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The War on Drugs represented a significant commitment of time, resources and efforts by the United States government. This effort to minimize the social, economic and medical effects of the increasing use of illicit narcotics consumed significant resources, and several decades after its inception, has had mixed results. At a time of continuing debate over the effectiveness of traditional counter-narcotics efforts, a new crisis has emerged. The increasing amount of deaths attributed to fentanyl is a challenge to the existing counter-narcotics framework. This study will investigate why fentanyl poses a unique challenge, how it is being addressed currently, and where shortfalls exist in addressing the fentanyl crisis.

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The Fentanyl Crisis: Are New Approaches Needed?

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Executive Summary

Title: The Fentanyl Crisis: Are New Approaches Needed?

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Thesis: The fentanyl crisis represents a unique threat to American society, and must be approached differently than previous efforts in the War on Drugs.

Discussion: The War on Drugs represented a significant commitment of time, resources and efforts by the United States government. This effort to minimize the social, economic and medical effects of the increasing use of illicit narcotics consumed significant resources, and several decades after its inception, has had mixed results. At a time of continuing debate over the effectiveness of traditional counter-narcotics efforts, a new crisis has emerged that threatens the health and wellbeing of the American public. The increasing amount of deaths attributed to fentanyl is a challenge to the existing counter-narcotics framework. This study will investigate why fentanyl poses a unique challenge, how it is being addressed currently, and where shortfalls exist in addressing the fentanyl crisis. It will also attempt to identify how to modify efforts to address emerging challenges.

Conclusion: Fentanyl poses a unique counter-narcotics challenge due to its high lethality, dual-purpose status as both an illicit and prescribed drug, and the lack of proper controls to prevent the importation of illicitly produced fentanyl. The United States government must encourage innovative approaches to the problem of the fentanyl epidemic, and utilize this as an opportunity to undo some of the failures of the War on Drugs.

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Preface

Having been raised in a family of law enforcement professionals, and with personal experience in counter-narcotics law enforcement as well, I feel that I have a strong working knowledge of the challenges of dealing with the constant flow of illegal narcotics. At the same time, however, I am aware that opportunities minimize the effects of narcotics abuse are often missed when the problem is viewed solely through a law enforcement lens. With this project, I wanted to explore some of the ways to reduce the negative impacts of illicit narcotics by addressing issues on the “demand” side of the supply chain. By diving deeper into the issue, I discovered that one of the nation’s most pressing narcotics problems, the Opioid Epidemic, was something I was unfamiliar with. I took this opportunity to learn more about this disturbing epidemic, and have learned a little more about alternative ways to reduce harm to narcotics users.

I would like to thank Dr. Douglas Streusand for guiding the way through this process and providing his thorough and honest feedback. I’d also like to thank Mr. William Soderberg, MCU FBI Chair, for providing additional feedback from a law enforcement perspective. Finally, I need to express all of the thanks in the world to my wife, Amy, and my children for their support throughout this past year.

Introduction

Since the 1990s, the United States has been struggling with the challenges of an emerging narcotics threat from opioids, and most specifically, fentanyl. The responsible authorities, including all levels of government, the medical community, and non-governmental institutions, have utilized various methods to attempt to minimize the impacts of these narcotics. Despite the use of techniques, procedures and best practices developed during the War on Drugs, attempts to stop the crisis of fentanyl addiction and overdose have not been successful. Legacy institutions developed to combat threats such as cocaine, heroin and amphetamines do not adequately address the unique threats of fentanyl.

This paper will uncover the unique aspects of fentanyl that have made it difficult to mitigate its effects and minimize its abuse. Fentanyl poses exceptional challenges due to its extreme concentration, prevalence in contemporary medicine, and skewed enforcement mechanisms. This study will address the physiological, medical, and policy challenges posed by fentanyl, and identify how these innovative approaches. The fentanyl crisis represents a unique threat to American society, and should be approached differently than previous efforts in the War on Drugs.

