Combating the Epidemic of Terrorism

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Abstract

The U.S. policy in dealing with Islamic State of Iraq and Syria is flawed. Destroying a terrorist group requires the elimination of a radical ideology, which is impossible. A radical ideology cannot be seen, and it spreads much like a virus. However, if a radical ideology is treated as an epidemic (in a social sense), then the threat it poses can be contained, treated, and immunized against to reduce and maintain its occurrences at politically and socially acceptable levels. A plausible method of combating the threat of radical Islam/jihadism can be developed by exploring the use of epidemiology and using the epidemiologic triangle of agent, host, and environment to identify how this violent ideology spreads. The analysis contained in this paper results in a solution consisting of inoculation, containment, and elimination. Through inoculation, the linkages that connect agent and environment to the host are severed. Containment isolates the host to an “infected” area, and elimination reduces those infected to the maximum extent possible.
Combating the Epidemic of Terrorism

The spread of infectious diseases constitutes a growing risk. The Ebola epidemic in West Africa highlights the danger of a raging virus.

—Barack Obama

The U.S. policy in dealing with Islamic State of Iraq and Syria (ISIS) is flawed. Destroying a terrorist group and its radical Islamic beliefs is akin to destroying communism during the Cold War. Just as communism remains a viable ideology today, radical Islamist terrorism will remain an attractive ideology even after ISIS is gone. Islamic terrorist groups adhere to a form of radical Islam that spreads unseen to those that are most susceptible. One cannot defeat radical Islam any more than one can easily control some viruses. Radical Islam, however, can be contained, treated, and immunized against to reduce and maintain its occurrences at an acceptable level. Yet, since the September 11, 2001 terrorist attacks, the U.S. Government has defined its policy toward radical Islam in military terms.

As a recent example, on September 10, 2014, President Barack Obama said the U.S. policy regarding ISIS is to “degrade and ultimately destroy the terrorist group known as ISIL.” On the surface, this policy seems logical. The horror and destruction ISIS has brought to the world is largely unmatched in modern times and makes destroying ISIS as the end state appealing. However, is destroying ISIS feasible? How will government officials know when ISIS is destroyed? On a broader scale, is it ISIS that governments seek to destroy or the acts of terrorism they commit?

Moreover, the military terminology is problematic. Army Field Manual 3-90 defines “destroy” as a tactical mission task that physically renders an enemy force combat-ineffective until it is reconstituted. Using this definition, destroying ISIS implies
a temporary state that lasts for an undetermined amount of time until it reconstitutes itself as a combat-effective force under the same name or another. In addition, rendering ISIS combat-ineffective is impossible to determine when one considers lone wolf attacks. As witnessed at Fort Hood, Texas, Nice, France, and other locations, one person, or a small number of people, can make ISIS combat-effective.

Destroying ISIS or similar groups is impossible because as long as people adhere to the group’s ideology, the organization will remain combat-effective. Thus, what drives people to join these groups and carry out violent acts of terrorism must be the focus. The “disease” that infects the mind of a susceptible person and pushes them to become a terrorist (and results in horrific attacks) must be addressed, and become the target of the U.S. strategy.

Epidemiological Approach to Disease

When someone thinks about a disease, they invariably come to the question, “Is it contagious?” Invariably we hear this question asked each year with respect to the flu. The question is also asked when dealing with much more serious diseases such as Ebola, malaria, tuberculosis and HIV/AIDS. Once the contagiousness question is answered, others soon follow. How contagious is it? How do you contract it? and What is being done about it? These questions are answered by epidemiologists. The World Health Organization defines epidemiology as the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems.4

The study of epidemiology is important for many reasons. The Centers for Disease Control and Prevention (CDC), an element of the U.S. Department of Health and Human Services, defines epidemiology as the scientific method of investigation
used by disease detectives to determine the cause of health problems and outbreaks within a community. Disease detectives, through data collection of symptoms, laboratory testing, medical history, and other methods, can answer the questions about contagiousness, and devise plans to treat and contain the disease. Their studies have led to the creation of the epidemiologic triangle, which helps in studying health problems and how they spread.

The epidemiologic triangle (Figure 1) consists of three elements: agent, host, and environment. The agent is the cause of the disease. The CDC explains an agent as something that is microscopic in scale—what most people call a “germ” and is the foundation of the disease. The host is the person usually unwillingly and unknowingly infected by the agent. The external factors affecting the agent and the host that increase, or decrease, the likelihood of infection are known as the environment. A vector, or the conduit that allows the disease to spread, connects each of these points. The epidemiologists’ goal is to remove or ‘break’ at least one of these vectors, disrupting the linkage between the environment, the host, or the agent, and stopping the continuation of the disease.
As one thinks about epidemics and their dispersion, one naturally tends to think solely about diseases. It is not hard to understand why this is. When examining the definition of the word “epidemic”, one source offers the following, “A widespread occurrence of an infectious disease in a community at a particular time.” However, the word epidemic is not reserved solely for use in describing an infectious disease. The term is commonly used in other contexts such as crime epidemics and drug epidemics affecting our inner cities. Malcolm Gladwell in his book *The Tipping Point* writes, “We have, in our minds, a very specific, biological notion of what contagiousness means. But if there can be epidemics of crime or epidemics of fashion, there must be all kinds of things just as contagious as viruses.” So what then is an epidemic?

