

To reliably track the progression of COVID-19 requires population-based testing to identify who currently has the virus (antigen testing) and who has already had it (antibody testing). The availability of tests is currently quite limited in most countries. Thus, antigen tests that detect acute infection are generally prioritised for use in sick people where the result of the test is necessary for immediate clinical management. Mildly sick people are not tested and even healthcare workers at high risk of infection are not able to routinely access these tests. A variety of antibody tests (to determine if an individual has been infected in the past and to monitor the general prevalence of the virus) are being developed but most have not been validated by the regulatory authorities as being sufficiently accurate (ideally, 95% reliability is needed in terms of specificity and sensitivity). There is huge effort underway in many countries to improve the reliability and availability of tests.

Meanwhile, the acute phase of the pandemic will evolve in different ways in different places. Some countries in the first wave will peak earlier in terms of infection and death rates, and then recover gradually. But they may have second waves depending on the proportion of the population that acquires immunity in the first wave and the extent, effectiveness and duration of controls imposed. Other countries would follow similar cycles.

Overall, with or without a vaccine, COVID-19 is unlikely to ever be eradicated but could become endemic i.e. be present within populations around the world and lead to outbreaks from time to time. Within a country, there may be persistent risk zones e.g. in crowded cities or when populations move around. The world will have to learn to live with this coronavirus through maintaining a permanent watch and acting quickly when it threatens to break out, as we do with many other infectious conditions. Future outbreaks and epidemics may also come in waves as the virus travels back and forth between countries, regions, and continents.

In terms of timescale, there are many uncertainties. Initial expectations of this being a short, sharp shock followed by speedy recovery are likely to be disappointed. The direct and indirect impacts are likely to extend to the rest of the year and probably well into 2021 or longer. This epoch-shaking experience also makes a reversion to the previous normal, and resumption of business-as-usual, unlikely. The familiar tenets of an inter-connected globalisation and international co-operation may

be challenged as a new world order with changed values emerges. This will have both positive and negative elements, and winners and losers.

COVID-19 SPREAD AND IMPACT IN AFRICA

Current extent of spread

As at mid-April, most countries in Sub-Saharan Africa had reported that they have COVID-19, totalling over some 10,000 cases including around 500 deaths. These figures are constantly changing as the pandemic progresses, and cases reported do not necessarily reflect the total magnitude of infection because the amount of testing being done is still very restricted. Thus, reported cases are a considerable under-estimate. Modellers suggest that for every death from community transmission, there are 500-1500 infections. On that basis, sub-Saharan African may already have a pool that is fast approaching 1 million infected people. The early days of the epidemic in Africa appears to be mirroring the early days of the epidemic as experienced in Europe, a few weeks ago.

Based on the current partial data, there appear to be three regional epicentres in Africa: in the south around South Africa, in the west around Cameroon and Senegal and, in the east around Rwanda and Kenya. COVID-19 appears to be following a relentless trajectory on the continent:

- In the first phase, with strong trade and education links between Africa and China, travel brought the first few cases. Subsequently, cases were also imported by travellers from Europe.
- In the second phase, the initial cases passed on the virus to others and small clusters of cases emerged.
- In the third phase, the clusters are coalescing and virus spread is becoming more generalised, as community transmission gets established.

Massive testing and contact tracing with isolation of positive cases can slow spread if done meticulously but it is already too late to completely eliminate spread in many places. Thus, It is highly likely that community transmission is now progressing in large swathes of the continent. As disease testing, surveillance, and reporting systems become more comprehensive, the availability of more data is likely to show that COVID-19 has become established Africa-wide.

The potential behaviour of the virus in Africa is cause for concern. In favour of a lesser impact is the continent's youthful demography: only 3% of Africans are aged over 65 years compared to 23% Italians and 11% Chinese. However younger virus carriers in Africa, even if mildly sick, can still transmit the virus as efficiently as their counterparts in other continents. And conversely, older more vulnerable Africans are more likely to be living in crowded households rather than alone as in Europe. Thus, they have higher inter-personal contact rates, especially in congested urban locations. Note that at least 40% of Sub Saharan African is already urbanised.

Africans have generally less adequate access to WASH. 20% of African families don't have reliable access to soap and, in many places, a significant part of household income may be needed to buy water for living purposes. So water for handwashing may not be prioritised and costs are higher.

African populations have a higher proportion of uncontrolled NCDs such as hypertension and diabetes as well as higher levels of TB which is now recognised as a risk factor. The higher prevalence of HIV as well as greater under-nutrition may also have impact on immunity and increase vulnerability to COVID-19.

Finally, the capacities of African hospital facilities are very limited. For example, low and lower middle income countries have an average of 1-2 beds per 1000 population, compared to around 5 in high income countries. The same order of differential applies to intensive care beds, and even more scarce are ventilators and staff to operate them. There are only 0.25 doctors for every 1,000 people in Africa, compared to 3 in OECD countries. Therefore case-fatality ratios may be expected to be much higher in Africa.

