

Preventing Pandemics for a healthy future: While winning this war.

Chuck Woolery – April 3, 2020

Predictions of a pandemic were uncontested and then ignored (see partial list below).

Others will come. We must win this war while preventing the next.

April 7th is World Health Day. “From Intervention to Prevention” Health first for everything (mind, body, spirit, personal relations, environment, economy, democracy, generational decisions...).

The forever war: Our Memes* vs their Genes**

Never before has humanity had so much power and technology to respond to humanities oldest and most lethal enemy – infectious diseases. A pandemic calls for all out mobilization. And, investments in preventing more in the future helping us to also prepare for those we cannot prevent.

A global system focused on early detection, rapid response, R&D (Research and Development), and most important, prevention, was proposed and needed decades earlier (see historical commissions below). World leaders must react wisely to Covid 19 but they must also begin engineering an effective global system. If not, in the decades ahead ‘we the people’ will suffer far more and risk tens of trillions of dollars more in debt. It is not a matter of if, but when. Unfortunately, policy makers rarely act on wisdom. But they do respond to public will. They need to hear from each of us. Scientists, citizens, organizations, business and religious leaders must unite and insist that our freedom, security and future prosperity can no longer be left to chance. We need a holistic, comprehensive, preventative approach for our children.

World Health Day is an ideal opportunity to share this need. Consider hosting live or pre-recorded webcasts on this day with local organizational leaders and issue experts who will share their views.

It’s now obvious that business as usual is no longer an option. It was actually unsustainable from the beginning. Covid-19 isn’t the only failure. Just the most urgent and obvious.

Key themes to explore on any webcast or social media platform.

- Prevention has always been the best medicine. Responses are too expensive in lives and dollars.
- A new level of understanding can enable real health benefits that are sustainable and help prevent some pandemics and other crisis.
- Understanding and practicing holistic management can prevent multiple problems that have resisted resolution for decades.

- Evidence based practices, well-informed citizens, and motivated policy makers can make miracles happen.
- What's missing is the collective potential of peace, justice and environmental movements coming together and then working together to maximize humanities health, freedoms and security for generations to come.

April 7 webcasts can start successive weekly participatory social media events. Mobilized News <https://mobilized.news/> will provide worldwide audiences with evidence-based, scientifically backed information, and expert analysis that listeners can put into local actions for sustainable global impact. We must build a healthy future, starting now.

***Meme:** Anything transferred between humans that is not genetic (DNA or RNA in origin). It can be an idea (capitalism or interdependence), image (American flag or Mickey Mouse), ritual (Macarena line dance or an election), or ideal ('the Golden Rule' or 'market forces will solve it'). It spreads via human communication by any means to anyone who receives it, if they want it or not, or if they like it or not. Memes can be a profoundly powerful tool for doing great good or catastrophic harm.

****Gene:** A segment of DNA or RNA shared between humans in close contact via air, water, food or other physical sharing of things. Spreading of genes can be accidental or unintentional (pandemics or accidental food contamination, hospital acquired infections, sexually transmitted diseases, shaking hands, or exposure to mosquitos. Or exchanged intentionally. Making babies, injecting vaccines, or launching a biological weapons attack. Again, Genes are profoundly powerful multi use tools.

Ultimately, both memes and genes are just information. And both can be controlled if properly understood globally and then effectively applied.

Many properly view our fight against Covid19 as a war. A war against infectious disease - humanities greatest killer. Those who study war know Sun Tzu's ancient book "The Art of War" and its number one rule: "Know your enemy and yourself".

To win this war we must understand the virus and learn how to control it. And, at the same time we are fighting it the best we know how, we must understand one of our greatest weaknesses that George Lakoff calls 'direct causation' thinking. Our primal thinking that reacts directly to a threat, instead of doing deeper "systemic causation' thinking... which can identify the threats root cause, which can lead to actions that prevent the threat before it becomes one.

All forms of human communication spread **memes** constantly. "Social distancing" was unheard of 3 months ago. Today it's morphing into a more accurate meme of 'physical distancing' which recognizes that our connecting by social media will be vital to winning this war. If you knew

someone who had heard of neither of these memes you understandably might be shocked. And, feel threatened when people are not acting on this meme.