The Merriam-Webster Dictionary defines an epidemic as an agent (1) affecting or tending to affect a disproportionately large number of individuals within a population, community, or region at the same time, or (2) excessively prevalent. The agent is not created out of nothingness, but something that affects disproportionately large numbers of people, or is excessively prevalent. The agent is existent, but something within the host or environment has caused the agent to thrive and spread. The point in which an
epidemic can rise or fall in one dramatic moment Malcolm Gladwell calls the "tipping point." As an example, instances of robbery happen every day within our cities, but we do not refer to this as a crime epidemic. However, if robbery crosses the tipping point, becoming an excessively prevalent practice carried out by an increasing number of the populace, there now exists a crime epidemic. Robbery has always existed, but the numbers of individuals committing the crime has become disproportionately large in relation to the population. The detectives (epidemiologists) job is to examine the crime (agent), criminal (host) and city (environment) to determine the vectors which spread the crime epidemic. Once the vectors are determined, the detective can employ measures to disrupt the vectors and stop the spread of the crime epidemic. These measures will look to bring the prevalence of the crime below the tipping point, thus ending the epidemic. It is, however, important to note that burglary still exists, the prevalence is what has changed.

In addition to fighting the vectors spreading the “disease”, the detective must also educate and inoculate the population to limit further spread of the disease. The disease will still spread to other hosts, but through education and inoculation of those persons at highest risk to contracting the “disease”, the prevalence will remain low. It is through these practices of disrupting vectors, education, and inoculation that epidemics are successfully limited in damage and scope.

With other types of epidemics such as crime, eradication is impossible. These activities involve psychological choices and the individuals who make these decisions do not exhibit any common, identifiable, physical symptoms prior to the manifestation of their decision to commit a crime. Thus, to use the epidemiological terms, it is impossible
to identify these hosts (criminals) and to inoculate or treat them prior to the disease symptoms materializing. These mental “viruses” may remain dormant for years, lurking in the body waiting for the right conditions to make their presence known.

Mental “viruses” are not necessarily medical diseases. As in the example above, crime is not a medical disease. However, it can become an epidemic and demonstrate the characteristics of a disease consisting of the aforementioned elements: agent, host, and environment. In his book, Gladwell states, “Ideas and products and messages and behaviors spread just like viruses do.”14 The spread of toxic ideas, products, messages and behaviors are what Gladwell calls social epidemics.

The best way to understand the emergence of fashion trends, the ebb and flow of crime waves, the transformation of unknown books into bestsellers, or the phenomenon of word-of-mouth is to think of them as social epidemics.15 Using the “selfie” as an example, one can see how a seemingly benign action undertaken on one day can undergo a rampant proliferation throughout society the next day. The first picture considered by many experts to be the first “selfie” was taken in 1839; however, it was not until 2013 that the “selfie” in the current environment became a viral hit.16 This social behavior and its spread, overtime throughout the world, is the basis of a social epidemic. Ideas spread throughout society and beyond at varying rates depending upon various factors and do so without conscious effort from the “hosts.” In this way, the thought acts similarly to an infectious disease.17

One of the ideas, messages, and behaviors spreading like a virus throughout the world is radical Islam. Neuroscientist Bobby Azarian observes it is essential that we recognize that radical Islam functions like a parasitic mental virus.18 This mental virus is
leading to the murder of innocent civilians by groups such as ISIS and Al Qaeda.

Former U.S. ambassador to the United Nations, John Bolton, says “their barbarism goes beyond the killing of innocents. It also includes forced marriages, selling women and children into slavery, medieval punishments and brainwashing the unwary.” Bolton goes on to say, “These are symptoms of the underlying radical Islam disease itself, and it is that disease which should be our (the United States) principal target.”

On January 22, 2016 Secretary of Defense Ashton Carter wrote, “ISIL is a cancer that threatens to spread. And like all cancers, you can’t cure the disease just by cutting out the tumor. You have to eliminate it wherever it has spread, and stop it from coming back.” However, Secretary Carter’s assessment is flawed in three ways. First, cancer is a disease contained within a host and is not contagious. This eliminates the threat of the cancer spreading. Second, contagious diseases, like the flu, are never truly eliminated. Lastly, ISIL is a terrorist organization just like Al Qaeda. The “disease” that spreads is radical Islam.

