Alderslade R, Kokeny M, Tsouros A. The health of the public: What has gone wrong? (Review article). SEEJPH 2020, posted: 07 December 2020. DOI: 10.4119/seejph-3996

REVIEW ARTICLE

The health of the public: What has gone wrong?

Richard Alderslade[1], Mihaly Kokeny[2], Agis Tsouros[3]

[1] St. Georges Hospital University of London, London, United Kingdom;

[2] Global Health Centre, The Graduate Institute of International and Development Studies, Geneva, Switzerland;

[3] Visiting Professor, Institute for Global Health Innovation, Imperial College, London.

Corresponding author: Richard Alderslade;
Address: St. Georges Hospital University of London, London, United Kingdom;
Telephone: +447742777465; Email: richard.alderslade@gmail.com

Abstract

COVID-19, a new pandemic, has swept the world. How could this have happened? In theory the world should have been prepared, armed as it has been since 2005 with a new set of International Health Regulations with universal commitment by WHO Member States. Yet disaster has struck. The authors of this paper consider that fundamental rethinking is needed, with a new review of the post-World War 2 international system for global governance for health. Whilst WHO and its present and future actions will be scrutinized, the organization is fundamentally made up of 194 Member States, which must share the responsibility for ensuring better global health protection in the future. It is clear the world needs a more effective WHO, but it also needs countries to support and develop their public health infrastructure to face today's more complex health challenges, which can only grow in scope and complexity over coming years. The paper proposes several key steps to achieve these goals.

Keywords: *COVID-19, global health governance, International Health Regulations (2005), pandemic, public health strengthening, WHO strengthening.*

Conflict of interest: None declared.

Introduction

A new pandemic - COVID 19 - has swept across the world. Globally as of 12 November 2020, there have been 51,547,733 million confirmed cases of COVID-19, and 1,275,979 deaths, reported to WHO (1). How did this happen? Could it have been prevented? We have all had to realize that the world is much more dangerous place than we thought. What lessons do we learn? What should we do in the future?

In theory the world should have been prepared. It has happened before, for example during the 1918-19 influenza pandemic which is estimated to have killed some 50 million people worldwide (2). After the SARS outbreak in 2003, which was globally contained, a new international legal instrument-the International Health Regulations (2005) (3) - was agreed, putting in place new legal obligations on countries, to be open and honest about any new outbreak of communicable disease, and the cooperate fully with WHO in terms of management and containment. Countries agreed to put in place a series of health system and laboratory "core capacities" to promote for preparedness and capacity, as well as outbreak surveillance and response.

The mild H1N1 influenza pandemic of 2009-10 was a first challenge to the IHRs (2005). Assessments suggest that country response was variable (4), whilst WHO was criticized for overestimating the threat (5). In the Ebola outbreak in West Africa in 2014 the criticism of WHO was the reverse, that is had not reacted with sufficient alacrity (6), and after internal and external review the Organization reformed and reinvigorated its emergency response capacity (7). It worked to help countries develop their own capacities and systems, and to provide immediate support and global oversight to countries in case of an outbreak and necessary global response.

Over the next years since 2005, in a world of nation states, it became clear that implementation of the IHRs (2005) was patchy and incomplete. Countries were not always open and immediate in the information they provided to WHO, and evaluations (8) revealed large gaps in core public health capacity and preparedness across a range of indicators.

Then, in late 2019, a new coronavirus mutation occurred, setting in train the worst human pandemic since the 1918 influenza pandemic. Since then we have thought that the development of virology, and the advent of antibiotics and vaccines, meant that such a devastating outbreak could not happen again. We know better now.

This paper will try to look behind what has gone wrong with our capacity to protect and secure the health of people-public health in our professional terminology- and to suggest what needs to be done now to safeguard the global population from such devastating events in the future.

The characteristics of the pandemic

Whilst the virus first emerged in China, it spread quickly to South East Asia, then to Europe, then to the USA and Canada, and later to South America. India and Russia have been severely affected. Until very recently the virus seemed better under control in most of Europe, although now flare ups are being observed and new control restrictions introduced. This picture reflects however a moment in time, and the pandemic continues to expand both globally, and in individual countries e.g. the United States and across Europe.

