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The Application of Strategic Leadership to the COVID-19 Pandemic and its Impact on US Military Operations

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Part 1: Issue

The United States (US) Military Health System (MHS), the military it serves, and the world are currently challenged with addressing and managing the new novel coronavirus pandemic. This virus and the disease it causes (COVID-19) can cause significant illness and death in both the civilian and military populations, overwhelm military medical resources, and cripple US military capabilities.[1]

Part 2: Background

COVID-19 presents a unique strategic issue for the US military, the US population, and the world. Despite significant advances in medical care, there are still no cures for the diseases caused by various coronavirus strains. Frequent air travel and international commerce have allowed the disease to spread rapidly. Political rivalries between countries have limited the open and honest dissemination of medical information and impeded the ability to track the pandemic. Within the US, disease management strategies have been hindered by several social and political issues. First, the US healthcare system is predominately profit based, relying on elective surgeries and brief hospital stays. This model of care depends on fast patient turnaround, such that hospitals aim to have as few vacant beds and ventilators as possible. To address this issue, the National Strategic Stockpile was developed; however, maintenance of the stockpile has not occurred, and some hospitals are overwhelmed with too many patients and too few ventilators to provide them adequate care. There is also a shortage of personal protective equipment (PPE). For economic reasons, US companies have moved production of PPE to foreign nations resulting in a substantial delay in production of further equipment, and hospitals, including those within the MHS, have failed to maintain sufficient stores of PPE. The combination of these economic and political factors and the highly infectious nature of the novel coronavirus has resulted in a global

pandemic that has the potential to significantly impact US security and US military operational capabilities.

One major challenge of addressing the impact of COVID-19 on the US military is clearly explaining to line leadership why this disease is a strategic issue. While most of the young, healthy military population will have minimal physical effects from this pandemic, the potential impact upon the US economy, global economy, beneficiaries, senior leaders, and global security is significant. Historically, the confined quarters of military personnel, in conjunction with their international movement, has proven to be a devastating vector for the spread of disease to vulnerable populations.[2] The US military is not only duty bound to defend against foreign enemies, but also to avoid adversely impacting public health.

The COVID-19 pandemic possesses all the aspects of the VUCA (volatile, uncertain, complex, and ambiguous) environment.[3] The pandemic is volatile in that the numbers of cases and deaths are rising rapidly, local, state and federal governments are approaching the issue with diverse strategies, and public support and opposition to these strategies remains in flux. Great uncertainty remains as to how dangerous this disease is, its true mortality rate, whether the disease will overwhelm the US healthcare system, how effective countermeasures are, how long it will take to address testing and equipment shortages, how adversely the disease will impact the US economy, and how best the military should be employed to address this disease. The disease presents multiple complex issues to include the ethical challenges of providing healthcare in a resource-limited environment (lack of personal protective equipment, ventilators, and medications) and balancing the control of the disease spread with the economic impact of quarantines. Finally, the lack of prior experience with this disease, or any large US pandemic in recent history, in combination with a current lack of testing and treatment options leaves great

ambiguity. This ambiguity has been exacerbated by the lack of a clear strategy and message from political leaders.

While COVID-19 directly or indirectly impacts nearly every aspect of human life across the world, this essay will focus primarily on addressing the impact of COVID-19 on the US military. The list of key stakeholders and leaders is extensive and consists of:

1) The components of the MHS to include the MHS leaders and medics (in the broadest sense of the term) tasked with caring for military personnel, military healthcare beneficiaries (including retirees and military dependents), and civilian patients who are cared for by deployed medical personnel.
2) Critical military capabilities necessary to ensure continuation of the US nuclear deterrence program. While the US can tolerate a temporary limited ability to project influence in various regions, a lapse in nuclear weapons security and functionality is unacceptable and every effort must be made to ensure COVID-19 does not adversely impact submarine, inter-continental ballistic missile, and strategic bomber operations.
3) Non-nuclear military capabilities necessary to project US influence throughout the world.
4) The civilian populations with which the US military interacts. This includes both the need to defend the US population and their interests from state and non-state military threats and the prevention of spread of the coronavirus via US military human vectors.
5) The political leaders who oversee and fund the US military.

6) The Center for Disease Control and Prevention, National Institutes of Health, Department of State, and other governmental agencies responsible for advising the disease and managing the movement of populations.
7) Foreign governments and populations at risk of spreading the virus to US personnel, receiving the virus from US personnel, or developing political instability due to the impact of COVID-19.