Radical Islam is a disease that is spreading throughout the world, resulting in the deaths of thousands of innocent lives. In 2014, 32,700 people were killed in terrorist attacks worldwide, nearly twice as many as 2013. Stopping the spread of this disease is possible by treating it like an epidemic. Identifying the agent, host, environment and vectors will allow for the development of a treatment plan. This plan will stop the radical Islam epidemic from infecting the world and reduce it below the tipping point, making it a manageable problem of isolated incidences.

The Agent

The agent is the virus that is spread among hosts. Many times, people do not even know they are infected with a virus. Concerning the Zika virus, the CDC says,
“Many people infected with the Zika virus won’t have symptoms…”23 In the case of Islam, over 1.6 billion people practiced the Muslim religion in 2010 and most of them never become terrorists or harm others.24 The preponderance of Muslims live peaceful lives, even though they could be infected with the virus of the radical Islam epidemic. Some contract the virus and carry out terrorist activities, while others may live out their lives never having the disease progress beyond the dormant stage. So, what makes the radical Islam virus and the terror it produces manifest itself in an individual?

Among radical Islamists, the notion that there is a permanent struggle against non-Muslims, until non-Muslims are converted to Islam, subjected to Islamic authority, or killed is based on an interpretation of the Qur’an.25 Whether these symptoms manifest themselves in acts of, or in support of, terror is dependent on the host. As with any disease there are some persons that are more susceptible to contracting the virus than others. For example, the elderly and children under five, along with those who have various medical problems, are at higher risk of contracting the flu.26 The same can be said for those who are infected with the radical Islamic virus, and who promote or carry out terrorist acts. These hosts are responsible for heinous acts of violence and make up terrorist cells or organizations such as ISIS, Al Qaeda and Hamas.

The Host

There are over a billion people in the world that practice the religion of Islam. Not all of them will become infected by the radical Islam disease. Just like Zika and the flu, the question is, who is most vulnerable? Once determined, a plan can be devised to either prevent infection by inoculation, or treat the symptoms of an infected host. It is important to point out that in most cases, those infected with a virus unwillingly succumb to its effects. In the case of radical Islam, those infected that choose to carry out terrorist
activities do so of their own accord. In the case of radical Islam, the question is: what are the characteristics of an organization or individual that would willingly allow such a disease to take over the body and mind?

The Organization

The Secretary of State has designated sixty-one groups as Foreign Terrorist Organizations. These organizations have not only carried out terrorist attacks, but have also engaged in planning and preparing future acts of terrorism, or retain the capability or intent to carry out such attacks. They have been determined by the Secretary of State to pose a threat to the national security of the United States or the security of U.S. nationals. While these groups are not all associated with radical Islam, they have all become hosts to the disease of terrorism. Thirty-years ago, social scientists at RAND Corporation studied twenty-nine terrorist groups and found they were all influenced by three factors: cultural factors, ideology, and identification of Americans as allies of the leaders that were oppressing them.

The RAND study also found that all terrorist groups in the study operated in areas of instability or places of endemic violence. Even though the study was conducted in 1985, the same holds true today. Islamic terrorist groups are found in Somalia, Kenya, Iraq, Syria, Afghanistan and Nigeria to name a few. These nations, whether through conflict or lack of governmental control, are in a state of instability or endemic violence; predisposing them as the perfect host for terrorist organizations.

Terrorist groups also have a rigid authoritarian ideology. The ideology describes the political, social, or religious orientation of the group. Political ideologies are concerned with the organization and structure of the forms of government. These range from conservative right wing to Marxist-Leninist left wing groups, and anarchist groups
that are anti-authority or anti-government. Social terrorist groups are often referred to as single-issue or special interest terrorism. These groups concentrate on the following issues: environmental, animal rights, minority rights.  

Radical Islamic terrorism is found in terrorist groups that have a religiously orientated ideology.

The Institute for Economics and Peace, an independent think tank, determined that in 2013, Iraq, Afghanistan, Nigeria, Pakistan and Syria accounted for 82% of all deaths from terrorism. ISIS, Boko Haram, the Taliban, and Al-Qaida were responsible for 63% of those deaths, with the global total being approximately 17,000 deaths. These four terrorist organizations, among others, are hosts to the radical Islamist virus. Moreover, A Military Guide to Terrorism in the 21st Century indicates: Islamic terrorists and extremist organizations have been the most active and greatest recent threat to the United States. Religious extremism couches terrorism with a distorted interpretation of theological dogma and can mask secular objectives as holy writ, infallible guidance, and non-negotiable responsibility.