Framing the Problem

President Richard Nixon's declaration of a War on Drugs represented a significant investment of resources to combat perceived threats to the health and safety of communities. In his "Special Message to Congress on Drug Abuse Prevention and Control" on June 17, 1971, President Nixon declared that the problems of illicit narcotics had "assumed the dimensions of a national emergency".¹ While this message presented several initiatives to combat illicit narcotics,

¹ US President. *Special Message to Congress on Drug Abuse Prevention and Control*. (Washington, DC: Executive Office of the President, June 1971), 1.

including the rehabilitation of addicts, it also advocated for an attack on the “supply” side of the problem through interdiction of narcotics.² It is this part of the special message which eventually received most of the attention and funding. Originally developed to respond to the dramatic increase in crime caused by the trafficking of illegal narcotics, the War on Drugs slowly morphed into a leviathan. The United States has dedicated untold lives, resources, and time to all aspects of combatting illegal narcotics, from disrupting at the point of origin, through interdiction along trafficking routes, to targeting distribution in communities. An estimate by the Associated Press in 2010, based upon Freedom of Information Act requests, stated that approximately \$1 Trillion had been spent during the first 40 years of the War Drugs.³

Despite this incredible application of resources, the negative effects of illicit narcotics use remain. According to the 2018 World Drug Report, the United States experienced its highest level of lethal drug overdoses ever in 2016 when 63,632 people died.⁴ In some circles, an alternative view has emerged for how to deal with the deleterious effects of narcotics use. One method that has gained traction is to shift resources to addiction and medical treatment while simultaneously legalizing narcotics and deemphasizing law enforcement solutions. In 2001, for example, Portugal decriminalized all drugs while attempting to shift focus on treating and preventing addiction.⁵ By 2009, indicators had shown that Portuguese drug use had either stabilized or decreased, even as demand throughout the rest of Europe increased.⁶ As several

² Ibid, 2.

³ Associated Press, “AP Impact: After 40 years, \$1 trillion, US War on Drugs Has Failed To Meet Any of Its Goals,” *Foxnews.com*, May 13, 2010, <https://www.foxnews.com/world/ap-impact-after-40-years-1-trillion-us-war-on-drugs-has-failed-to-meet-any-of-its-goals>.

⁴ United Nations, *World Drug Report 2018; Conclusions and Policy Implications* (New York, NY: United Nations Publications, 2018), 11.

⁵ Mirjam van het Loo, Inheke van Beusekom & James P. Jahan, “Decriminalization of Drug Use in Portugal: The Development of a Policy.” *The Annals of the American Academy of Political and Social Science*, vol 582 (July, 2002): 50.

⁶ Glenn Greenwald. *Drug Decriminalization in Portugal: Lessons for Creating Fair and Successful Drug Policies*. (Washington, DC: CATO Institute, 2009), 28.

states and countries around the world experiment with the legalization approach, this approach appears to be an area of promise.

An extensive, interagency, multi-jurisdictional and multi-national apparatus has been developed to deal with the problems of illicit narcotics. As communities struggle to deal with both the negative effects of narcotics and the often detrimental effects of enforcement techniques, new challenges have appeared. The emergence of an opioid epidemic, and the prevalence of its most dangerous form as the synthetic opioid fentanyl, challenges almost every aspect of the structures developed to deal with illegal narcotics. Fentanyl is a synthetic opioid with legitimate medical uses, such as pain relief. Of particular concern, fentanyl is an extremely concentrated substance, and a lethal dose can be lethal at significant smaller doses than other narcotics, to the point that even casual contact can cause an overdose. The introduction of fentanyl into American mainstream drug culture has produced shockwaves throughout the nation. Fentanyl addiction often begins with the legitimate medical use of opioids, and has emerged in suburban and rural areas that had rarely experienced major narcotics problems. Its compact form makes it easy to conceal and smuggle. Additionally, as with many other narcotics, most fentanyl is produced outside the United States. Its largest producer, China, has only recently begun taking action to ensure the proper accountability for its massive production of the synthetic opioid. Each of these factors challenge the existing counter-narcotics system. Fentanyl addiction and its consequences can only be managed effectively through the dedicated application of resources, increase in education, and application of modified enforcement mechanisms.

