

SHORT COMMUNICATION

Coronavirus Disease 2019 (COVID-19): Potential implications for weak health systems and conflict zones in the Middle East and North Africa region

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Abstract

This short communication recognizes the underbelly of weak and conflict-prone health systems in the Middle East and North Africa region in the wake of COVID-19 pandemic. The communication highlights how the lack of basic resources, absence of a well-functioning health system and the dearth of well-coordinated communication channels, can bode ill for the successful fight against COVID-19. The article elucidates COVID-19 potential health, social, and economic implications for such countries. The communication cautions that if COVID-19 is left to incubate and makes a home in weak systems, it will have a much better chance of mutating and coming back to infect many people globally. The communication calls on the international institutions in collaboration with developed nations to be prepared to probe up health systems in weak and conflict-prone health systems with much-needed resources in order to nip COVID-19 in the bud.

KEYWORDS

conflict zones, COVID-19, COVID-19 implications, Weak health systems, WHO MENA region

1 | INTRODUCTION

Coronavirus Disease 2019 (COVID-19) is now a pandemic and its disruption is global. While the challenges it poses to the global community are widespread, different countries are responding to the containment of the diseases in different ways—some successfully, others not so,^{1,2} while the reactions of many others are yet to be evaluated. Overall, there is a consensus that the pandemic has caught many countries unawares in comparison to previous

infectious outbreaks.¹⁻³ There are relative successes of Singapore⁴ and other Asian countries,¹ including mainland China, in implementing strong surveillance and containment measures,⁴ which have led to progressive reduction of cases in the last few days.⁴ Measures such as China's aggressive isolation approach could well have contributed to the survival and recovery rate of 95% or more of the people who contracted the disease in some of these countries. However, while these measures are commendable and the successes registered impressive, they should not lull the global community into complacency. The many unknowns about the disease and the fast rate at which COVID-19 is spreading should be enough to make health systems take the scourge seriously. The fact that China went from 1000 patients to well over 80 000 in a matter of about 6 weeks, is the clearest indication that the sparks and spread of COVID-19 are a cause for worry for the global community. In addition, COVID-19 has been fast spreading in other countries and causing deaths and widespread disruption such as in Italy.⁵

The motivation for this editorial is that few COVID-19 cases have been reported/underreported in conflict-afflicted countries with health systems in the Middle East and North Africa (MENA) region. Yet, there are certain pointers that when the scourge hits these countries, the impact could be catastrophic. Lack of basic resources and the absence of a well-functioning health system, not including the dearth of well-coordinated communication channels, can bode ill for the successful fight against COVID-19.

2 | AETIOLOGY, TRANSMISSION, DIAGNOSTIC, AND TREATMENT CHALLENGES OF COVID-19

Following the emergence of Corona Virus Disease 19 (COVID-19), a novel infectious agent of global epidemic levels, first identified in Wuhan, China, on December 2019, a global response to prevent the spread of the disease to those who are most susceptible, provide prophylaxis to those suspected to be exposed, efficiently and effectively treat the infected, and mitigate the consequences related to the spread of the virus is an urgent requirement. Similar to the Severe Acute Respiratory Syndrome (SARS) virus, COVID-19 is a member of the Ribonucleic acid (RNA) family of Coronaviruses.⁶ The aetiology of COVID-19 is yet to be fully established. However, the known clinical manifestations include flu-like symptoms, such as coughing, sneezing, sore throat, and high fever. The established primary modes of transmission include inhalation of respiratory droplets, direct person-to-person contact (including oral contact), and indirect transmission of viral particles onto hands from contaminated objects.⁴ Although the clinical severity of the COVID-19 is unknown and there are epidemiological studies underway, the virus is currently spreading globally and causing severe respiratory illness with the global death toll rising to 18 443 and confirmed cases of 413 467 as of March 24th 2020.⁷

COVID-19 presents a truly global challenge both in its diagnosis and treatment. COVID-19 diagnostic testing is proving to be a daily challenge for healthcare systems around the world. Even in countries with "strong" and "established" healthcare systems, there have been significant challenges to adequately treating and diagnosing COVID-19. For example, The New York Times reported that the United States government, even with the help of private companies and academic institutions to expand the nation's testing capacity, was unable to attain the targeted one Million Coronavirus Tests.⁸ In addition, researchers are still far away from developing a definitive viable vaccine and there are no established treatment regiments for those affected.⁶ Currently, the therapeutic strategies to deal with the infections are only supportive, and prevention aimed at reducing transmission in the community is our best weapon.⁴

The initial challenges posed by COVID-19 may necessitate raising the question of whether weak healthcare systems can provide adequate protection in pandemic situations. The World Health Organization (WHO) defines a health system as the organization of people, institutions, and resources that deliver health care services to meet the health needs of target populations. When health services are desperately needed, epidemics with highly infective viruses may undermine the health system's ability to provide adequate response. Resources run scarce and needed healthcare services get neglected, exacerbating the strain on the already feeble health system.