Due to the isolated nature of terrorist organizations, and the common “disease” that infects its members, attempting to cure the radical Islam at the organizational level would be impossible. A willingness to be cured would be required by most of the adherents within the organization. However, as stated earlier, the radical Islamic disease is different in that the hosts willingly accept the virus. Islamic terrorist organizations will resist the antidote, thus making an organizational-level cure impractical. This leaves the individual host, before the individual joins the terrorist organization, to be the most susceptible to a cure.
The Individual

In the 1970s, terrorists were described as suffering from some sort of mental illness; they were depicted as individuals who engage in antisocial behaviors without an understanding of right and wrong and incapable of remorse for their actions. This depiction was comforting to many people simply because it reassured them that terrorist acts were carried out by a mentally unstable few, rather than facing a potentially widespread social phenomenon. This, however, is not reality. The consensus among experts is that instances of mental illness among terrorists are rare.

This does not mean mental illness does not exist in terrorists. In a database of 119 lone actors, of the true lone actors—those that truly acted alone, without command and control links to terrorist organizations—roughly 36% had evidence of a mental illness, as compared to 8% among group actors. Although the prevalence of mental illness in lone actors is striking, these represent the minority. Over 60% of lone actors (90% of group actors) do not suffer from mental illness. These are the individuals infected with the radical Islam virus and the ones that must be targeted for a cure.

No one profile exists for an individual that will become a terrorist. The idea of a social misfit or an uneducated and unemployed person is a misconception. According to data on 172 known al-Qaida terrorists, none of these assumptions is true. Instead of poor, ignorant, single young men with no knowledge of the West, most are middle- to upper-class, highly educated, married, middle-aged men. Most had traveled to or lived in the West. In addition, John Horgan, former director of the Pennsylvania State University’s International Center for the Study of Terrorism, determined that people more susceptible to terrorist radicalization tend to feel alienated or disenfranchised, feel powerless to affect change through political involvement, identify with perceived victims
of the social injustice they are fighting, feel the need to take action, believe violence against the state is not immoral, have friends or family sympathetic to the cause, and believe that joining the movement offers social and psychological rewards. All of these have a significant impact on the individual, and facilitate the radicalization process and encourage the individual to express the symptoms of radical Islam.

The radicalization process involves three basic steps: needs, narratives, and networks. These three steps depict the union of psychological forces that can lead individuals to allow the symptoms of radical Islam to take over their mind, and proceed willingly down the path of radicalization.

Individuals are motivated to have significance—the fundamental desire to be someone and matter in the eyes of others. This desire to be significant motivates individuals, and is present in everyone. Extremism materializes when the motivation to be significant dominates all others. A triggering event is often the factor that drives the motivation to be significant and move to the forefront of an individual’s mind.

More specifically, triggering events are personal experiences that result in either significance loss or significance gain. When a person faces humiliating or shameful circumstances, a significance loss is triggered. These feelings can stem from attacks on an individual person, or a group to which the person belongs. The path toward radicalization often begins with the experience of emotional vulnerability, disenfranchisement, personal victimization, humiliation, relative deprivation, or strain. The feelings that result from a significance loss were found to increase justification for violence, endorsement of an extreme political stance, aggression, and support for suicide bombings, respectively.
Some individuals are attracted to the glamour of significance gain. This appeared to be the primary motivation for Osama bin Laden and Muhammed Atta who have been identified as “megalomaniac hyper terrorists” striving for larger-than-life status within the extremist community.\textsuperscript{49} The trigger of significance gain is the most prominent motivation for those seeking life purpose, monetary reward, or martyrdom. The presence of significance gain also has clear implications for the outcome of the attack; individuals motivated by significance gain were responsible for attacks with greater casualties.\textsuperscript{50}

In sum, a triggering event motivates an individual to carry out a terrorist act. Although the motivation for significance is present, a narrative or cultural ideology that depicts violence as a valid and sustainable mechanism for earning significance must also exist.

There are numerous avenues for an individual to attain significance in a lawful manner. For those seeking significance due to loss, there are support groups, counselors or grievance procedures. Significance gain can be achieved by excelling in work, politics, or sports to name a few. The motivation to achieve significance is not the problem. The problem is the violence-justifying narrative that presents violence as not only morally acceptable but also as a superior avenue for significance gain, more effective and direct than all others.\textsuperscript{51} This narrative provides the justification for carrying out terrorist acts in a personal search for significance.

Violence-justifying groups portray violence as a necessity. They identify a grievance that has been committed against the group, and identify the perpetrator. The group then promotes violence against the perpetrator as a justifiable means to ensure the group’s survival. Essentially, the ideology provides its adherents with a justification
that a specific instance of violence is not only permissible from a moral standpoint, but also necessary and laudable.\textsuperscript{52} Thus, a suicide bomber is no longer committing murder but is heroically sacrificing himself for the survival of the group.