History of Opioids and Their Effects

Opioids are a class of narcotics either derived from opium, or synthetically created to reproduce the effects of opium. Upon use, these substances travel through the body and attach themselves to receptors in the central nervous system (CNS), known as μ mu opioid receptors, or MORs.⁷ Opiates act as MOR agonists, or activators.⁸ The medicinal benefit of this physiological reaction is known as an analgesic effect, the relief of pain.⁹ The side effects include respiratory depression, drowsiness, and nausea as well as the feeling of euphoria known as a high.¹⁰ When used for long periods, opioids can cause physical dependence or addiction. *Opioid Therapy in the 21st Century* states, “physical dependence is the end result of physiological changes due to continuous or frequent use, which leads to compensatory adaptations in multiple CNS regions”.¹¹ Factors such as undertreatment of pain can also present as addiction, when individuals who have not been adequately treated need more opiates than they have been prescribed.¹²

Opium use for both medicinal and recreational aspects extends back several thousand years to such civilizations as the Ancient Greeks, Assyrians, and Babylonians.¹³ Numerous societies were aware of both the positive and negative effects of opium by 1400, and later opioid use and addiction surged toward the end of the 19th century.¹⁴ Over the past several centuries, the traditional consumption method of smoking opium has given way to applications such as the injection of morphine and the oral intake of pills in the form of drugs like oxycodone and

⁷ Howard S. Smith, ed. *Opioid Therapy in the 21st Century, 2nd Edition* (Cambridge: Oxford University Press, 2013), 2.

⁸ *Ibid*, 2

⁹ *The Hutchinson Science Desk Reference* (Abingdon, Oxon: Helicon Publishing, 2006), 138.

¹⁰ Howard S. Smith, ed. *Opioid Therapy in the 21st Century, 2nd Edition* (Cambridge: Oxford University Press, 2013), 36

¹¹ *Ibid*, 37

¹² *Ibid*, 38

¹³ Henry H. Brownstein, ed. *The Handbook of Drugs and Society* (Malden, MA: John Wiley & Sons, 2016), 100.

¹⁴ *Ibid*, 101.

codeine. Each advance increased the utility of opioids to perform as analgesics.¹⁵ Scientists also attempted to synthesize derivatives that did not have the undesirable side effects without reducing pain relief. Additionally, application methods of the narcotics advanced. Injectable opiates, such as morphine and heroin, work faster and more effectively than traditional opium smoking, in which the drug reaches bloodstream through the respiratory system. The development of the hypodermic syringe in 1844 has been credited with increasing opiate use in the late 19th Century.¹⁶ Ingestible opiates like codeine and oxycodone, though not as quickly absorbed as injectables, facilitated patient use of the drugs at home.

Fentanyl, developed by a Belgian pharmaceutical company in 1953, combined the convenience of the ingestibles with a greater potency than the injectibles.¹⁷ By the 1960s, both Europe and the United States approved the product, and it was utilized in an intravenous form to deal with the most persistent forms of pain.¹⁸ The synthetic origin of fentanyl allows it to be incredibly concentrated. Fentanyl is quickly processed through the liver, and not slowly through the mucus of the gastrointestinal system.¹⁹ Opioids of this type are typically delivered via subcutaneous, transdermal, or sublingual means. Fentanyl is not ingestible, but can be administered orally in buccal or sublingual tablets, by injection, intranasal spray or transdermal patch.²⁰ These attributes make fentanyl a blessing for patients from pain and also an especially attractive recreational drug.

¹⁵ Davis, Mellar P. and Paul A. Glare, ed. *Opioids in Cancer Pain* (Cambridge: Oxford University Press, 2009), 1.

¹⁶ Henry H. Brownstein, ed. *The Handbook of Drugs and Society* (Malden, MA: John Wiley & Sons, 2016), 100.

¹⁷ Katarzyna Kuczynska, Piotr Grzonkowski, Lukasz Kacprzak, and Jolanta B. Zawilsa, "Abuse of Fentanyl: An Emerging Problem to Face." *Forensic Science International*, 289 (June 2018):207.

¹⁸ *Ibid*, 207.

¹⁹ Howard S. Smith, ed. *Opioid Therapy in the 21st Century, 2nd Edition* (Cambridge: Oxford University Press, 2013), 33.

²⁰ Katarzyna Kuczynska, Piotr Grzonkowski, Lukasz Kacprzak, and Jolanta B. Zawilsa, "Abuse of

The Fentanyl Epidemic

Deaths caused by overdosing on narcotics are not a new phenomenon. The dangerous side effects of opiates, including deaths from overdoses, are nothing new. Heroin, one of the most dangerous of the opioid narcotics, quickly developed a recreational following that led to many thousands of deaths throughout the years.

