OEINSIGHTS+
Evidence, Analytics, Decisions

Harnessing the Power of a Crisis:

Will We Repeat History or Learn from It?

July 16, 2020 | Article No. 11

Contributors

Ellen Scholl B.Ed

Mohit Bhandari MD FRCSC PhD
Editor-in-Chief, OrthoEvidence

> "The coronavirus will undoubtedly test our principles, values and shared humanity."[6]
>
> **Michelle Bachelet and Filippo Grandi**
> The UN Refugee Agency
> March 12, 2020

During the COVID-19 crisis, different narratives have emerged – like pathways, they have led us away from old realities. However, we have been here before. All too often, these paths lead us back to where we started; creating themes that are easily predicted from one epidemic to the next. Historians warn that in times like these, where there are beautiful stories of "we" there are also tales of "they".[1] The most prevalent narratives are often the latter, and can mean the difference between unity and disunion, heed and disregard, progress and stagnation. We might not all consider ourselves frontline workers, but are at the front lines nonetheless – leading the charge towards the future. How will we choose to move past these great moments of discomfort and unrest? Will we choose to forge new paths and imagine our world anew? Or will these times of trial simply represent a missed opportunity to improve ourselves, our societies and the world?

Insights

- Historians provide us with a valuable opportunity to look back at past epidemics and reflect upon our current one.
- These valuable lessons, should we choose to learn from them, can help us to envision a way forward.

- Epidemics are framed by societies understanding of disease.
- The economic devastation caused by epidemics greatly effects the public's response.
- Focusing on a new disease often overshadows our efforts to deal with existing ones.
- The media has a lot of power during an epidemic and can change the public's perception entirely. It can provide valuable information but also can spread misinformation.
- There is often concealment of the extent of the disease to preserve national pride and avoid the label of a "problem area".
- Epidemics tend to also cause us to blame others or scapegoat certain social groups.
- We need to focus on learning from history to avoid repeating it.
- Let's make collaboration a priority, take the time to evaluate and plan ahead, alter our approach to point-of-care, rethink the role of health care centres and nurture improvements in psychosocial care.

> "We learn from history that we do not learn from history"
>
> **Georg Hegel, Philosopher**
> 1770-1831

Lessons from History

How unfortunate that it always seems to take a tragic event to free us from our usualness, rediscover our humanity and lead us to ask important questions like "How can we do things differently?". Simply asking these questions though, doesn't necessarily mean we find an answer or develop a clear understanding of the way forward. All too often, epidemics abruptly get our attention only to fade away before they amount to change. Fortunately, historians have never lost an interest and they continue to remind us why we need to do things differently.[2]

> "When asked to explain past events, historians are quick to assert the importance of context. If you want to understand how or why something happened, you must attend to local circumstances. But there is something about epidemics that has elicited an opposite reaction from historians: a desire to identify universal truths about how societies respond to contagious disease."[2]
>
> **Jones, DS**
> 2000

In a 2007 workshop summary on mitigating pandemic disease from the Institute of Medicine Forum, Howard Markel outlines six themes or leitmotivs that have appeared throughout the ages. He also reminds us that the exact mix of themes changes from era to era, and from disease to disease.[3] These six **L.E.S.S.O.N.**s are summarized below:

1. **Lest we forget that epidemics are framed and shaped by how a given society understands a disease to travel and infect.** Our ability to understand how diseases are transmitted gets increasingly clear as we learn more about various infectious diseases. Old eighteenth century beliefs that diseases were spread through polluted air and dirty urban areas led to a focus on cleaning up streets, sewers and toilets. Since the discovery of the germ theory in the nineteenth century, we now have a drastically better understanding of how to contain contagious diseases.[3] But even knowing what we know now, each new outbreak seems to force us to drastically change our strategy. For example, the hospital-level disease containment that helped in the 2003 SARS outbreak has needed to be re-evaluated after SARS-COV-2's increased transmissibility left us vastly underprepared.[3] Our increasingly globalized world and economy also continue to make things more difficult from one epidemic to the next.