The social network to which one belongs—one’s social ties and close relationships to individuals who embrace an extreme ideology—constitute the conduit whereby the radicalization process takes place.\textsuperscript{53} A loose collective of friends and family espousing an extreme ideology can be crucial in the radicalization process of jihadists. Likewise, over 90\% of Sunni terrorists in the United States were found to have radicalized through social networks.\textsuperscript{54} The presence of like-minded individuals within these social networks helps normalize deviant behavior. These networks provide would be extremists an ally to ease their walk down the pathway to terrorism.\textsuperscript{55}

The presence of an extremist social network also serves to validate the extreme ideology. Maintaining any ideology requires consensual validation; humans evaluate the correctness and appropriateness of our actions by looking to the actions, beliefs, and responses of others.\textsuperscript{56} This validation process and reaffirmation of radical beliefs also leads to family-like bonds between members of the social network. In this case, one’s personal identity becomes fused with one’s group identity, and there is not differentiation between personal and group goals.\textsuperscript{57} These social network conduits are the vectors that connect the points of the epidemiological triangle, and complete the three-step radicalization process of the individual.

The Vector

A vector is the conduit through which a virus is spread. West Nile fever is caused by the West Nile virus, which is spread by the mosquito. In this case the mosquito acts as the vector, carrying the virus from one host to the next. Just as a virus spreads
through a vector, so can an idea. Social media is a vector that spreads information and ideas to millions of people. In 2014, Vietnam’s state-controlled media reported a measles outbreak—the worst in Vietnamese history. The authorities tried to manage the situation, but the spread of information via social media led to panic according to an unnamed nurse:

Parents of victims rushed to Facebook to share their grief and outrage. So did their friends and neighbors, who wanted to know how the outbreak was spreading, and whether it was even safe to bring their children to hospitals. The authorities distributed information about the measles deaths via leaflets, loudspeaker bulletins and updates on the health ministry’s website. ’But there was so much information online that some people became panicked.’

The power of social media as a conduit for information (good or bad) is so strong that state-controlled media cannot stop information (true or false) from spreading and causing a panic.

Social media provides three ways to facilitate the radicalization of individuals. First, they provide forums for like-minded individuals that normalize the symptoms of radical Islam. Second, the presence of a social network of like-minded individuals interacting through social media gives the ideology validity. People tend to evaluate the correctness and appropriateness of their own actions by looking to the actions, beliefs, and responses of others. Additionally, a social media network provides validation for espoused beliefs. In February 2015, former National Security Council staff member Hillary Mann Leverett said that each day, 90,000 pro-ISIS messages are posted on social media. Lastly, the individuals that make up the social media network tend to form a family bond. These individuals identify closely with one another and thus fuse with the group’s identity, leaving no differentiation between the personal and group goals.
ISIS has made great use of the Internet and online social media sites to spread its message and encourage others to support the organization. Social media is a valuable tool and is perfectly suited for the audience terrorist organizations are trying to reach. According to Pew Research Center's Social Networking fact sheet, 89% of adults 18-29 years of age use social media platforms such Facebook, Twitter, and even YouTube, allowing ISIS propaganda to reach across the globe in real time. The message that is spread preys on an individual’s desire for significance, and provides the conduit through which the radicalization process occurs.

Speaking before the Senate’s Select Committee on Intelligence, CIA Director John Brennan noted,

On the propaganda front, the Coalition is working to counter ISIL’s expansive propaganda machine. ISIL paints a carefully crafted image to the outside world, lauding its own military efforts, portraying its so-called ‘caliphate’ as a thriving state, and alleging that the group is expanding globally even as it faces setbacks locally.

ISIL releases a multitude of media products on a variety of platforms—including social media, mobile applications, radio, and hardcopy mediums. To disseminate its official online propaganda, the group primarily uses Twitter, Telegram, and Tumblr, and it relies on a global network of sympathizers to further spread its messages.

The social media campaign ISIS uses to spread its propaganda is massive. The videos produced resemble Hollywood action films and music videos, portraying heroic actions in battle and a larger-than-life persona. These images are targeted at those who seek significance, and by all accounts it is working.

One scholar has estimated that more than 3,000 nationals from Western nations have migrated to ISIS-controlled territory in support of the extremists. These are estimates of individuals who have travelled specifically to join ISIS. There is no way of determining how many have been radicalized but have chosen to remain hidden within
their own state. Social media is the illusive vector through which the radical Islam virus is spread. It allows the flow of a pernicious narrative between individuals who seek greater significance. This process triggers the dormant radical Islam virus and motivates an individual who willingly goes down the path of radicalization.

The Environment

The environment consists of a variety of external factors that affect the agent and host, increasing or decreasing the likelihood of infection. This refers to those key factors that promote or minimize exposure to radical Islam. The factors that minimize exposure are positive and need to be promoted as a solution to the problem. These factors will be expounded on later as potential solutions to the problem. The factors that increase an individual’s exposure to radical Islam span the socioeconomic spectrum but ultimately are determined by personal contact through social interaction. It is unrealistic to imagine a plausible scenario where individual social interaction is controlled. However, it is possible to monitor or manage social interaction where exposure to radical Islam is prominent—mosques and prisons.

