COVID-19 and health systems: responding to unpredictable predictability, by Liz Grant, Yina Lizeth Gracia-Lopez and Christine Bell

Health systems across the world have been tested by this pandemic, and many have been found wanting, surprised by the pandemic's ferocity and its unknowness, its seeming unpredictability. And yet pandemics are not new — the Black Death, cholera, yellow fever, smallpox, the Spanish Flu, HIV/AIDS. We know a lot about pandemics and can even predict them.

In an article for Just Security, Professor Christine Bell identified 11 baseline understandings likely to shape effective responses to the coronavirus pandemic in conflict-affected regions. Based on our experience with fragile and resource-limited health systems, we set out a further 11 themes that all health systems must consider in order to make effective decisions while battling the pandemic.

1. Build trust

As we have seen in past crises, the effectiveness of responses depends on the trust that people have in their clinicians, and in health systems, to protect them and have their best interests at heart. In the HIV pandemic, the move from fear and authority to a relational approach between patients and their clinicians changed outcomes. One male HIV patient captured the importance of trust when interviewed about his care: "I feel very confident [with my doctors in the infection consultations], because both he and the psychologist advise

me. I thank them because they have always been extremely good, they are always aware of my mood and how I feel. Every time I come for a consultation, they take good care of me and I feel very at ease with them and with the whole team here."

Yet, in a recent comment in *The Lancet*, Robert Peckham quoted a physician who led the 2003 SARS response in Hong Kong: "At that time [the SARS era] society was more united … whereas now people feel they have to rely on themselves for protection. They have less trust in the government." If true, this will pose significant challenges in combatting the coronavirus.

2. Ensure public access to accurate information

Organizations such as Healthcare Information for All have a vision: "A world where every person will have access to the healthcare information they need to protect their own health and the health of those for whom they are responsible." The most accessible, simple, and free "medicine" is accurate health information.

Lack of information kills. Misinformation kills.

This lesson was felt acutely during the Ebola epidemics in West Africa and more recently in the Democratic Republic of the Congo. These saw health workers beaten to death because of false beliefs that they were bringing Ebola to the community, that injections given at health centers were full of the virus to kill communities, and that body bags for those who had died were not to protect against bodily fluids leaking and transmitting the virus but to take away body parts for sale elsewhere.

The strategies to manage this coronavirus pandemic depend on individual and collective responses to a set of essential simple health messages, including wash your hands, stay two meters (or six feet) apart, avoid touching, and stay indoors. But the myths, misconceptions, and inaccurate information about coronavirus have placed thousands at people at risk of

severe illness, and caused deaths.

Social media has amplified a tsunami of misinformation. This includes myths such as: herbal remedies or garlic can cure COVID-19; the virus is spread by 5G; it only affects older people; and spraying alcohol on your skin or gargling with salt kills the virus in your body. The health system needs to be at the forefront of the largest health information campaign in its history, while simultaneously working in tandem with Facebook, WhatsApp, Instagram, and the like, to stop rumors and myths.

3. Widen the concept of stakeholders

Everyone is a stakeholder in the health of a community and its members. What happens outside the formal health sector is as important to health and wellness as the actions of formal health workers. Cultural, religious, and traditional spaces become even more powerful in times of stress and severe illness, and behavior in those spaces may need to adapt. When rituals, rites, and beliefs such as communal worshipping services, funerals, and religious pilgrimages such as the Hajj have to be abandoned, faith leaders have powerful roles to play in reconstructing communion and recreating spiritual space using the power of symbols and icons.

Just as "aid modalities may themselves need forms of conflict diplomacy," health modalities may also need new forms of health diplomacy. And we are seeing a new form of health diplomacy in the public space of volunteering — informal workers offering their services. Across countries, many without formal health roles have created systems to backstop and safeguard the formal healthcare system — boda boda drivers in Uganda carrying food to hospitals, taxi drivers in Spain carrying patients to the hospital for free.

4. Be aware of the health worker gap

How are countries managing the total health worker gap? We are

not aware of any country that has a sufficient number of healthcare workers. The WHO projects a "shortfall of 18 million health workers, primarily in low- and middle-income countries" by 2030, unless significant efforts are made.

This workforce shortage is across all areas of health workers, but it is particularly acute for nursing. "The State of the World's Nursing 2020," which the WHO published on April 6, describes a current shortage of 5.9 million nurses and estimates that there will still be a shortage of 5.7 million nurses in 2030. This shortage overwhelmingly affects Africa, Southeast Asia, and the Eastern Mediterranean.

Such shortages are further exacerbated in these fluid and uncertain times because some health workers have left their workspaces, and we need to better understand this dynamic. Which health workers have left their worksites for family, health, economic, geosocial, or geopolitical reasons? Who remains within their country, and who crossed borders before they closed? Health workers have become the social and informal political leaders of this pandemic as they, more than anyone else, know what is happening. But with lockdowns, quarantines, and, as we have seen in India, mass movement of workers, many have moved back to their home states, provinces, and countries.

5. Learn and implement lessons from past pandemics and epidemics

As we mentioned at the beginning of this article, viruses with wide-ranging effects are not new. Many countries have recent experience with pandemics or epidemics, and we should learn from them.

