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Leadership Lessons From Prior Pandemics: Turning the Coronavirus Disease 2019 (COVID-19) Pandemic Into an Opportunity

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INTRODUCTION

There is no such thing as a coronavirus disease 2019 (COVID-19) crisis. The virus, or more precisely its perceived threat, is more aptly thought of as the trigger. The actual crisis is a combination of two other factors: First and obvious, the direct health effects of this viral pandemic, and second and far more important, the effects of the measures necessary to mitigate the former. As with any crisis, infectious pandemic included, it is instructive to separate responders into two groups: those charged with ad hoc policy development (hereby called administrators) and those charged with executing those policies (hereby called frontline personnel). That administrative leadership being responsible for policy development can beget three outcomes: (1) aggravate the crisis; (2) merely manage it; or (3) lead the institution to emerge stronger. History is replete with leadership examples during pandemics to avoid or emulate, and administrators are well advised to study it.

The first well-documented pandemic crisis was the Athenian plague, described by Thucydides [1]. In 430 BC, Athens was stricken by a pandemic in the midst of the Peloponnesian war against Sparta. As the death toll mounted, eventually claiming nearly 100,000 lives or one-third of the

population, social order broke down entirely. The *crème de la crème* of Athenian statesmanship failed their subjects. Athenians, who prided themselves in their commitment to the common good and service to the state, lost confidence in their leadership. Lawlessness took over [1,2], class distinctions became more acute, and eventually Athens fell to Sparta, ending the Greek experimentation with democracy.

Lesson: Even the Best of Leaderships Can Fail

Justinian's plague decimated the Byzantine empire in the 6th century AD [3]. Despite killing nearly half the population and upending production, distribution, and trade, the Emperor Justinian failed to implement effective policy changes. His business-as-usual approach and the absolute-centralized control by the state that was operative under normal circumstances proved inflexible. It led to loss of faith by the people in the state, tax revenues plummeted, army recruitment failed, and eventually the Empire's borders shrunk as enemies took advantage of Justinian's failed leadership [4].

Lesson: Flexibility Is Crucial at Times of Crisis

The most infamous plague was the black plague of the 14th century.

Leadership (state and church) implemented policy changes, although they did so not to address the pandemic but to protect their own interests and maintain their grip on power. Social upheaval was magnified by the blame game as these policy changes by the authorities (states and church) targeted the poor, "heretics," and the Jews [5]. Notwithstanding the horrific toll (some 20 million people perished in Europe), poor leadership resulted in disenfranchisement of the people and led to multiple revolts [6] that changed economic and social structure in Europe permanently.

Lesson: Practice Needs to Be Based on Evidence

A positive example of leadership, albeit during a metaphorical pandemic, is that of Winston Churchill carrying the British people through WWII. His style has been characterized by "self-confidence, enthusiasm, assertiveness, emotional stability, extroversion, warmth, trustworthiness, frustration tolerance and even sense of humor" [7]. Just as importantly, Churchill never claimed undue credit for himself, praised those fighting on the front lines, and was quite tolerant of other's lapses under stressful circumstances. Churchill's leadership transcended the British Isles, and he gave equal

credit to non-British peoples. The falsehood of “the British stood alone” against the Germans was a jingoistic sentiment propagated by post–World War II nationalists [8] and an example of credit-seeking behavior to avoid.

Human history is rich in leadership lessons during crises that can help today’s administrators.

PRACTICE-LEVEL LEADERSHIP RECOMMENDATIONS

1. Resist the temptation to centralize control. This behavior places administrators in the middle of the spotlight, promotes self-exposure, gives the impression of seeking credit, and alienates frontline personnel [8].
2. Avoid “excessive” administration.
 - a. Limit communications to those necessary and helpful to frontline personnel. Mass, repeated e-mails or memos from multiple uncoordinated administrative sources only distract frontline personnel and result in the loss of faith in the administration’s ability to administer. Even well-intended communications if not materially useful to frontline personnel can be burdensome and distracting and lead to a tendency to ignore further communications.
 - b. Limit new regulations to only critical ones, those based on evidence and those unlikely to be implemented by frontline personnel spontaneously. Health care providers are by and large educated, creative, flexible, and reasonable and will in many cases implement useful changes autonomously. The knee-jerk reaction to

create ad hoc committees and their natural indulgence to increase regulation can be insulting, demeaning, and demoralizing to frontline personnel.