Whilst the virus is highly infectious, its population burden is hard to estimate. Globally

there have been few population-based surveys of prevalence. Recent research suggests that prevalence and mortality are substantially underestimated, and that across countries where data is available estimated cumulative COVID cases may be underreported by several orders of magnitude. In addition, for every two COVID-19 deaths counted, a third may be misattributed to other causes (9).

The indications are that a significant proportion of those infected do not have symptoms yet can transmit the virus to others. It is also now clear that the virus seems largely transmitted through the airborne route, and transmission is much more likely in crowded places indoors than outdoors (10).

These two characteristics of the virus make global control difficult and challenging. In the absence of a vaccine or definitive treatment, control measures rely on social distancing, wearing masks or face coverings, and avoided crowded and poorly ventilated places indoors. If these measures fail, either generalized or localized lockdowns remain the only control mechanism available. There is increasing evidence (11) that such restrictions are associated with severe adverse economic consequences, particularly for poor and disadvantaged groups, are characterized by adverse health consequences, and interfere with normal health system functioning.

In response to the virus, there remain significant uncertainties. Previously assumed knowledge and experience may be overwritten by new observations. For example, the previous assumption that mostly old people were affected has been shaded by recent experience where a greater proportion of the younger and the chronically ill have been affected (12). It is not clear why the infection appears to have spread faster in some countries than others. Everywhere the return and maintenance of children at school is an urgent priority (13).

Also uncertain is the eventual effective management of the virus, through the development of a vaccine, the availability of effective antiviral treatments, and more widely available tests backed up by effective contact chasing and quarantine measures. There is a substantial global effort towards producing a safe and effective vaccine, with some concerns. Safety must be assured, using usual scientific methods and judgements. The early distribution of a vaccine which proved not to be safe could have devastating negative consequences, for the recipients, and globally for public acceptability and willingness to take the vaccine. Another concern is global production capacity, and the mechanism for global distribution. Hopefully disruptive "vaccine nationalism" will be avoided.

The global response

In responding to the pandemic as it evolved, a main question is why the world's previous arrangements with a focus on the International Health Regulations (2005) did not work as expected. At the World Health Assembly in May 2020 WHO Member States agreed (14) that an enquiry should take place in due course. For that reasons present day questions must be presumptive, and open to later refinement.

For WHO there are some compelling questions. Was there a delay in the Chinese Government alerting WHO to the new and threatening viral mutation? Did WHO respond appropriately and with alacrity? Was WHO too close to the Chinese Government and if so, did this interfere with necessary operational responses?

On the other hand, WHO clearly did engage in effective and high-quality public communication, issuing urgent warnings at an early

stage. Did countries take sufficient and urgent notice, and necessary action?

It must be said that throughout WHO acted as asked and authorized to do by its Member States. Yet should WHO have a stronger mandate and some capacity of enforcement when countries drag their heels. Why were some countries' reactions different to others? Why did some countries delay or implement only half-heartedly the WHO-advised regime of testing, contact tracing and isolation? Was the threatening nature of the disease misunderstood by some countries, basing judgements perhaps on the normal course of influenza outbreaks? What was the "herd immunity" model seemingly pursued by some countries, and not others? Why were movement and other restrictions imposed earlier by some countries than others?

COVID-19 also caused a health crisis that amplified existing global health inequalities and disruptions, and the resultant lockdown restrictions have resulted in both economic and employment crises. Different countries have pursued different paths in dealing with these consequences, opening many questions about the optimum way forward.

This paper does not attempt to answer these questions. Yet it does make the point that taken overall, and unlike the SARS epidemic, the world's arrangements failed in preventing a global pandemic. Some part of this failure may be due to the nature of the virus itself. However, it is very difficult at this stage to suggest that the world's arrangements worked well. This paper will attempt to get behind that conclusion, to explain, and to draw presumptive lessons for the future.

The challenge of the coronavirus?

COVID-19 is a harsh reminder of the need to anticipate, to mitigate and to respond effectively to unexpected and emerging threats and hazards that can affect and severely disrupt every aspect of human existence. The virus has demonstrated clearly how fragile is our inter-connected world. We can be certain that this virus will not be the last threatening our global health and well-being. In addition, we will certainly be threatened by environmental and man-made disasters, and wars and complex emergencies, with climate change looming as an existential pending catastrophe and a marker of a critically deteriorating and unstable planet.