Mosques

In 2011, the journal Perspectives on Terrorism highlighted a report titled Sharia Adherence Mosque Survey: Correlations between Sharia Adherence and Violent Dogma in U.S. Mosques. This report published the results of a random survey of 100 representative mosques in the United States measuring the correlation between sharia adherence and dogma calling for violence against non-believers.65 The results of the survey showed that more than 80% of the mosques surveyed were complicit in promoting some sort of violence.66 This number is alarming, and even more so when 51% of the mosques surveyed had texts on site rated as severely advocating violence.67
These mosques, and the imams that preach in them, promote exposure to the radical Islam and increase the likelihood of an individual carrying out a terrorist attack.

It is hard to imagine a place of religious worship promoting violence. However, many people are unclear about the true nature of a mosque. The mosque is the center of all life in the Islamic community. Islam defines itself as a complete way of life and the mosque is the center of all social, cultural, military, political, legal and religious matters. With this understanding, the mosque becomes greater than a place of worship. It is the epicenter guiding every aspect of life for individuals practicing Islam. This makes mosques, and the imams that preach there, the perfect incubators for the disease that radicalizes Islam.

Mosques by themselves are merely religious buildings, but when combined with a radical Imam they become the locus of radicalization. These radical mosques pose a direct threat to the security of the nation they reside within by promoting the spread of radical Islam. Following the terrorist attacks in Paris that killed 130 people, French Interior Minister Bernard Cazeneuve called for the “dissolution” of radical mosques, and Belgium’s Prime Minister, Charles Michel, threatened similar action in his country where the attacks were staged. These declarations were made because these two political leaders understood the threat radical mosques pose as they are not merely places of worship.

Prisons

As early as September 2006, prisons were identified as environments in which radicalization occurs. In testimony before The Senate Committee on Homeland Security and Governmental Affairs, Donald Van Duyn, the Deputy Assistant Director, Counterterrorism Division of the Federal Bureau of Investigation, testified, “FBI and the
Bureau of Prisons analysis shows that radicalization and recruitment in U.S. prisons is still an ongoing concern. Prison radicalization primarily occurs through anti-U.S. sermons provided by contract, volunteer, or staff imams, radicalized inmates who gain religious influence, and extremist media.\textsuperscript{70} Two groups within the prison system were identified as areas of concern. The first group consists of inmates, and the second consists of individuals who enter the correctional facilities with the intent to radicalize individuals.\textsuperscript{71}

The primary concern was that influential inmates could urge other prisoners to attend certain mosques or Islamic centers in the United States or overseas upon their release from prison, presenting opportunities for the proselytizing of radical Islam.\textsuperscript{72} These radicalized inmates direct other inmates to radical mosques, which in turn promotes the spread of the radical Islam. This all occurs once released from prison; however, there is the concern of those that visit correctional facilities with the intent to promote radical Islam.

The second group of concern consists of contract, volunteer, and staff personnel, many of which are imams, who enter the correctional facilities with the intent to radicalize and recruit.\textsuperscript{73} These imams speak authoritatively to inmates on religious issues and seek individuals willing to accept their message. Not only do they spread their message by word of mouth, but they also provide literature and videos to circulate within the prison population.\textsuperscript{74}

On June 15, 2011, the House Committee on Homeland Security held a hearing on the “Threat of Muslim-American Radicalization in U.S. Prisons.” Chairman Peter T. King (R-N.Y.) said in his opening statement,
This issue of Islamic radicalization in U.S. prisons is not new. In fact, this is the third Congressional hearing on this problem in recent years. It is a hearing which is necessary because the danger remains real and present, especially because of Al Qaeda’s announced intention to intensify attacks within the United States.

A number of cases since 9/11 have involved terrorists who converted to Islam or were radicalized to Islamism in American prisons, then subsequently attempted to launch terror strikes here in the U.S. upon their release from custody.

These radicalized terrorists have also carried out attacks overseas. Just last year, Senator John Kerry, Chairman of the Senate Foreign Relations Committee, released a report that said, quote, ‘Three dozen U.S. citizens who converted to Islam while in prison have traveled to Yemen, possibly for Al Qaeda training.’

Chairman King was clear that the U.S. prison system provides an environment that promotes the spread of the radical Islam, and further stated that the Obama administration recognizes prison radicalization is a serious threat and that prisons are a fertile ground for recruitment.