3. Avoid inappropriate praise (and most of it is). Frontline personnel are risking their lives to help patients. They know this and generally view any praise coming from those sitting in offices as condescending and paternalistic. Praise directed to a specific group or person might even be worse, because others may view it as the administration ignoring their sacrifice. Instead of praise, administrators could verbalize the debt owed by the institution to frontline personnel and assure them it will not be short-lived. Administrators should also avoid the British post–World War II syndrome of “we alone did it.” Even if administrators deserve some praise, it is not one that comes from putting their lives at risk. Stay in the shadows.
4. Be humble and moderate in your message.
 - a. Be honest. Do not be too pessimistic or too optimistic. Physicians, nurses, and technicians are aware of the epidemiological and health care implications of the COVID-19 pandemic. They know as much if not more than the administrators. Any undue optimism or pessimism will give the impression of intentional misinformation or at least lack of understanding.
 - b. Limit punitive measures. Understand the COVID-19 stressor is added on top of the stressors people have to

deal with on a daily basis. Divorce, family sickness, death, child care issues, financial problems, professional uncertainties are the baseline. If you are one of those who can manage stress effectively, help those who are not. Transgressions should be approached with compassion, forgiveness, and camaraderie. Zero tolerance policies can bring about a lethal blow to morale.

- c. Maintain adherence to old morals. Patient care priorities, professional respect, work ethic, friendships, social cohesion cannot be put on the back burner. Allowing or causing these to be damaged in the pretext of fighting the COVID-19 pandemic is misguided. COVID-19 will pass, but any damage to deeply held moral beliefs will not likely recover.
5. Trust frontline personnel. Administrators should understand that at times of crisis, frontline personnel have the upper hand in the relationship, should it turn adversarial. This is a lesson that Tsarist Russia learnt the hard way, when soldiers simply laid down their weapons and abandoned the fight. Tsarist leadership was short-lived after that. Administrators should be viewed as a support group that is there to ensure frontline personnel has the knowledge, training, and supplies to continue fighting. Freedom of movement for the frontline personnel is crucial and that requires faith in their ability to carry out their mission.

As we emerge into the post-COVID-19 world, it is important that these lessons are not short-lived. With globalization, the world's susceptibility to repeated pandemics is increased. The response at national level will tend toward self-sufficiency—the opposite of globalization. Similarly, health care institutional administration must help develop policies that are proactive and flexible and that render their institution as self-sufficient as possible. Importantly, administrators must, at times of health crises, relegate themselves to a role supportive of frontline personnel. Both administration and frontline personnel are necessary to succeed in managing the COVID-19 pandemic. Thoughtfully targeted policies aimed to enhance the safety and efficacy of frontline personnel are necessary, and they ring true to General Patton's statement that a "pint of sweat today

saves a gallon of blood tomorrow." At the same time, administration should heed the general's more famous statement: "Lead me, follow me, or get out of the way" [9] by making sure those policies are indeed thoughtful and aimed solely to support the work of frontline personnel.

REFERENCES

1. Zaretsky R. The plague that killed Athenian democracy. Slate. Available at: <https://slate.com/news-and-politics/2020/03/thucydides-plague-athens-coronavirus.html>. Accessed April 19, 2020.
2. Target Health. The plague of Athens. Available at: <https://www.targethealth.com/post/the-plague-of-athens-leading-to-the-fall-of-the-golden-age-of-greece>. Published April 15, 2019. Accessed April 19, 2020.
3. Tsiamis C, Poulakou-Rebelakou E, Tsakris A, Petridou E. Epidemic waves during Justinian's plague in the Byzantine Empire (6th-8th c. AD). *Vesalius* 2011;17:36-41. Erratum in: *Vesalius* 2011;17:41.
4. Horgan J. Justinian's plague 541-542 CE. Available at: <https://www.ancient.eu/article/782/justinians-plague-541-542-ce/>. Published December 26, 2014. Accessed April 19, 2020.
5. History.com Editors. Black death. History.com. Available at: <https://www.history.com/topics/middle-ages/black-death>. Accessed April 19, 2020.
6. Courie LW. The black death and Peasant's revolt. New York, NY: Wayland Publishers; 1972; Strayer JR, ed. Dictionary of the Middle Ages, vol. 2. New York, NY: Charles Scribner's Sons; 257-267. Available at https://www.brown.edu/Departments/Italian_Studies/dweb/plague/effects/social.php. Accessed May 29, 2020.
7. Chris J. 6 Winston Churchill leadership style doctrines. Available at: <http://www.josephchris.com/6-winston-churchill-leadership-style-doctrines>. Published August 28, 2015. Accessed April 19, 2020.
8. History Extra. WW2: When Britain stood (not quite) alone. Available at: <https://www.historyextra.com/period/second-world-war/britain-stood-alone-ww2-myths-brexite-debate/>. Accessed April 19, 2020.
9. 11 quotes that show the great leadership of General George Patton. Available at: <https://www.businessinsider.com/11-quotes-that-show-the-great-leadership-of-general-george-patton-2015-11>. Accessed May 13, 2020.

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