Now, suddenly, usual geopolitical considerations are being overridden by an imperative of survival where transparency and international cooperation and solidarity are vital. So far, in dealing with this virus these requirements have not been in place. For example, better coordination between countries has certainly been needed (15).

This crisis demands a total rethinking of the way the world works together in response to such events, which have the potential to cost many lives and bring countries to their knees. Yet so far it is hard to be optimistic. The post-World War 2 era of international rule-based cooperation looked increasingly fragile, affected as it has been by nationalist and populist political and social influences, even prior to this coronavirus crisis. This has not been a good time for multilateralism.

In terms of global health protection and promotion since WW2 the world has been dependent on the work of the Geneva-based World Health Organization (WHO), which in addition to its many other global health activities acts as a prime-mover as well as Secretariat for the International Health Regulations (2005).

Now WHO must defend itself for its actions during the crisis in a climate of vocal criticism, easily transmitted as never before by technology in general, and social media in

particular. These media are filled with stories feeding into conspiracy theories which can divert attention from the political and technical determinants that influence WHO's interaction with countries, particularly at a time of crisis. WHO is not a well-known or understood organization, and this makes it particularly vulnerable to criticism and an easy target for being made a scapegoat.

An organization like WHO, at the heart of the global health architecture, can be analysed from several different perspectives: technical excellence and capacity; policies, strategies, plans and procedures; ability to support countries; resources and the ability to advocate and mobilize the international community and donors; access to and support of innovation; governance and leadership and communication.

Ultimately, however, WHO is an inter-governmental organization made up of 194 sovereign Member States that it cannot instruct or cajole, but must inspire and influence. WHO has little in the way of sanctions available if Member States fail to comply.

The decline of public health institutions and capacities

Public health services are an important component of Universal Health Coverage (UHC) (16). Yet globally public health services are low in priority for health investment. There is a clear need to close the clear gap between political commitments to public health and the increased resources needed for public health to be effective; to place more focus on development of the public health workforce; to better organize governance arrangements (including accountability mechanisms); to start the work on mitigating the environmental footprint of healthcare; and to assign stronger legislative mandates for public health and public health legislation that is properly enforced.

Concerns about present day public health governance reflect the difficulties of developing effective multisectoral thinking and practice across different levels of government. As said previously, financing for public health is inadequate, both in absolute terms, and in comparison, with the money allocated to health care. Public health infrastructure needs to be updated and upgraded to cope with today's new issues, to deliver effective legal regulatory frameworks and surveillance frameworks. Political and social legitimacy are both critical for success. Public health should have an independent authoritative voice and be able to effectively communicate and report independently. In addition, effective public health services require structures to create and sustain a workforce with appropriate skills and knowledge (17).

WHO - a future perspective

The nature of the challenges exposed by the coronavirus and the present crisis is such that the authors believe that future efforts to assess the role of WHO at this moment should extend much further than considering only its leverage and effectiveness in handling an emergency situation. The question rather is whether WHO as the lead United Nations technical agency can continue to be relevant in the face of tomorrow's demographic, environmental and technological challenges. How can it position itself to fulfil its public health mandate to full potential?

The authors of this paper believe that over the last 30 years or so WHO's governance and ways of working have become increasingly out of tune with its strategic objectives and newly available evidence about health and well-being. Today whilst inter-sectoral action; whole of government, whole of society

and health in all policies approaches should be at the core of the Organizations' strategies, the reality in countries is that WHO's governing bodies and working counterparts are predominantly health ministries, and for countries health continues to be mainly limited within the health sector. In most countries, ministries of health are preoccupied with diseases, and obtain little political engagement with the structural and non -health system determinants of disease. This is despite the vast literature on the determinants of health which calls for a much broader engagement of governmental and societal stakeholders.

This multiple determinant understanding of health and the role of health as an essential precondition for human social and economic development is now made even more imperative in the light of the UN 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs). Ultimately health must be seen as important to human development as economic progress.

In fact, we know that the two are intimately entwined. This is not a new idea. In 1946 John Maynard Keynes famously said:

"The day is not far off when the economic problem will take the back seat where it belongs, and the arena of the heart and the head will be occupied or reoccupied, by our real problems — the problems of life and of human relations, of creation and behaviour and religion (18)".