**The Epidemiological Solution**

Epidemiologists use a systematic approach to determine the host, agent and environment allowing them to establish preventative measures and implement controls. This approach allows for an honest, accurate description of what the disease is, where it is occurring, why it is occurring, and how it is spreading. The goal of the epidemiologist is to break a link between the host, agent, or environment on one side of the epidemiological triangle, thereby stopping the spread of the disease. Breaking a link in the radical Islam epidemiological triangle requires a three-pronged policy— inoculation, containment, elimination (ICE).
Inoculation

Inoculation measures are aimed at protecting those high-risk individuals that are most susceptible to the disease and breaking the link between the agent and host, and the environment and host. The most basic form of inoculation is like a flu shot. Expose an individual to a small, non-harmful level of the virus and allow the body to build up antibodies against the disease. This approach with regard to radicalization could be accomplished through a public education campaign designed to expose the harmful and destructive nature of the disease. This educational campaign would target the U.S. population and serve to inoculate U.S. citizens against the disease.

Foreign education programs, especially in the Middle East, are more difficult. The political and religious dedication required over an extended period to inoculate a population is not evident now. Thus, the short-term goal should be to establish an educational program immediately in the United States. The long-term goal is to establish foreign education programs, starting in areas believed to be free from the disease. This will help build up areas of disease resistance and prevent the disease from spreading.

Breaking the link between agent and host is more difficult. It is impossible to stop the spread of a disease through human interaction, especially if an individual is seeking the interaction. However, it is possible to stop the spread of the agent through social media. Google, Twitter, and Facebook have recently been added to a civil lawsuit alleging that the social media companies have played crucial roles in the growth of terrorist organizations in recent years. The use of these companies and their services by terrorist organizations to spread their ideology to hosts throughout the globe is well known.
Breaking the link between the environment and host will take education and law enforcement assistance. Education is required to inform the public of the role of imams within the Islamic religion. The population must be aware that mosques are not only religious centers, but deal in all aspects of life. The radical imams that spread radical Islam do so using religion, but they also have political, cultural and military applications. Law enforcement must identify these radical leaders and investigate situations where there is a clear intent and likelihood to incite immediate violence.

In testimony before the Senate Judiciary Committee, former federal prosecutor, Andrew C. McCarthy, testified the FBI is bound by investigative guidelines put forth by the Justice Department. They (the guidelines) impose a caveat on every investigation: These guidelines do not authorize investigating or collecting or maintaining information on United States persons solely for the purpose of monitoring activities protected by the First Amendment or the lawful exercise of other rights secured by the Constitution or laws of the United States.\textsuperscript{79} It instructs that agents may not investigate for the sole purpose of monitoring activities protected by federal law. Consequently, if agents have other legitimate purposes for investigating--such as preventing terrorist attacks or probing terrorism conspiracies--the Justice Department guidance is no bar to conducting an investigation in which a mosque or a protest rally may foreseeably come under scrutiny.\textsuperscript{80}

McCarthy continues his testimony stating,

Political dissent and the exercise of religion are protected by the First Amendment. But this is a protection against being prosecuted merely for one’s words or religious observance. It is not a shield against investigation for criminal activities that are motivated by religious or political belief.

Not only may one be investigated and prosecuted for criminal offenses that are motivated by one’s beliefs or speech. It has long been the law that
evidence of one’s beliefs and speech, which is often highly relevant to proving criminal intent, may be admitted in a prosecution for such offenses.\textsuperscript{81} These beliefs and statements are evidence to a state of mind and are admissible if the individual is charged with terrorism conspiracy. These guidelines should be sufficient to investigate and arrest radical imams for inciting violence and terrorist activities. However, the Obama administrations Countering Violent Extremism (CVE) program inhibited these actions.

The Obama administration’s CVE program stated that terrorism has nothing to do with Islam or even with Islamist ideology that reviles the United States.\textsuperscript{82} Obama’s CVE strategy expressly instructed federal investigators to consider only violent or criminal conduct. They were told to ignore radical ideology, particularly if it has the patina of “religious expression.” They were directed to turn a “deaf ear” to anti-Americanism and the desire to impose sharia, which is the principal objective of all violent jihadists.\textsuperscript{83} These directives prevented law enforcement agents from tying terrorist activities to the words and actions of radical imams, and incarcerating those that were found guilty of inciting violence by a court of law.

\textbf{Containment}

Containing radical Islam aims to isolate the host to an infected area, and prevent the spread of the disease by limiting contact outside the infected area. Part of this entails steps that must be taken to limit the use of social media. Combating the use of social media to spread the disease will significantly help in containing the disease. In addition, all immigrants from known regions of infection must be screened more thoroughly to determine if the individual is infected. This screening must be thorough and conducted by experts who know how to diagnose and identify the “disease.”
The Obama administration’s decision to go from an 18-to-24-month vetting process, to a 3-month vetting process for Syrian refugees was said to have created severe vulnerabilities. FBI Director James Comey warned about the government’s inability to thoroughly screen Syrian refugee applicants for terrorism risk and the Department of Homeland Security investigative arm warned about ISIS’s capability to print fake Syrian passports for terrorism infiltration.\textsuperscript{84} The vetting process clearly was not thorough enough when it resettled two terrorists as refugees in Kentucky who were later arrested in 2011 after law enforcement learned of the ties and support of these individuals to Al Qaeda. These individuals slipped through the 18-to24-month screening process, a 3-month screening process can be expected to do worse. Therefore, the process must be sufficiently long enough to allow agencies time to perform due diligence, and for information to be entered into databases for proper screening by all foreign and domestic law enforcement agencies.