2. **Economic devastation associated with epidemics has a strong impact on the public's response to the disease.** Quarantine causes particular hardships for individuals and can have a lasting economic impact. It is not surprising then, that during international sanitary conferences of the mid-nineteenth century, merchants and business people were the most vocal against measures that would prevent or contain disease.[3] Afterall, such measures would also greatly impact their own livelihood and the livelihood of their communities. The same struggle between disease control and economics continues to cause differences of opinion between groups; leaving countries around the world, as well as their approaches, greatly divided. COVID-19 quarantine tactics in low-middle income countries have been equated to a death sentence for some-especially the poor. When livelihood and survival is contingent upon working, the alternative of home quarantine risk health and welfare of impoverished families and children.[14]

3. **Suddenly appearing diseases too often overshadows our approach to existing infections.** For example, while anthrax back in 2001 threatened the lives of only a few, the HIV/AIDS pandemic continued to take over two million lives every year.[3] Of course, our intentions are good. New diseases or biological threats are unknown and bring new risks – and with that, the potential for devastation. However, there is something to be said for the imbalances created when our often-intense preoccupation with a new disease is contrasted with the general public's limited awareness of existing ones.[3] It remains unknown if ultimate toll on non-COVID conditions will be greater than the impact of COVID-19 itself. Amidst the strategies and policies employed to save lives from COVID, have we inadvertently led to more suffering and deaths from non-COVID related health issues?

4. **Societies are informed and misinformed by the media. It can shape the public's perception of an entire epidemic.** Media throughout history has been efficient at spreading news, but new technology and digital forms of media does mean that more information can be provided to a greater number of people, faster.[3] While this is especially useful in conveying important information about a disease, it can become equally as dangerous when conveying false information. Print media during the 1918 Spanish flu was wrought with ads for false remedies and interviews with people trying to benefit from people's fears; even going as far as to state “the more you fear the disease, the surer you are to get it”.[4] Our own work has suggest an epidemic of information during COVID-19 with over 1741 articles published on COVID over a 9 week period during the height of the pandemic. (Watch corresponding OE OrthoPod Video, Download Corresponding OE Insight)

5. **Our tendency to conceal problems from the world at large.** We see this theme come through in our current discussions surrounding COVID-19 case reporting and testing strategies. It seems that not all countries are comfortable with labelling themselves a 'problem area'. In 1892, the German government initially concealed the extent of that year's cholera outbreak that would close the port of Hamburg for fear it would cause economic ruin.[3] Since then, similar concealment efforts have been seen during other epidemics, motivated by national bias, national pride and politics. This secrecy has almost always contributed to the spread of disease and further hindered public health efforts.[3] COVID-19 has been no different. Varying leadership approaches around the world have sought to minimize the virus, often in direct contradistinction to evidence and local health care agencies. Poignant examples include but are not limited to the United States of America and Brazil.

6. **Nobody escapes blame and scapegoating--especially certain social groups.** In 1892, impoverished Jewish immigrants were wrongfully blamed for bringing Cholera to the United States. In the 1900 outbreak of the bubonic plague, it was the Chinese who were wrongfully denounced. Gay men and Haitians were inappropriately and wrongfully stigmatized early on in the AIDS epidemic.[3] In an attempt to both rationalize the disease and remain free from blame, to this day great effort is placed on outlining the exact origin of a disease and the shortcomings of others. Regrettably, it is often the already marginalized who are accused and the poor who are disproportionately affected.[3]

Markel also quotes Rosenberg, a professor of the history of science and medicine who famously likened the unfolding of events during an epidemic to the acts of a play. In a 1989 article published in the Daedalus, Rosenberg explains that similarly, how communities have dealt with the epidemic's challenges can be imposed as the play's epilogue and that this epilogue provides us with an opportunity for retrospective moral judgment.[5] Afterall, epidemics have a way of exposing our failings, especially in the areas of social and economic progress.[6]