Modelling estimates suggest that if the pandemic is not mitigated (i.e. if there is “business as usual”), Africa may expect approx 2.5 million deaths. This approximates, if annualised, to an additional crude death rate of 2.3 deaths per 1000 population on top of the base death rate of 8.8/1000 i.e a mortality increase of 25%.

To this excess COVID-related mortality could be added the additional mortality from other treat-able conditions such as cancers, cardiovascular, and so on, which would be neglected because available health capacities are overwhelmed by the emergency requirements of COVID-19 patients. Comparisons with the Ebola epidemic in West Africa in 2014-2016 and the early years of HIV and AIDS are pertinent in terms of excess mortality experienced from the neglect of other causes of deaths.

Additional risks and vulnerabilities attach to populations of humanitarian concern i.e refugees and IDPs. Forced migration in Africa is common, as a consequence of conflict and violence, climate and environmental disasters, as well as poverty-related, livelihood-seeking migration, often from rural to urban areas. In aggregate, in Sub-Saharan Africa:

- The region hosts over 18 million refugees (26% of world total) with large numbers in Uganda, Sudan, Ethiopia, DRC, Kenya.
- There are at least 10 million internally-displaced (25% of world total) with the greatest numbers in DRC, Somalia, Nigeria, Sudan, Ethiopia, Sudan, CAR, and Cameroon.

Forced migrants are more at risk from COVID-19 because they are likely to live in congested formal and informal settlements including camps and slums, and to be poorer, more exposed in riskier livelihood-seeking environments, have less legal status and thus less able to access key health and social services, less protected, and less well placed to receive and utilise life-preserving information and advice.

As more and more African countries suspend economic activity and formal and informal employment reduces, families who have been just about coping are being tipped into deeper poverty, with tens of millions of people joining the ranks of “people of humanitarian concern”.

Additionally, social exclusion and stigmatisation of people with or suspected to have infection, are on the rise. As COVID-19 accelerates, it will also potentate other existing vulnerabilities eg from on-going food insecurity, and existing and new disasters in an already disaster-prone continent.

Modelling of COVID-19 control options suggests that, depending on the scale of the mitigation measures that are applied, mortality could be reduced to between 300,000 and 1.2 million in Africa. Aiming for the lower end of this range must, therefore, be the intent of public policy measures.

Note that the numbers quoted here are modelling estimates. There are many types of models used by different researchers and their results depend on the assumptions made and the data inputted into the models. As more data accumulate, the estimates will evolve. Modelling estimates are not predictions but, regardless of the uncertainties, it is prudent to prepare Africa and its people to

respond fast to reduce the further spread of COVID-19 and to mitigate its impacts. This applies equally to both existing and the rapidly expanding newer “populations of humanitarian concern”.

Economic impacts in Africa

African GDP was projected to grow by 3.9% in 2020 but COVID-19 is expected to cut this to +0.3% on an optimistic scenario, or to even shrink it by -3% to -8% on more pessimistic but realistic scenarios. That translates to a loss of between \$90 billion and \$200 billion in 2020 including from a 35% drop in imports and exports.

Africa is scheduled to suffer disproportionately in economic terms from COVID-19 compared to a projected 0.5% global growth reduction in 2020. The top two Sub-Saharan economies are Nigeria and South Africa – and the latter, which is also a regional economy driver, is now the African nation that is worst-affected by COVID-19.

This analysis is the base case, assuming that there will be no mitigation from fiscal stimulation packages. The pan-economy impacts on Africa come from disruption to the global economy including lower demand for the continent’s exports, as well as supply chain interruptions, reduced foreign direct investment and remittances, collapsed oil and commodity prices (on which Africa is highly dependent), and tourism decline. Additional impacts come from control measures being taken within Africa such as travel bans, border closures, and lockdowns which affect trade, agriculture, and all types of domestic and regional economic activity, and also lead to lost tax revenues and currency pressures.

Several African governments have announced multi-billion dollar rescue packages but the challenge is in their trickle- down and targeting, as well as on their productive utilisation, while minimising leakages. Bold actions are needed including new financing instruments, debt rescheduling, and public-private partnerships. Total African external debt is valued at \$236 billion and writing that off is a big ask as creditor countries are themselves struggling.

Worst affected are small and medium sized businesses (which cater for 80% of employed Africans). The informal sector is also very important, estimated at 55% of the total sub-Saharan economy. Nearly 20 million jobs are threatened with destruction by COVID-19 impacts. Thus, preserving jobs in informal and formal sectors through governments extending subsidies via employers and social safety nets is crucial not just in the immediate future to maintain resilience but also post-pandemic so that economic activity can re-start speedily when that becomes possible.

The broad economic impacts will put additional pressure on the health sector. There are estimates that African countries will need an additional \$10.6 billion health spending on the pandemic. COVID-19 is already creating a shortage of medicines and health equipment everywhere in the world. Africa’s biggest suppliers of health products are Asia and the European Union, and their manufacturers have either reduced or even halted their production, or are subject to export controls by governments seeking to ensure adequate domestic availability. So African countries may find it increasingly harder to access or afford healthcare products.