3 | COVID-19 POTENTIAL HEALTH, SOCIAL, AND ECONOMIC IMPLICATIONS FOR WEAK HEALTH SYSTEMS

There is an emerging concern about the spread of the virus in countries with poorly established systems of healthcare in comparison to more developed countries. When a major disease outbreak occurs, such as in the case of COVID-19, there are compelling moral reasons to save as many people as possible. Pandemic responses, particularly in the context of limited medical resources and unorganized healthcare systems, can often bring efficiency and equity into question. The efficacy of prevention, containment, diagnostic, and treatment efforts of COVID-19 will greatly depend on the quality of the healthcare services within a country. A joint report by the Organization for Economic Co-operation and Development (OECD), World Health Organization (WHO), and the World Bank in 2018 demonstrated that low-and poor-quality healthcare services can have far-reaching ramifications, not only hindering progress in health improvement at all income level but also increasing the burden of illness and health costs.⁹

4 | LACK BASIC INPUT RESOURCES

What is more unsettling in poor countries with weak healthcare systems is that the spread of COVID-19 may be a pandemic of monumental proportion owing to inadequate healthcare inputs and resources. Countries with weak healthcare systems often lack the basic resources needed to implement simple prevention campaigns such as those which encourage hand washing and proper coughing etiquette. Since no treatment yet exists, these barrier protections, of proper hand hygiene and coughing etiquette, remain the most effective means of prevention. In addition, countries with weak health system lack adequate healthcare workers who can respond to communicable diseases. Already thinly stretched, these workers may be overwhelmed in dealing with the outbreak of pandemics, particularly with highly infective viruses such as COVID-19. Many healthcare workers may die, leaving the health system under even more strain. Thus, without external help, the absence of the ingredients of a well-functioning health system to respond to pandemics is likely to jeopardize any effort to prepare and combat COVID-19. A well-functioning health system working in harmony is built on having trained and motivated health workers, well-maintained infrastructure and reliable supply of medicines and technologies backed by adequate funding, and evidence-based plans and policies.¹⁰

The most critical health investment input needed in these countries is sufficient health spending. Expenditure on health sector is important because it has higher return in terms of health outcomes and economic development,¹¹ and the impact of such investment on health outcomes is greater for lower income countries when compared to strong health systems.¹² Weak health systems lack the financial resources to devote to health care, both for individuals and for the population as a whole; hence, the health status of their population will greatly be affected, especially in preparing and responding to pandemics.

5 | SOCIAL, CONFLICT CONDITIONS AND POPULATION COVERAGE

Coupled with a lack of resources are other social and structural issues that provide perfect conditions for the faster spread of potential pandemics in poor countries. Within many underdeveloped countries, there are regions in which whole communities live in squalor, increasing both the spark and spread the risks of the COVID-19 pandemic. Previous evidence showed that overcrowded places, such as slum dwellings, put residents at risk of respiratory infections and other related diseases,^{13,14} cause clustering of epidemic-prone infections like pertussis,¹⁵ and are capable of fuelling the emergence of epidemic diseases like SARS or influenza.¹⁶