Knowing these types of people exist generates another meme. Rational “Fear”. This is another meme which spreads very rapidly for obvious biological reasons. The direct reaction to this fear is boosting guns sales and hoarding of toilet paper. But the ‘fear’ meme can be used to bring people together if they understand our systemic failures in preparing for this inevitable threat. And more importantly preventing the next. And at least being better prepared for it.

Conclusion: Fear is an exponential disrupter meme when our minds gravitate ‘directly’ to a threat. But fear can also be an exponential connector meme, when it moves people beyond the primitive ‘direct’ reactionary thinking we normally do – into the deeper systemic thinking now needed - at every level.

Example 1: President Trump renamed Covid-19 the “Chinese Virus”. According to a Congresswoman on Cspan this week, there has been over 1000 acts of violence against Asians in the US (of any nationality) in just the last 4 weeks. Attacks are now averaging about 100 per day. The spread of this fear meme is dangerous and may be lethal. Dr. Fauci, now the most trusted man in America, needs body guards because of a ‘deep state’ meme, pushed by conspiracy ‘super spreaders’.

There have been many references to the ‘1918 flu’ as the “Spanish Flu”. In reality scientists believe it originated on a Kansas farm. “The name of Spanish Flu came from the early affliction and large mortalities in **Spain** (British Medical Journal (BMJ),10/19/1918) where it allegedly killed 8 million in May (BMJ, 7/13/1918). However, a first wave of influenza appeared early in the spring of 1918 in **Kansas** and in military camps throughout the US.”

The spread of Trump’s meme “Chinese virus” misinforms people. It has led to violence. Every time we hear the “Spanish Flu” meme we can use it to demonstrate how meme’s can be both misleading and dangerous.

Here are a few meme’s that are vital to understanding Covid-19, responding to it, and preventing its spread. As well as preparing for future strains and preventing other pandemics, - or better preparing for them and other biosecurity threats we cannot prevent.

1. **“SARS-CoV-2”** is the technical name of the virus that causes the ‘Covid-19’ disease.
2. SARS-CoV-2 is a **“Novel corona virus”**. ‘Novel’ means it is new to our species that came from one or more other species -- and no human has immunity to it...unlike other corona viruses we have long been exposed to.
3. **“Genetic drift”** means that viruses (especially RNA based viruses like SARS—CoV-2 Covid-19) change, slowly...but potentially enough that it will continue to spread globally even after an effective vaccine is created to protect against the original strain. NOTE: RNA is what the nucleus of a cell uses to copy DNA. Deoxyribonucleic acid...and Ribose Nucleic Acid.

4. **“Herd Immunity”** refers to a population that has been exposed to, and recovered from a virus, or been successfully vaccinated to a degree that the bad virus is no longer spread under relatively ‘normal’ conditions. Herd immunity can become irrelevant if/when a virus mutates to the degree it can re-infect a population. Things change. Can we?
5. **“Comprehensive”** response or approach. Without a national or globally coordinated response we aid the genetic spread of Covid-19, and any other global threat we face to our freedom, security and prosperity.
6. **“Systemic approach”**. Everything in the known universe (created by nature or human engineers) is made up of systems and structures that are based on certain principles. Nature’s engineering is based on fundamental principles. These can be recognized as “the Laws of Nature and Nature’s God”. Then there are alternative principles that are created by human minds. Principles like “peace through strength”.
7. **“Fundamental principles”** are “self-evident” “truths” like gravity. Or, ‘the golden rule’. Violate these and its inevitable things will not go well. Alternative principles like “independence” can work well for a while in making human systems and structures...but inevitably, if they have ignored fundamental principles, they may end catastrophically. Regarding the control of any infectious disease it is important to understand they do not abide by alternative principles like nationality, states’ rights, or the economic law of supply and demand. Leaving each US hospital or all 50 states to compete in acquiring respirators or ventilators isn’t going to end well for all 50 states. The same is true in competition between nations for similar essentials. Essentials that policy makers knew were inevitably going to be needed. See warnings below.

“In the final analysis, unless Americans -- as citizens of an increasingly interdependent world -- place far higher priority on overcoming world hunger, its effects will no longer remain remote or unfamiliar. Nor can we wait until we reach the brink of the precipice; the major actions required do not lend themselves to crisis planning, patchwork management, or emergency financing... The hour is late. Age-old forces of poverty, disease, inequity, and hunger continue to challenge the world. Our humanity demands that we act upon these challenges now...”
Presidential Commission on World Hunger, 1980.