Additionally, data sharing between agencies is essential. However, not all countries and agencies are working together. Following the terrorist attacks in Brussels, terrorism expert Peter Neuman said, “As of today, there is still no central database containing information on terror suspects and foreign fighters to which all European states and security authorities have access.”\textsuperscript{85} In testifying before the Senate Committee on Armed Services, the Director of the National Security Agency, Admiral Mike Rogers, confirmed that Twitter is refusing to provide his agency information that could prevent attacks on the United States.\textsuperscript{86} The sharing of data is crucial in containing radical Islam and must improve. Sharing data across all levels of government improves law enforcement’s ability to detect, prevent, and respond to acts of terrorism.
The sharing of law enforcement information is not, however, a single integrated process. Rather, it cuts across business processes in multiple communities and at all levels of government. Since September 11, 2001, FBI-sponsored Joint Terrorism Task Forces and fusion centers have been established as a means of sharing information among agencies and across all levels of government. Criminal history records, law enforcement incident reports, records of judicial actions and decisions, and watch lists of known and suspected terrorists are all sources of vital data that provide accurate, timely, and complete information to law enforcement officers across the country. Thus, without a combined data sharing effort, radical Islam will continue to spread, containment is less possible, and government agencies cannot properly screen immigrants or identify social media sites that spread the disease.

Containment is not only about digital and social access. Organizations like ISIS must also be geographically contained. This requires the aforementioned screening of individuals traveling to and from the "infected" region, as well as the use of military forces to stop their advance on the ground. These forces must be composed of personnel from the local area. Further, these local forces must be trained and equipped, and supported by partner land and air forces to contain the problem to an area. These forces would also be used to carry out the last part of the policy—elimination.

Elimination

Once a group such as ISIS is contained, those who are infected must be eliminated, to the maximum extent possible, by incarceration or lethal means. Because a large part of the infected population operates in secrecy and hiding, it is impossible to eliminate every individual of an organization that is infected by radical Islam. However, the numbers of individuals infected can be reduced to a level that renders the
organization ineffective. As the numbers of individuals participating within an organization is reduced, so too is the social network associated with that organization. This reduction in the social network not only weakens the organization by attrition of its members, but it also disrupts the radicalization process mentioned earlier.

Local coalition forces, backed by military force are essential to the elimination phase. It is imperative that local forces are involved because they must live with the aftermath, and they possess the cultural understanding to create new social networks. These new social networks will aid in establishing inoculation programs and identifying possible outbreaks of the disease in the future. In addition, these social networks will be able to collect and distribute data to aid others throughout the world.

Around the globe, law enforcement agencies must work together and share data to investigate and apprehend small cells of individuals that are infected with the disease. The sharing of data is imperative to track infected individuals as they travel the globe and attempt to spread their disease. When identified and properly investigated, these individuals must be quarantined (incarcerated) or eliminated by lethal means to prevent the disease from spreading. There is a risk in incarceration because, as mentioned previously, prisons are identified as an environment that promotes the disease. However, this risk is mitigated by properly vetting those who visit the prison and limiting inmate interactions within the prison.

Using the ICE methodology, the threat of the radical Islam disease can be reduced to an acceptable level. No disease can be eradicated, but it can be controlled. Just as crime still exists in our cities, effective inoculation, containment, and elimination
programs prevent it from becoming an epidemic. The same can be true of radical Islam, but it will take a global effort of data sharing, military power, and law enforcement.

Conclusion

Radical Islam is a disease that is spreading throughout the world like an epidemic. The infected individuals cause death and destruction everywhere they go. Those that are infected willingly accept this disease, and treatment is difficult, if not impossible, even once the symptoms are evident. The current policy of degrading and destroying the groups infected with this disease is flawed because of the infectious nature of the ideological disease. To destroy a disease of this nature, every host would need to be eliminated, and the vectors that spread it removed. However, the agent would still be present and the risk of another outbreak would still exist.

Using an epidemiological approach to combat this disease provides the framework for a policy that can be devised to reduce the threat of the disease to an acceptable level. Inoculating the population provides a way to help limit the spread of the disease. Containment limits the ability of the disease to spread and provides a defined area within which to combat the disease. Elimination removes those groups and individuals that are infected who carry out the devastating symptoms of the disease and facilitate its spread throughout the world. A policy for combating terrorism based on epidemiology is the best approach to combating the radical Islam disease and limiting its adverse effects on the world.

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