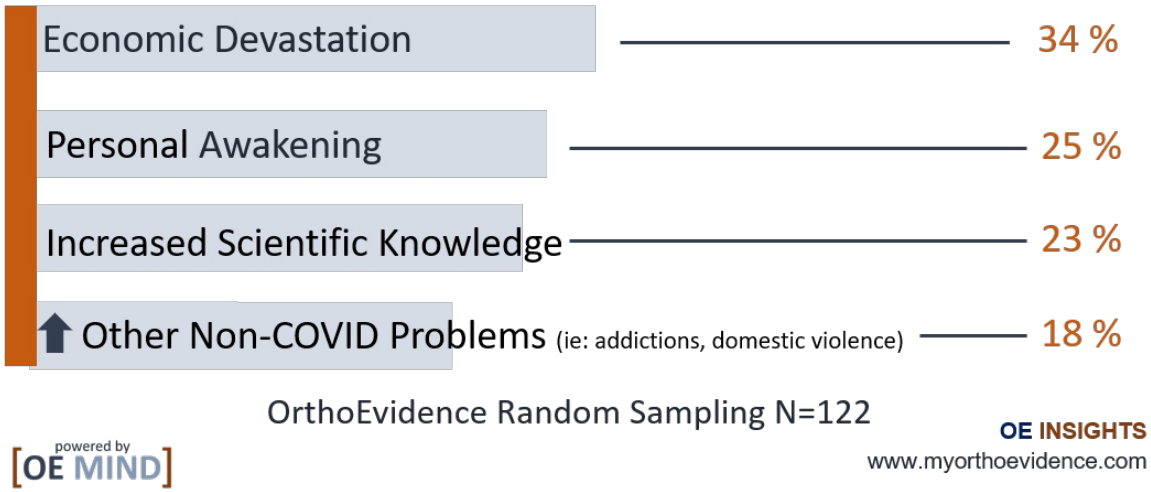
> "Rosenberg argued that epidemics put pressure on the societies they strike. This strain makes visible latent structures that might not otherwise be evident. As a result, epidemics provide a sampling device for social analysis. They reveal what really matters to a population and whom they truly value."[1]
>
> **Jones, DS**
> 2000

To Ignore History is to Repeat it

It is one thing to recognize that almost all of these historical themes have indeed emerged at some point during our current pandemic, but it is a completely different matter deciding what we are going to do about it. How do we better prepare for the next contagious disease while also giving attention to current ones? How do we move away from blame and concealment and towards putting global health benefits before national pride? How do we balance the extent of the economic fallout with the good use of disease containment strategies? How can we support the marginalized while also supporting business? How can governments succeed in managing a disease while also facing failings on social issues? These questions may be more for our governments, our economists and our global institutions, but no change happens without a clear understanding of what is at stake.

In an OE Insights poll, we asked members what they believed the biggest impact from COVID-19 would be (Exhibit 1). Our responses were varied; however, 1 in 3 members felt that the largest impact would be 'economic devastation', while 1 in 4 felt the scientific knowledge gained from this pandemic would inform future pandemics. Will we learn? There have been hundreds of clinical trials conducted, hundreds of millions of dollars of research funding allocated to find a treatment and develop a vaccine. Evidence however, has been largely replete of any breakthrough treatments. Guidelines continue to call for "more evidence" and recent publications suggested our haste in conducting clinical trials has led to inadequate study quality and methodology. [15]

EXHIBIT 1: WHAT WILL BE THE GREATEST IMPACT FROM COVID-19?



> The world needs leadership that embraces a new way of thinking and a new way of working. Leadership that liberates brilliance and harnesses that brilliance to drive change and transformation."[7]
>
> **David Williams**
> CEO and Founder of Impact International

From face masks, to virtual meetings and conferences, to an online shopping boom, COVID-19 has already drastically changed the way we go about our everyday lives, temporarily at least. Although it is still unsure how many of these changes will last into the future, one thing is for sure – no idea that can change the way we do things for the better should go to waste. Afterall, what use is it to endure such hardships and loss if we don't actively seek out ways to do better?

"What is this thing that has happened to us? It's a virus, yes. In and of itself it holds no moral brief. But it is definitely more than a virus. Some believe it's God's way of bringing us to our senses. Others that it's a Chinese conspiracy to take over the world.