The Commission specifically warned about the future consequences if we ignored the global injustice of hunger. “The most potentially explosive force in the world today is the frustrated desire of poor people to attain a decent standard of living. The anger, despair and often hatred that result represent real and persistent threats to international order... Neither the cost to national security of allowing malnutrition to spread nor the gain to be derived by a genuine effort to resolve the problem can be predicted or measured in any precise, mathematical way. Nor can monetary value be placed on avoiding the chaos that will ensue unless the United States and the rest of the world begin to develop a common institutional framework for meeting such other critical global threats as the growing scarcity of fossil fuels and other non-renewable resources, environmental hazards, pollution of the seas, and international terrorism. Calculable or not, however, this combination of problems now threatens the national security of all countries just as surely as advancing armies or nuclear arsenals.”

The commission also stated “that promoting economic development in general, and overcoming hunger in particular, are tasks far more critical to the U.S. national security than most policymakers acknowledge or even believe. Since the advent of nuclear weapons most Americans have been conditioned to equate national security with the strength of strategic military forces. The Commission considers this prevailing belief to be a simplistic illusion. Armed might represents merely the physical aspect of national security. Military force is ultimately useless in the absence of the global security that only coordinated international progress toward social justice can bring.”

INFECTIOUS DISEASES as a threat to U.S. National Security:

1. *Emerging Infections; Microbial threats to health in the United States* 1992, Lederberg, Joshua, Oaks, Stanley C., & Shope, Robert E., eds, National Academy of Press, Washington DC. [On-line] <http://www.nap.edu/books/0309047412/html/index.html>
2. *Addressing Emerging Infectious Disease Threats: A Prevention Strategy for the United States* 1994, Center for Disease Control (CDC). [On-line] <http://www.cdc.gov/mmwr/preview/mmwrhtml/00031393.htm>
3. *Infectious Disease – A Global Health Threat* 1995, Committee on International Science, Engineering, and Technology Working Group (CISSET), [On-line] <https://jamanetwork.com/journals/jama/article-abstract/406080>
4. *America’s Vital Interest in Global Health* 1997, Board on International Health, National Academy of Press, Washington DC, [On-line] <http://books.nap.edu/catalog/5717.html>
5. *The Global Infectious Disease Threat and its Implications for the United States*. Jan. 2000, NIE 99-17D, [On-line] <https://fas.org/irp/threat/nie99-17d.htm>
6. *Biosecurity: A comprehensive Action Plan*. June 2006. Center for American Progress. <https://www.americanprogress.org/issues/security/news/2006/06/28/2051/biosecurity-action-plan/>
7. **Commission on a Global Health Risk Framework for the Future** (GHRF Commission)
Report title: “The Neglected Dimension of Global Security: A Framework to Counter Infectious Disease Crises” January 2016. https://nam.edu/initiatives/global-health-risk-framework/?utm_source=National+Academy+of+Medicine&utm_campaign=9c986f06c9-GHRF+report+release&utm_medium=email&utm_term=0_b8ba6f1aa1-9c986f06c9-129670121

Credible Books:

1. **The Coming Plague** First published in 1994 in hardcover by Farrar, Straus and Giroux, **THE COMING PLAGUE: Newly Emerging Diseases in a World Out of Balance** was a New York Times bestseller in 1994-5. Laurie Garrett researched and wrote **THE COMING PLAGUE** for ten years, starting in the mid-1980s when the very premise of the effort was highly controversial. <https://www.lauriegarrett.com/the-coming-plague>

2. WARNINGS: FINDING CASSANDRAS TO STOP CATASTROPHES By Richard A. Clarke and R.P. Eddy, 2017: <https://cco.ndu.edu/PRISM-7-2/Article/1401978/warnings-finding-cassandras-to-stop-catastrophes/> **The first 8 chapters detail the millions of lives and hundreds of billions of dollars lost to catastrophes,– natural and man-made – due to our failure to act on the advance warnings of experts. The last eight chapters estimates the billions of lives and trillions of dollars that could be saved if humanity collectively works to prevent the other dire warnings now given regarding other threats (some existential). Chapter 11 “The Journalist: Pandemic Disease”. Chapter 9 outlines the three cognitive reasons why humans ignore such warnings.**

SUMMARY: Human engineered or nature diseases can and will have debilitating economic, social and political consequences on every nation. These growing health threats are inevitable. The only debate is about their magnitude of impact and origin. Those who suggest the threat is minimal ... don't know history or fully understand the trends in our current global situation.