In particular, Liberia, Sierra Leone, Guinea, Nigeria, Uganda, and the Democratic Republic of Congo developed processes to prevent the spread of and ultimately halt their Ebola epidemics. They also identified failures in resource

utilization and investment made during, and in the wake of, the Ebola crises, and they used this information effectively to ensure that gaps are filled and loopholes closed. The lessons they learned include: work with communities; build on existing community leadership and coordination structures; and, from the very beginning, manage the crisis through the lens of a humanitarian emergency and build in national emergency response capacity.

6. Understand and address inequalities in access to healthcare resources

Public, private, not-for-profit, and faith-based health services, as well as traditional healers, all provide forms of healthcare, but each has different access to resources and different remits and commitments. It is dangerous to assume there is equality and equity of access to each service and therefore that all members of society have some form of health coverage.

In this period of pandemic there are numerous reports of hospitals turning away patients too poor to pay and patients with illnesses other than COVID-19 being unable to access care with the disruption in the delivery of essential services. While the disease trajectory of this pandemic points to how essential intensive care units equipped with ventilators are, hospitals across the world — in New York, Madrid, and Moscow — do not have enough. Those in many low-income regions have none.

But it is not just inequalities in high-tech resources; inequalities in access to services, particularly primary healthcare, are also critical. Getting the basics of care right will change the face of the pandemic, but this is only possible when the basic primary care systems are in place. In so many countries these are missing or, if present, unaffordable to the poorest. If ever there were a rationale for Universal Health Coverage, this is it; if ever there were

a time for Universal Health Coverage, it is now.

7. Understand who is being left behind

Health systems urgently must determine which communities, which groups with which illnesses, which segments of the population are being excluded from health care. As Robert Muggah, principle of The SecDev Group, has noted, "While all populations are affected by the COVID-19 pandemic, not all populations are affected equally."

Those living in informal settings globally are particularly vulnerable as their access to health systems was already fragile before the pandemic. Among the many groups identified as likely to be outside the care system, researchers have estimated that, in the U.K. alone, between 30,000 and 40,000 homeless people are living in hostel accommodation or on the streets. Children are also particularly vulnerable, and children in fragile and conflict zones who have already experienced multiple shocks in their short lives are likely to be excluded from health care.

Groups outside the care system are not only at risk of COVID-19 but also other common illnesses, and they may refuse to come into the health sector or find themselves excluded from it. Moreover, factors outside the health sector's power in many countries — crowded living conditions, lack and cost of running water, and protective measures intended to curb the disease — are the very factors driving the disease. These same factors are also often responsible for hunger, malnutrition, and the exacerbation of other deadly illnesses, including untreated non-communicable diseases.

8. Address psychological dimensions as core to health

The silent psychological pandemic creeping alongside the coronavirus pandemic — fear, anxiety, isolation, and loneliness — must be studied, along with its influence on life and health. Victor Frankl's statement, "Man is not destroyed

by suffering; he is destroyed by suffering without meaning" resonates across many countries as news outlets tell of patient after patient dying alone. There is a terror of the lonely death, and the unresolved grief of families unable to say goodbye.

9. Understand disease interactivity

As with other contextual dimensions of this pandemic, the presence of diseases other than COVID-19 affects health systems' and patients' experience of coronavirus. For example, Clare Wenham, Gabriela Lotta, and Denise Pimenta's powerful analysis, published in "Mosquitos and COVID-19 are a ticking time bomb for Latin America," draws attention to the syndemic that Latin America faces. With dengue, chikungunya, yellow fever, and Zika interacting — driven by poverty, overcrowding, poor housing, lack of access to water, poor sanitation, gender inequalities, and violence — the health sponge is already saturated to capacity.

10. Maintain essential health services

While the focus of all health systems is understandably on tackling the coronavirus pandemic, failure to manage populations' ongoing healthcare needs could have a far longer, deeper impact on health globally. If child vaccination programs are stopped, if medication for non-communicable diseases such as cancers or heart disease and infectious diseases such as tuberculosis and AIDS are not available, if maternity services are absent, advances in maternal and child health will be reversed and the health of a country's workforce will rapidly decline.

However, maintaining essential services is not always simple. The WHO's maintaining essential services report explains, "a system's ability to maintain delivery of essential health services will depend on its baseline capacity and burden of disease, and the COVID-19 transmission context."

11. Expand valuable practices beyond COVID-19

In response to the coronavirus pandemic, numerous practices have been developed in the crisis delivery of services, such as rapid transition to telemedicine, nurse and doctor task-sharing, and guidelines enabling all clinicians to discuss anticipatory palliative care and end-of-life preferences. Some of these practices could strengthen health services in the future.

Notably, integrating palliative care into mainstream healthcare could have an unparalleled impact on the global burden of suffering, which was already acute in many low- and middle-income countries. Half of the world's population — the 3.6 billion people who live in the poorest countries — have access to less than 1% of pain medications distributed worldwide. Indeed, the editor of *The Lancet*, Richard Horton, has described this great abyss of suffering as "an appalling oversight in global health." The coronavirus pandemic has further increased demand for, and encouraged recognition of, the significance of, palliative care. This provides an opportunity to integrate this essential service into mainstream healthcare outside the crisis context.

The pandemic has challenged to the core the systems that promote and protect our health. It has accentuated rather than initiated capacity failures, organizational gaps, and resource crises in almost all systems across the globe. However, the strategies for shaping effective decision-making and care to battle this pandemic could also be the strategies that will strengthen health systems in the future, making them more equitable, more responsive to needs, and more oriented towards health, rather than disease.

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