Part 3: Analysis

There are several strategic tasks available to address the COVID-19 pandemic and its impact upon US security and stakeholders. Given that there is no cure for COVID-19 and that a vaccine is months to years away, management of the COVID-9 epidemic relies predominately on public health measures like social distancing and limited movement of military personnel to slow or limit the spread of the disease. This includes the reprioritization of physical, monetary, and human resources. As gatherings of large groups increases the risk of spreading the disease, consideration must be given to determine what aspects of the military mission can be completed from home. Additionally, the MHS is currently undergoing significant cuts in personnel and funding. Consideration must be given to at least temporarily limiting this process. As the downsizing of the MHS is mandated by the current National Defense Authorization Act, coordination with the Joint Chiefs and Congress is required to employ this strategy.

While the sudden rise of COVID-19 cases in New York City resulted in the deployment of military personnel in support of patient care, there is need for improvement in cross-cultural competency regarding the US military and its medical capabilities. Until recently, most military casualties resulted from disease, not combat injuries.[4] Over the last two decades, in response to Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF), the MHS has

transitioned from an agency predominately focused on disease prevention to one focused on combat trauma care.[5] Due to the realignment of the MHS, the number of intensive care unit (ICU) personnel available to deploy is limited. In addition, the deployment rate of emergency physicians (one of the key specialties needed to address an epidemic) remains high, leaving a shortage of emergency medical staff at MHS facilities prior to the COVID-19 outbreak. The military also lacks the PPE and ventilators necessary to manage a large pandemic. Unfortunately, many line and civilian leaders are unaware of the limitations of MHS capabilities.

Communication between the MHS, military line leadership, governmental agencies, Congress, and Office of the President is essential to ensure leaders remain aware of the impact of COVID-19 and public health measures on the military's capabilities. Appropriate communication between and within the military and other governmental agencies can improve organizational alignment with national objectives. Given the significant unpredictability of a novel pandemic in modern history, communication must be frequent and rapid. Leaders and advisors must maintain the highest integrity to earn trust despite what will certainly be a rapidly changing and evolving management strategy. As Gerras states, "Alignment needs to be both vertical — the lowest levels of the organization understand and accept the big picture, and horizontal — each of the stovepipes that come together at the strategic level are in sync."[3] While this communication is vital, so too is the requirement to ensure national security by avoiding the inadvertent dissemination of US vulnerabilities.

It is imperative that the military considers major policy changes. Currently, military treatment facilities (MTFs) do not see non-beneficiary patients. If COVID-19 overwhelms the civilian healthcare system, allowing civilian patients to be treated at MTFs could increase the pool of hospital beds and ventilators available for patient care. However, allowing COVID-19

patients to be treated at MTFs runs the risk of spreading the disease to military personnel, potentially impacting mission capabilities. The current mission of the Defense Health Agency (DHA) is to "achieve greater integration of our direct and purchased health care delivery systems so that we accomplish the Department's Quadruple Aim: achieve medical readiness, improve the health of our people, enhance the experience of care, and lower our healthcare costs."[6] Of note, the phrase “improve the health of our people” refers to DoD beneficiaries. The treatment of general civilians does not fall within the DHA mission. It is therefore not surprising that the MHS lacks many of the capabilities necessary to address a pandemic. An example of this is the MHS’s decision to transition the use of extracorporeal membrane oxygenation (an advanced life-saving intervention for lung failure, including lung damage caused by COVID-19) to the civilian sector due to costs. If the President and Congress determine that the MHS should be used to address civilian pandemics, modification to the DHA mission, policies, and practices are necessary.[7] If the MHS is not used to address civilian pandemics, then an appropriate alternative is necessary.

Protecting the military force will also require policy changes focused on preventing the spread of COVID-19 to critical military personnel with an extended training pipeline such as missileers, pilots, and special forces units. Potential strategies to protect personnel include isolation, limited leave, stop-loss, extension of deployments, and minimizing permanent change of station orders. Such measures must be weighed against the potential negative impact on morale and mental health.