We have three basic choices.

1. We can wait until the infection reaches our lungs, home or community before taking action. The attacks on 9-11 provides us with a mild example of consequences of the expensive approach of ignoring warnings to a persistent global threat. (Mindset: It hasn't happened so far...don't worry about it.)
2. We can try to stop the threat at our borders. Our success in stemming the flow of illegal immigrants, illegal drugs or weapons across our borders gives one an idea of how effective this approach will be. (Mindset: Our Federal government and our national sovereignty will protect us.)
3. We can go to the source of the threat and create systems that facilitate both prevention and adequate early detection and response efforts. (Mindset: We are one human family. We hang together or we hang separately. See 17 Sustainable Development Goals).

In the closing paragraphs of The Coming Plague (1995), aptly entitled “Searching for Solutions”, Laurie Garrett writes:

The human world was a very optimistic place on September 12, 1978, when the nations' representatives signed the Declaration of Alma Ata. By the year 2000 all of humanity was supposed to be immunized against most infectious diseases, basic health care was to be available to every man, woman, and child regardless of their economic class, race, religion, or place of birth.

But as the world approaches the millennium, it seems, from the microbes' point of view, as if the entire planet, occupied by nearly 6 billion mostly impoverished *Homo sapiens*, is like the city of Rome in 5 B.C. "The world really is just one village. Our tolerance of disease in any place in the world is at our own peril," Lederberg [Nobel laureate for discovery of DNA] said. "Are we better off today than we were a century ago? In most respects, we're worse off. We have been neglectful of the microbes, and that is a recurring theme that is coming back to haunt us."

In the end, it seems that American Journalist I.F. Stone was right when he said, "Either we will learn to live together or we will die together."

While the human race battles itself... the advantage moves to the microbes' court. They are our predators and they will be victorious if we, *Homo sapiens*, do not learn to live in a rational global village that affords the microbes few opportunities. It's either that or we brace ourselves for the coming plague."

CONCLUSION: We must understand and apply 3 Key Concepts. All are essential to defeating Covid19 and preventing/preparing for future pandemics.

1. Everything in the known universe is made up of systems and structures and they are all interconnected, except in our current thinking.
2. Two of the most complex and complicated systems in the known universe are inside of us. Our immune system and nervous system. We can strengthen both by applying the fundamentals of biology and cognition.
3. Protecting nature and all others that we share this planetary environment with -- by globally codifying 'the Laws of Nature and Nature's God (the golden rule). These three things will not change. We must.

The solutions:

1. Global enforcement of the Universal Declaration of Human Rights.
2. Funding and achieving the 17 United Nations 17 Sustainable Development Goals.
3. Pray and hope that God sleeps forever.

"I tremble for my country when I reflect that God is just; that his justice cannot sleep forever."

Thomas Jefferson

Chuck Woolery in his own words, Apr 3, 2020: Contact: chuck@igc.org. Bio (pre-covid-19): A former HS biology teacher elected to Chair the United Nations Association Council of Organizations (100+ U.S. based organizations working on a variety of issues with a collective membership of 25 million Americans), also appointed to the Action Board of the American Public Health Association (120,000 U.S. Health Professionals) is currently a 'has been', but the unbreakable links between human rights, environmental protection, and national security remain his study and passion. Mr. Woolery's successes as Director of the Alliance for Child Survival, and Issues/Advocacy Director for both the Global Health Council and Albert Einstein affiliated World Federalist Association led to his colleagues electing him to his peak career positions. He then discovered if you tell people what they need to know instead of what they

want to hear, the truth will set you free. (My focus has been on Biosecurity threats: New and reemerging infectious diseases, pandemics, and bioterrorism events, as the best way to connect all issues to our own freedoms and security. I was persistent to the point of being an annoying pain. And ultimately ineffective. Post-Covid-19 some have apologized.

Blog: 435 Campaign: <http://435globaljustice.blogspot.com> (may 2017 - present)