Whatever it is, coronavirus has made the mighty kneel and brought the world to a halt like nothing else could. Our minds are still racing back and forth, longing for a return to "normality", trying to stitch our future to our past and refusing to acknowledge the rupture. But the rupture exists. And in the midst of this terrible despair, it offers us a chance to rethink the doomsday machine we have built for ourselves. Nothing could be worse than a return to normality. Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next.

We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly, with little luggage, ready to imagine another world. And ready to fight for it."[8]

Arundhati Roy

Let's Not Relive History: Instead Let's L.E.A.R.N.

Let's consider what happened in long-term care facilities around the world. Was it really that surprising that our ageing population would be especially vulnerable to this respiratory illness? Measures similar to the ones taken to prepare our hospitals for the virus could have also protected vulnerable residents and staff.[9] A lack of personal protective equipment, safety procedures, testing supplies and little collaboration with acute health care all highlight the underlying systemic issues that exist in our current systems.[9] We need to be better prepared. We need to plan, reprioritize and reimagine the way we have done things so we do not make the same mistakes twice. There is a lot at stake.

We can **L.E.A.R.N.** by gathering insights and considerations for our healthcare system, our communities, our practices and ourselves moving forward.

1. **Let's Make Collaboration a Priority.** This pandemic has forced many groups to collaborate in ways they might not have before. Keeping this momentum will not only help our future pandemic response but increased collaboration also has the potential to positively influence our efforts in other areas, such as the opioid crisis or the long-term care of our aging population.[11]

> "Public sector budgets at all levels of government are siloed. Programs and departments have their own rules and procedures; data systems are often incompatible in frustrating ways, making cooperation difficult; and cross-department planning is rare. The intensity of the COVID-19 pandemic, however, is forcing jurisdictions all across the country to find ways to be nimble so that multiple agencies can work together"[11]
>
> **Butler**
> 2020

2. **Evaluate and Plan Ahead.** Take the time to evaluate procedures that were implemented. Think "Did our strategy work?", "What were the gaps?" and "What can we plan to do differently next time?". Work within your community to identify potential gaps and inefficiencies and plan accordingly. Are there specific risks for the local population that need to be considered? Are there ways to be more efficient with our procedures, both in clinics or hospitals and within the municipality? The Canadian Influenza Preparedness plan writes that "this evaluation helps ensure that lessons learned from the real-life event are captured and remain available to inform pandemic plan revisions."[10]

3. **Alter our Approach To Point-of-Care.** Digital solutions such as video or telephone meetings, virtual conferences and online education have meant less risk of disease transmission for patients and providers. For patients who can avoid an in-person meeting, this equates to efficiency in patient care and patient triage.[12] In the case of patients with less mobility or who are living in more rural communities, there is also potential for communication to be improved. Not only have these solutions enhanced accessibility and availability of important health care services, but they also present an "environmentally-friendly way to operate in a connected world".[12]

4. **Rethink the Role of Health Care Centres.** How can the use of local resources be maximized? Are there steps that can be taken to ensure patients are seen appropriately? Can we re-evaluate what services are currently being offered by hospitals and other health care centres? The integration and segregation of various services could help us to respond more efficiently during a pandemic and means more patients will be reached.[11]

> "The enormous pressure on hospitals because of the COVID-19 pandemic should bring about a re-examination as to whether these institutions should be the first resort when people are sick…reconsidering the best settings for different patients could mean that with appropriate infection control practices, thousands of skilled nursing homes and inpatient rehabilitation facilities could be available for patients with COVID-19 and for other patients currently being sent to hospitals."[11]
>
> **Butler**
> 2020

5. **Nurture Improvements Psychosocial Care.** Mental health is an important and often overlooked aspect of health, especially during a pandemic. Public health measures (social distancing and closures) and the stress that comes from dealing with a pandemic in general (fear of getting sick or informational overload) can have lasting effects on our psychological and emotional well-being.[13] A more psychosocial response will help to "prevent some of these adverse outcomes and enhance not only the nation's response capacity but also its long-term recovery process."[13] To this end, not only is it important to think about how we can best help our patients, we also need to think about how we can best help ourselves. Just as society has learned, once again, the true value of frontline workers, we also must learn the true value of our own mental health.

