

Summary Sovereign Challenge Forum – 19 May 2020

Dr. W. Abdullah Brooks, Associate Scientist, Johns Hopkins Bloomberg School of Public Health

BLUF: Governments must remain aware that pandemics create the opportunity for Disorder, Mistakes, or Long-Term partnerships; how those opportunities unfold will be determined by our ability to maintain long-term sustained engagements that can build trust. (Well written)

Attendees included:

Rebecca Lang, J59

Maj Craig Thompson, J25

Mr. Ken Brown, J2

Ms. Elizabeth Pfozter, JMWC

Mr. Harry Thomas

Mr. Kevin Brill

Mr. Alex Morales-Hernandez

Mr. Luis Quiceno

Mr. Chris Thomas

Dr. Brooks shared a brief of his background. He opened the conversation with a reference to the Lancet article lamenting the absence of the leadership of the US Centers for Disease Control on the global scene. Dr Brooks shared that many of his international colleagues have noted the absence of the CDC and US military response to COVID-19. The US may be missing an opportunity to expand its influence and reputation abroad in the absence of the participation of these key pieces of the US Government and its actions abroad.

70% of all federal employees are in some form working in support of National Security. Cross pollination is critical. Leaders should take into account the epidemiological scene as they lean forward in their decision processes. Pandemics represent opportunities for three distinct contexts; 1. Disorder (instability is exploited) 2. Mistakes (instability resulting from actions or unintended consequences) 3. Long Term Partnerships (taken when a long-term view of a challenge is taken and addressed collectively). A Mideast proverb describes the choices, “it takes 1000 builders to equal one saboteur”.

Social disruption in Low and Middle Income countries represent systems that at best have sharp instabilities. Countries like Kenya, India were cited.

Try to prevent falling into instability. Crossing the line from stability to instability is easy. Moving from instability to stability is a Herculean task that can take generations. Citing the example of Uganda and Edie Amine, Dr. Brooks highlighted how that country fell from the most prosperous African nation 50 years ago to where it is today.

In short, it is extremely costly to allow violence to take over. If this is allowed to occur, it creates opportunities for bad actors. Long standing grievances re-emerge. For example, in the middle east people remember the Medieval Crusades. This history is exploited often in some madrasas, presenting

the world view of Islam under siege. Some madrasas present a world view of Islam under siege, exploiting historical facts and world views.

A recent example highlighted the Polio vaccination program which became a casualty of broken trust. It became viewed People viewed the PVP with suspicion and conspiracy theories, wrongly suggesting it a means to sterilize the population.

Dr. Brooks shared some details about how the tetanus vaccine became the subject of such rumors. Because the Tetanus Toxoid has a large molecular structure into which other vaccine molecules can be incorporated. In places where the vaccine is in limited supply, pop to give the vaccine to women of childbearing age as to protect the unborn from neonatal tetanus, a cause of significant infant mortality. When a catholic priest realized that young women were given the vaccine exclusively, he made up a story that it was really a means of mass sterilization. This occurs when trust between the population and the authorities is eroded.

Similarly, the Polio vaccination was used as a rouse to obtain DNA samples which led to the identification of Usama Bin Laden. The Taliban soon learned of this method and retaliated against health workers.

Conspiracy theories are an avenue of control by the powerless. Some use this as a tool to manipulate; in other cases, as a means to commit genocide.

Suspicious include diseases that are new to a population may be viewed wrongly as a bioweapon, deployment of a vaccine may be seen with distrust.

Mistakes by the 'good guys', a single point of failure may lead to long-term distrust. Anything that jeopardizes trust is a single point of failure. Necessary are sustained bilateral relationships trust is essential—irreplaceable.

Ex: Measles in Bangladesh; measles vaccine was administered by Russians and the Americans in different methods. Viewed with suspicion by populace as a result. (this needs more detail... lost thought)

Critical mistakes that lead to lost trust are

1. Ignoring a problem until it affects you
2. Withdrawing Aid

Two categories of public health

1. High Public Health Impact -
2. Climate Motivated Disease Spread? - Typhoid in urban settings

Mitigating a single point of failure through the following actions:

1. Long Term Engagement
 - a. Health workers are ambassadors for US
 - b. Strategic deployment of support
 - i. Long-term – Fixable problems with high mortality rate like TB, Typhoid
 - ii. Short-term – Disaster mitigation and sustainment

WORKING TO GAIN STABILITY

1. Surveillance

- a. Diagnostic (looking for viral particles)
- b. Serologic (looking for antibodies) tells you how widespread and where it's going; number of silent carriers; asymptomatic;

Moving forward the coincidence of influenza and COVID-19 is worrying

2. Vaccine and Therapeutic Development – management of expectations –

Note: nutrition matters and is related to the efficiency of vaccines; works differently in different populations.

Having the capacity to develop in country for surge capacity is key

TECH TRANSFER -can the treatment be licensed

1. Existing Therapies
2. Novel therapies
3. Immune Based

CAPACITY BUILDING – Giving life saving skills targeted toward pandemic preparedness; provides possible early signals

Conspiracies are challenging; “Working together sheds antiseptic light on conspiracies”

IN the case of Ebola – lack of trust toward the governments turned to lack of trust against doctors – Docs were accused of bring the virus to the community – breaking important cultural rituals like stopping the family from washing the body of a deceased family member was troubling and unacceptable. The inability to work on common medical problems erodes trust as well.

Vaccines are successful in only 1 out of every 16 attempts.

Vaccine trials are composed of three components: 1) Evaluation of Safety 2) Evaluation of Immunogenicity and Protection from the infection 3) Evaluation against Wild Type Virus (antigen)

Taiwan has had a great deal of success, they are doing what the Chinese are doing, but on Steroids. They have done an excellent job of surveillance; they have the highest percentage of testing per capita. Contact tracing and disease mitigation has been critical in their success. The US would have to do 5 million test per day to achieve the same level of surveillance. Ironically Taiwan is not permitted in the WHO; an issue the US is working to resolve

COVID-19 is revealing societal inequities. the US infection rate is likely underestimated significantly. We can tell this because our infection rate is still at 6% which is too high. If more

testing occurs, this will drive the infection rate closer to the actual rate. Taiwan Singapore leverage their health services and militaries to identify cases rapidly and

Greatest spread in US is occurring in underserved communities. Racism, lack of access, and prejudice are components of this. Minorities are treated differently as reflected by studies in NEJM. Many essential workers are minorities, and this too may drive the incidence higher. Poor diets, food deserts, in addition contribute

Dr. Brooks shared a personal story of a grandmother who brought her 6 month old grandbaby to the ER. He admitted that he jeered at the idea that she brought the child initially. Upon examination he learned the child had septic meningitis placed the child in treatment and saved his life.

The grandmother later explained that her daughter had died of a drug overdose; that she was raising her grandson alone. Worked two jobs. After returning home taking care of the other children, she noticed the baby was ill. She decided to take the child to the place she could get the best medical assistance, which was a 2-hour train ride to Cornell University Medical Center. She was doing the best she could. Never again did he judge someone coming into the ER.