Equity is at the core of such consideration. It has been at the heart of WHO policies since the launch of Health for All in 1981. Here again the reality is that political, social, economic and health inequalities in the world are growing wider (19). Specifically, for health most countries do not measure health inequities, or at best address these only in terms of access to health services.

More widely across the global society it is increasingly clear that negative effects on health and wellbeing and violation of human rights are the consequences of unprincipled globalization; exploitation and mistreatment e.g. of migrants and refugees; environmental degradation and pollution; and political, social, and economic conflicts and complex emergencies.

Politics and diplomacy are a big part of the way WHO as an inter-governmental organization works. Should not WHO be redesigned to be more vocal, assertive and effective in the face of crises and inequalities and also better configured to accommodate 21st century public health concepts and principles?

Yet at the same time WHO must preserve its scientific excellence and independence. Transparency, honesty, integrity, together with local preparedness, are essential prerequisites for a sound relationship between politics and science, which is vital if the world is to be able to deal effectively with emerging threats.

The role of countries

The importance of public health has been illustrated during the COVID-19 crisis through the performance of countries whose leaders relied upon professionalization, public health experts, and who provided accurate, timely and detailed information to the public. Countries such as Germany, Vietnam and New Zealand offer positive examples here. Much less successful have been those countries where populist and nationalist perspectives predominate.

Yet all too often public health institutions and capacities have been allowed to decline and become degraded in many, or most, countries. There is an urgent need for this trend to be reversed, with investments made in public

health organizations, institutions and capabilities at all levels of governance (20). Communities and multicultural societies need to be energized and empowered for public health.
It also seems clear that public health staffing and skills need transformational changes in order to respond to the complexities of present-day and future health challenges, which will exhibit inevitable complexity, ambiguity and uncertainty in planning and implementing public health responses.

The way forward

Today as the world attempts to deal with the coronavirus crisis there exists perhaps, and hopefully, a momentum to improve the establishment and performance of global public health institutions. The authors suggest a further strengthening and re-design of WHO to protect and promote global public health, particularly through the prevention, detection and response of future outbreaks. Also, to be considered is the possible creation of new International Health Regulations, with a more pronounced accountability system.
The authors suggest several key developments and changes to achieve these goals, focusing on:

- Ensuring health and equity are and remain high on the world agenda.
- WHO being protected, resourced, and given space by global leaders in becoming an advocate for fairness, equity, universal coverage and well-being.
- WHO becoming more present in global politics, for example in trade agreements.
- Changing the composition of WHO's governing bodies, to ensure representation from different sectors and levels of government, including mayors.
- Stepping up leadership by the Director General and Regional Directors, expressing clear expectations that countries comply with the IHRs or face consequences in the case of non-compliance.
- Building on inter-country agreements such as the recent European Parliament resolution on the EU's post COVID public health strategy: the EU's public health strategy post COVID-19.
- Helping countries invigorate and reform public health institutions, capacities and staffing.
- Following up aggressively preparedness and response activities in all countries to deal with communicable disease, climate change and other emerging threats.
- Developing platforms and supporting dialogue with different sectors and civil society.

Conclusion

This is a formidable and ambitious list. It foretells a place for WHO within a new world order where health, health security, health equity and sustainable development are central on the world political agendas.
Accordingly, and ideally, WHO should have more leverage, be a stronger and courageous advocate, actively engage other sectors and civil society, and have a strong leadership role in world human, social and economic development.
It is also clear that the world and the international global order does not look like this today. Yet changes are essential if the world is not to repeat this recent coronavirus experience and is to ensure human survival during the coming period of dramatic, and likely existential, global health challenges and crises.