Contributors

Ellen Scholl, B.Ed
Ellen Scholl has a degree in Physical Education and Kinesiology from Brock University and a B.Ed from the University of Ottawa.

Mohit Bhandari, MD, PhD
Dr. Mohit Bhandari is a Professor of Surgery and University Scholar at McMaster University, Canada. He holds a Canada Research in Evidence-Based Orthopaedic Surgery and serves as the Editor-in-Chief of OrthoEvidence.

References

1.Panizza, S (2020, March 18). Philosopher in Italian coronavirus lockdown on how to think positively about isolation. The Conversation. Retrieved from: https://theconversation.com/philosopher-in-italian-coronavirus-lockdown-on-how-to-think-positively-about-isolation-133859

2. Jones DS. History in a crisis – lessons for COVID-19. N Engl J Med 2020; 382:1681-1683. https://doi.org/10.1056/NEJMp2004361

3. Institute of Medicine (US) Forum on Microbial Threats. Ethical and legal considerations in mitigating pandemic disease: workshop summary. Washington (DC): National Academies Press (US); 2007. 1, Learning from Pandemics Past. Retrieved from: https://www.ncbi.nlm.nih.gov/books/NBK54171/

4. Zeitz J (2020, March 17) Rampant lies, fake cures and not enough beds: what the spanish flu debacle can teach us about coronavirus. Politico. Retrieved from: https://www.politico.com/news/magazine/2020/03/17/spanish-flu-lessons-coronavirus-133888

5. Rosenberg CE. What is an epidemic? AIDS in historical perspective. Daedalus 1989;118(2):1-17. Retrieved from: https://edisciplinas.usp.br/pluginfile.php/4205740/mod_resource/content/1/Rosenberg_What%20is%20an%20epidemic.pdf

6. Bachelet B & Grandi F (2020, March 12). The coronavirus outbreak is a test of our systems, values and humanity. The UN Refugee Agency. Retrieved from: https://www.unhcr.org/news/latest/2020/3/5e69eea54/coronavirus-outbreak-test-systems-values-humanity.html

7. Williams D. Life after COVID-19: an invitation to reimagine the future. Impact International. Retrieved July 3rd, 2020. Retrieved from: https://www.impactinternational.com/blog/2020/04/life-after-covid-19-invitation-reimagine-future

8. Roy A (2020, April 3). Arundhati Roy: 'the pandemic is a portal'. Financial Times. Retrieved from: https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fcd274e920ca

9. Holroyd-Leduc JM & Laupacis A. Continuing care and COVID-19: a Canadian tragedy that must not be allowed to happen again. CMAJ 2020;192(23):E632-E633. https://doi.org/10.1503/cmaj.201017

10. Public Health Agency of Canada (2018, August). Canadian pandemic influenza preparedness: planning guidance for the health sector. Government of Canada. Retrieved from: https://www.canada.ca/en/public-health/services/flu-influenza/canadian-pandemic-influenza-preparedness-planning-guidance-health-sector/table-of-contents.html#a4

11. Butler SM (2020, April 23). After COVID-19 – thinking differently about running the health care system. JAMA Forum. Retrieved from: https://jamanetwork.com/channels/health-forum/fullarticle/2765238

12. The Medical Futurist (2020, April 21). Life after COVID-19: what will change? Retrieved from: https://medicalfuturist.com/life-after-covid-19-what-will-change/

13. Public Health Agency of Canada (2009, March). Pandemic influenza psychosocial annex. Government of Canada. Retrieved from: https://www.canada.ca/en/public-health/services/flu-influenza/canadian-pandemic-influenza-preparedness-planning-guidance-health-sector/pandemic-influenza-psychosocial-annex.html

14. Roberton T, Carter ED, Chou VB, Stegmuller AR, Jackson BD, Tam Y et al. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. The Lancet 2020;8(7):e901-e908. https://doi.org/10.1016/S2214-109X(20)30229-1

15. Mehta HB, Ehrhardt S, Moore TJ, Segal JB & Alexander GC. Characteristics of registered clinical trials assessing treatments for COVID-19: a cross-sectional analysis. BMJ Open 2020;10(6):e039978. https://doi.org/10.1136/bmjopen-2020-039978