The COVID-19 pandemic presents a unique opportunity for leadership development within the MHS.[8] With the conclusion of OIF and OEF, line and congressional leadership has focused significant efforts on minimizing the cost of healthcare within the DoD. Additionally,

leaders within the MHS community may fail to develop sufficient cross-cultural competency to convincingly advocate for critical public health measures. Military medical history is filled with examples of mission failure due to the inability of medical personnel to convince line leadership to enforce necessary preventative health measures.[2,4,9] The MHS must develop leaders capable of collaborating with line and civilian leadership in a manner that ensures the health and mission readiness of the US military.[10]

There are a multitude of COVID-19 ethical dilemmas to consider. Leadership must weigh the benefit of using MHS personnel to care for civilian casualties against the risk of spreading the disease to military personnel. Policies must address whether US military personnel who are deployed should be sheltered-in-place to prevent spreading the disease to MTFs or if personnel should be flown back to the US to receive the highest standards of medical care. In the event that COVID-19 becomes as severe as what was experienced in Italy, military physicians will be faced with the dilemma of focusing on those with highest risk of adverse outcomes (elderly patients and those with co-morbidities) or those most essential to the military mission (combatants with critical skills).

Part 4: Implementation

As a physician, I can command those medical personnel assigned to me, but population-based decisions ultimately rest with line leadership. Therefore, I would employ the use of "boundary spanning" and meta-leadership to convey the importance of the aforementioned issues.[10,11] I would clearly explain to leadership what protective measures are required to ensure our military force and medical force remains combat effective. This would include significant efforts to minimize the spread of coronavirus to, and within, military bases and ships by mandating social distancing, quarantining ill individuals, and the use of telecommuting when

possible. The coronavirus outbreak aboard the USS Theodore Roosevelt has helped to convey the importance of disease control to military leaders, but the specifics on how best to control the disease while maintaining mission capabilities will require continued advisement from medical personnel as more information regarding this disease and its management become available.

For those personnel assigned to critical nuclear deterrence capabilities, I would advise the adoption of a deployment schedule similar to that used in combat operations. Missileers, nuclear submarine personnel, strategic bomber crews, and other critical personnel could be quarantined for two weeks and then begin a one month "deployment" to their duty locations with limited to no contact with the outside world. I would advise the use of telecommunication and mental health resources to limit the impact upon the individuals and their families.

As coronavirus testing capabilities become available, I would advise line leadership on the inherent limitations of said testing (limited accuracy) and the need for retesting. I would advocate for the use of triaged testing, with those assigned to the nuclear deterrence being tested first, followed by those preparing to deploy, those returning from deployment, and those arriving at a new permanent duty station. In the event an individual tests positive, I would advise they be immediately quarantined until they are no longer infectious to prevent further spread to other personnel.

With regards to the employment of MHS personnel in treatment of non-beneficiaries, I would advise the use of infrequently deployed medical specialties (pediatrics, infectious disease, obstetrics) to support civilian hospitals or establish field hospitals geographically separated from military bases. I would also advise that combat deployable medical specialties (i.e. trauma surgeons, anesthesiologists, and emergency physicians) remain at military bases and continue preparation for support of combat operations. Additionally, I would advise that Air Force Critical

Care Air Transport Teams (CCATTs) should immediately prepare for the potential to evacuate critically ill COVID-19 patients to advanced medical facilities. These efforts will allow for support of the public health of the US while maintaining combat readiness.

Additionally I would recommend that organizations in the military and those that support the military (i.e. State Department, American Red Cross, local hospitals, and foreign nations where US military personnel are stationed/deployed) be advised of the lack of military ICUs and advanced medical care OCONUS and at smaller bases. These limitations may force a reliance on the civilian healthcare system for those who may become critically ill, and awareness can aid in planning for such an event. I would also advise military leaders as to the civilian healthcare systems capabilities, and to their abilities and limitations in the care of military beneficiaries. These efforts would ensure the continued operation of the US military's nuclear arsenal, maintenance of deployable combat units to protect US interests, and security of the health of military personnel and the civilian population.

Conclusion

The US military is currently tasked with maintaining security and military capabilities during the COVID-19 pandemic following a significant decrease in military medical assets, an insufficient national strategic stockpile, and a dependence upon foreign nations for medical supplies and personal protective equipment. This volatile, uncertain, complex, and ambiguous environment necessitates a coordinated, strategic response from military and civilian leaders.[3] Key necessary aspects of this COVID-19 response include appropriate social distancing, utilization of military medical assets to support the civilian healthcare system, interagency communication, and protection of vital military assets (i.e. nuclear weapon and special operations personnel). Military medical personnel must provide honest, reliable

recommendations to line leadership focused on balance mission completion with appropriate disease prevention, testing, and treatment recommendations. Finally, military medical personnel must develop and utilize interpersonal relationships with US and foreign agencies, employing meta-leadership to address a strategic challenge impacting the entire human population.

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