In addition, a significant proportion of the populations of low-income countries are underpowered and uninformed, potentially inducing pandemic-like situations and greatly increasing morbidity and mortality over a wide geographic area.⁹ Feeble healthcare systems often face low population coverage owing to their limited resources among other factors. Thus, the number of people who benefit from a set of interventions that aim to promote, prevent, cure, rehabilitate, and provide palliative health services are limited. This will present a significant challenge in the prevention, spread, diagnosis, and treatment of a population when COVID-19 strikes in these countries. Even then, some interventions including guidelines to flatten the curve of pandemics such as distancing, quarantine, or isolation measures may be problematic for populations in weak health systems and conflict zones. Overcrowding, porous borders, and insecurity issues may jeopardize the efficacy of these measures in such areas as enforceability, and consistency of such guideline is certainly a challenge. If Western countries, with their better capacity, did not adopt consistent social distancing, quarantine, or isolation measures as required,² then implementation of such guidelines can only be expected to be worse in weak health systems. While WHO ranks most MENA countries relatively high among the world's 191 health systems, there are a few exceptions, especially conflict-prone countries such as Yemen and low-income countries such as Djibouti.¹⁷ Middle-income populations of MENA countries have moderate coverage, up to 60% by global standards. However, conflict-afflicted countries such as Yemen, Syria, and Libya have very low population coverage.¹⁸ Some of these countries might face difficulties in fighting the spread of COVID-19, almost certainly impeding the proper functioning of the health systems according to the WHO's Regional Office for the Eastern Mediterranean.¹⁹ A recent handbook²⁰ summarizes several studies on how on-going political conflicts in Palestine, Sudan,²¹ Somalia,²² Iraq,²³ Syria, and most recently, the cholera outbreak in Yemen, present a number of public health challenges that can threaten any progress. These challenges include wide disparities between rural and urban areas and between different countries, inadequate number of medical centers, and emphasis on curative rather than preventive care, high mortality rate, and weak public health institutions.⁹ Additional challenges of poor health data for decision-making and the absence of regularly conducted household surveys, which contain the necessary data to inform the extent of health coverage and financing policies in these economies, make these regions greatly vulnerable in preparing for infectious disease disasters.

6 | SOME ECONOMIC IMPACT

As a result of COVID-19, the economies of poor countries will suffer a major impact. A great majority of populations living in these countries will be infected, and the already vulnerable health sector may crumble under the pressure of need and their main economic activities will suffer disproportionately. Further, the unique health care challenges of conflict-prone countries with weak economies may hinder the proactive engagements of health care systems in making timely decisions and devising new models of care to meet the needs of the general population. COVID-19 pandemic, in particular, may cause widespread increases in morbidity and mortality globally and these consequences will be more pronounced in countries with weaker healthcare systems. The negative economic burden of the disease could be significant and far-reaching, including short-term fiscal shocks and long-term negative unsettling economic growth, making recovery take longer than usual.²⁴ Since weak healthcare systems have lower per capita health spending, their economic loss could be more in the form of indirect economic burden rather than direct health care costs. In other words, these countries would experience economic loss in the form of nonhealth gross domestic product per capita. Mortalities associated with infectious diseases have shown to significantly decrease nonhealth GDP, especially in weak health systems.^{22,25} Other socio-economic impacts could be related to individual behavioral changes, such as fear-induced aversion to workplaces and other public gathering places, which would result in negative shocks to economic growth during pandemics and social disruptions, sparking the possibility of political instability and conflicts.²⁴ Fearmongering media and misinformation on the nature of the virus and mode of spread may also increase the risk of panic and chaos in exposed and unexposed populations, further adding to public anxiety, unnecessary travel bans, and quarantines.

7 | CONCLUSION

The war on an invisible and novel enemy, that is little understood, is now imminent than ever before. A fire cannot be fought blindfolded and the community of nations must exert a global pressure to not only curb the impact of COVID 19 but also throw everything at their disposal to defeat it in the shortest possible time. Personnel and pharmaceuticals must be available for populations across the globe and in particular developing nations as further preventive measures are devised in the fight against COVID 19.

There is positive news coming from important institutions such as the World Bank and WHO but in order to nip this relatively novel virus in the bud, these institutions in collaboration with developed nations must be prepared to probe up health systems in developing countries with much-needed resources. If the disease is left to incubate and make these weak systems home, it will have a much better chance of mutating and coming back to infect many more and once again playing havoc on lives and the world economy. Mitigation measures such as assisting countries with poor health systems to cope with the pandemic will help reduce spread. As countries close borders and reduce movement, business will continue crumbling and weak economies will go under. This will make the fight against COVID 19 blunt and populations living in developing nations may continue dying from other preventable diseases as a result. The announcement by the World Bank to probe treasuries of developing nations is a timely measure but the world must not lose focus on the hugely negative impact of the pandemic on developing nations.

CONFLICT OF INTEREST

The authors have no competing interests.

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