Finally, the direct and indirect consequences of the pandemic are set to deepen inequalities. Africa has been growing well over previous decades and, as it did so, inequalities have been getting worse to the point that its Gini index is the second worst for any continent. While we may expect an infectious disease like COVID-19 to be a “big leveller”, the experience from crises is that risks and vulnerabilities are not equitably distributed and neither are protective measures. As the impacts will be felt disproportionately on more vulnerable and marginalised groups, existing disparities in critical areas such as access to healthcare, food, and shelter would be expected to worsen.

PREVENTION AND CONTROL STRATEGIES IN SUB-SAHARAN AFRICA

Set against the above global context and trends, the scenario that is most likely for sub-Saharan Africa is that of partial or limited containment of the virus in the months ahead. To cope with this requires a nuanced and contextualised approach rather than the wholesale and uncritical application of the policies and practices that have been undertaken in Asia or Europe. Informed by the best scientific advice but cognisant of the trade-off that are forced by the realities of available resources, capabilities, and infrastructure, Africa is obliged to strike a balance between saving lives now and protecting livelihoods in the longer-term.

Saving lives

Morally and politically, the pressure to save as many lives as possible without undue delay is the imperative pressure on African governments and institutions. They need to:

- Expand provision and accessibility to effective hand washing which, in turn, requires widescale access to soap and water (and alcohol-based sanitiser)
- Expand provision of face masks and encourage appropriate use in line with WHO advice
- Expand provision of PPE for healthcare workers and other carers of sick people with utilisation according to WHO guidance
- Promote physical distancing in daily living, working, and travelling
- Make efforts to reduce occupational risks in subsectors of the informal economy such as street hawking, construction, sex work, waste management) through targeted provision of specific advice and self-hygiene promotion materials.
- Expand COVID19 testing (antigen, and when available, antibody tests), contact tracing, and isolation of positive cases.
- Strengthen public health surveillance and disease tracking, utilising mobile phone and internet technologies, while respecting confidentiality and human rights considerations
- Maintain access to preventive and curative healthcare for all other existing conditions while ensuring that general healthcare provision is done safely
- Create safe community spaces for self-isolation of contacts, and separately, for the care of sick people if they cannot be isolated at home
- Invest in critical intensive-care hospital facilities including medicines, ventilators, oxygen and other supplies and staff for the treatment of seriously ill people who need to go there.

Protecting livelihoods

To protect livelihoods, necessary for resilience against the immediate economic and social impacts of the pandemic, as well as for eventual recovery, government policies and interventions are needed to:

- Review the effectiveness of lockdown measures to the minimum period essential for optimal disease control, so that the economy can resume as soon as feasible
- In the interim, enable employment to be maintained by subsidising formal sector employers to keep their staff
- Consider providing cash transfers as income support for vulnerable families or/and emergency access to food and water (or else people who must work to live may put themselves and others at even greater risk)
- Design schemes for subsidies that maintain the small business and informal sector

- Give priority attention to food production and distribution and guard against price inflation
- Seek private sector partnerships to mobilise additional resources, skills, and capacities
- Conduct dialogue with international financial institutions and development partners for concessional finance
- Make plans for rapid recovery and be ready to implement them swiftly when feasible, so as to minimise longer-term damage.

A whole-of-society effort

This is an unprecedented crisis and success requires the mobilisation of all elements of society. As learnt from previous health crises such Ebola and HIV/AIDS, that means proactive efforts to build trust with the public through strong community and media engagement to:

- Develop and disseminate appropriate messages.
- Challenge myths and misinformation, and counter stigma and discrimination.
- Maintain essential services that allow the public to access goods and services necessary to meet their basic needs.
- Encourage and mobilise large-scale volunteering to meet key gaps among essential service providers who may become sick, or are otherwise needed to expand capacity to meet the needs of isolating and other populations of humanitarian concern, especially in informal crowded settlements and refugee/displaced camps.

What not to do

Of equal importance are negative approaches that include, in particular,

- Politicising prevention and control efforts or generating divisions founded on social, economic or religious factors.
- Instrumentalising the emergency to make fundamental alterations that may be seen as eroding the principles of good governance and rule of law.
- Sending contradictory messages or downplaying the threat or conversely, using alarmist and demoralising messages.
- Using penal enforcement methods that infringe on fundamental human rights, and which can cause panic, backfire, or stigmatise.
- Closing down all essential services such as food outlets and imposing extremely harsh quarantine restrictions thereby forcing people to take even greater risks to obtain their critical daily survival needs.
- Blindly replicating practices from elsewhere – however apparently good – without assessing their appropriateness, feasibility, and acceptability in specific national and local contexts.

The nature of the spread of COVID-19 is such that although it may have generated a global pandemic durable solutions are ultimately local ones. They depend on the empowerment and willing participation of people and communities who are required to take personal responsibility including by making considerable sacrifices aimed at keeping themselves and others safe.