References

1. World Health Organization. WHO Coronavirus Disease (COVID-19) Dashboard. Available from: https://covid19.who.int/?gclid=CjwKCAjwnK36BRBVEi-wAsMT8WD8g44bMLiBbYX-ODskXYtnBRnyxke7HJ_c8T1x-NeA_bhpQ4lF2RxRoCM3UQAvD_BwE (accessed: October 15, 2020).
2. Centers for Disease Control and Prevention. 1918 Pandemic (H1N1 virus). Available from: https://www.cdc.gov/flu/pandemic-resources/1918-pandemic-h1n1.html#:~:text=It%20is%20estimated%20that%20about,occurring%20in%20the%20United%20States (accessed: October 15, 2020).
3. World Health Organization. Strengthening health security by implementing the International Health Regulations. WHO; 2005. Available from: https://www.who.int/ihr/publications/9789241580496/en/ (accessed: October 15, 2020).
4. Oppenheim B, Gallivan M, Madhav NK, Brown N, Serhiyenko V, Wolfe ND, et al. Assessing global preparedness for the next pandemic: development and application of an Epidemic Preparedness Index. BMJ Glob Health 2019;4:e001157.
5. The Irish Times. Was swine flu exaggerated? 19 January 2010. Available from: https://www.irishtimes.com/news/health/was-swine-flu-threat-exaggerated-1.1241758 (accessed: October 15, 2020).
6. O'Dowd A. WHO's role in Ebola crisis criticized by all sides. BMJ 2015;351:h6385.
7. World Health Organization. Global Policy Group Statement on reforms of WHO work in outbreaks and emergencies. 30 January 2018. Available from: https://www.who.int/dg/speeches/2016/reform-statement/en/ (accessed: October 15, 2020).
8. Gupta V, Kraemer JD, Katz R, Jha AK, Kerry VB, Sane J, et al. Analysis of results from the Joint External Evaluation: examining its strength and assessing for trends among participating countries. J Glob Health 2018;8:020416.
9. Walsh D. Covid-19 cases are 12 times higher than reported. MIT Management Sloan School. 26 August 2020. Available from: https://mitsloan.mit.edu/ideas-made-to-matter/covid-19-cases-are-12-times-higher-reported (accessed: October 15, 2020).
10. European Centre for Disease Prevention and Control. Transmission of COVID-19. 30 June 2020. Available from: https://www.ecdc.europa.eu/en/covid-19/latest-evidence/transmission#:~:text=Several%20outbreak%20investigation%20reports%20have,confined%20indoor%20spaces%5B63%5D%20.&text=The%20duration%20of%20the%20indoor,increased%20the%20risk%20of%20transmission (accessed: October 15, 2020).
11. John Moores University. Direct and indirect impacts of coronavirus on health and wellbeing. July 2020 (Version 2). Available from: https://www.ljmu.ac.uk/~/media/phi-

reports/2020-07-direct-and-indirect-impacts-of-covid19-on-health-and-wellbeing.pdf (accessed: October 15, 2020).
12. John Hopkins Medicine. Coronavirus and COVID-19: Younger Adults Are at Risk Too. Available from: https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-and-covid-19-younger-adults-are-at-risk-too (accessed: October 15, 2020).
13. Brown G, Ahmed A. Saving Generation COVID. World Economic Forum. 17 July 2020. Available from: https://www.weforum.org/agenda/2020/07/covid19-education-lockdown-children/ (accessed: October 15, 2020).
14. Covid-19 response WHA. 73.1. Available from: https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_R1-en.pdf (accessed: October 15, 2020).
15. Sukhram S. In an interconnected world, coronavirus needs a coordinated global response. Trades Union Council 8 April 2020. Available from: https://www.tuc.org.uk/blogs/interconnected-world-coronavirus-needs-coordinated-global-response (accessed: October 15, 2020).
16. World Health Organization. Health Systems. Universal health coverage. 30 August 2020. Available from: https://www.who.int/healthsystems/universal_health_coverage/en/ (accessed: October 15, 2020).
17. World Health Organization. Advancing public health for sustainable development in the WHO European Region. WHO European Regional Office EUR/RC68/17; 16 September 2018. Available from: https://www.euro.who.int/__data/assets/pdf_file/0004/380029/68wd17e_AdvancePublicHealth_180624.pdf (accessed: October 15, 2020).
18. First Annual Report of the Arts Council (1945-46). Available from: https://www.economicshelp.org/blog/613/economics/quotes-by-john-maynard-keynes/ (accessed: October 15, 2020).
19. Ruger JP, Kim HJ. Global health inequalities: an international comparison. J Epidemiol Community Health 2006;60:928-36.
20. Tsouros A. City leadership for health, equity and sustainable development. In: Urban Health. Galea S, Ettman K, Vlahov D, eds). Oxford University press; 2019:386-93.