Despite the known dangers, however, people continued to use these narcotics for both legitimate and non-legitimate purposes. In the 21st Century, public health officials, researchers, and the general public became aware of a new phenomenon. The rise in opioid related deaths skyrocketed and quickly surpassed those of other narcotics. According to data provided by the National Vital Statistics System, over 700 thousand deaths in the United States were attributed to drug overdoses between 1999 and 2017. Of these, 56.8% were caused by opioids.²¹ For the years 2016 to 2017, deaths from all opioids increased from 42,249 to 47,600. Most of this increase was from synthetic opioids.²²

One of the most concerning items that has been discovered is that illegally manufactured fentanyl (IMF) drives many of these increases. According to a study by Scholl et. al, “From 2013 to 2017, drug overdose death rates increased in 35 of 50 states and DC, and significant increases in death rates involving synthetic opioids occurred in 15 of 20 states, likely driven by IMF. From 2016 to 2017, overdose deaths involving all opioids and synthetic opioids increased, but deaths involving prescription opioids and heroin remained stable.”²³ While data for 2018 is has not been analyzed yet, improvements might be seen in some areas of drug overdose data.

Fentanyl: An Emerging Problem to Face.” *Forensic Science International*, 289 (June 2018):208.

²¹ Lawrence Scholl, Puja Seth, Mbabazi Karjisa, Nana Wilson, and Grant Baldwin. “Drug and Opioid-Involved Overdoses Deaths: United States, 2013. *Morbidity and Mortality Weekly Report*, 67 (January 2019): 1419-1427.

²² Ibid.

²³ Ibid.

The overall effects of these drug overdoses have significant consequences. In testimony to Congress in September 2018, Paul E. Knierim, the Deputy Chief of Operations, Office of Global Enforcement, Drug Enforcement Agency (DEA), stated, “Drug overdoses, suffered by family, friends, neighbors, and colleagues, are now the leading cause of injury-related deaths in the United States, eclipsing those from motor vehicle crashes or firearms. An in-depth analysis of 2016 U.S. drug overdose data shows that America’s overdose epidemic is spreading geographically, and is increasing across demographic groups. The sharp increase in drug overdose deaths between 2015 to 2016 was fueled by a surge in fentanyl and fentanyl analogue (synthetic opioids) involved overdoses.”²⁴ What factors are causing this opioid epidemic, and why are IMFs fueling the rise in drug overdose deaths in the United States?

Ironically, the success of U.S. efforts in the suppression of heroin production and trafficking has contributed to the rise in opioid deaths. Although U.S. efforts at the eradication of poppy field and interdicting the heroin trafficking have not succeeded completely, they have made heroin more expensive and less obtainable. Fentanyl, whether diverted from legitimate sources, or manufactured illegally. Is cheaper than heroin and easier to conceal and transport.

Illicit manufacturers also produce fentanyl-laced heroin, which they market as a stronger variety of heroin intended to attract existing heroin users.²⁵ These products target experienced heroin users searching for a stronger narcotic. Despite fentanyl’s high cost, its great potency permits heroin dealers to increase their profits by cutting heroin with it. Adding fentanyl to a single kilogram of heroin permits the production of ten kilograms of salable heroin.²⁶ This

²⁴ *Tackling Fentanyl: The China Connection: Hearing before the House Subcommittee on Africa, Global Health, Global Human Rights and International Organizations 115th Cong.*, (2018) (statement of Paul E. Knierim, Deputy Chief of Operations, Office of Global Enforcement, Drug Enforcement Administration), 1.

²⁵ Katarzyna Kuczynska, Piotr Grzonkowski, Lukasz Kacprzak, and Jolanta B. Zawilsa, “Abuse of Fentanyl: An Emerging Problem to Face.” *Forensic Science International*, 289 (June 2018):208.

²⁶ Hench, David, “Fentanyl Worsens Maine Heroin Epidemic,” *Portland Press Herald*, August 20,

technique increases dealer profits but introduces drug users to an extremely dangerous drug. Fentanyl's potency, as much as forty times as great as that of heroin, greatly increases the probability of lethal overdoses.²⁷

The trend of lacing more common narcotics with fentanyl to create a higher potency mixture has also appeared in the cocaine scene. Speedballs combine the stimulant effects of cocaine with the depressant effects of fentanyl to reduce the negative experience of coming off a cocaine high.²⁸ Speedballs first appeared in centers of cocaine consumption, such as New York and Miami, but have spread nationally.²⁹ With law enforcement and medical professionals prepared and experienced in dealing with particular types of addiction and overdose, the introduction of fentanyl complicates an already deadly situation.

Some researchers contend that efforts to restrict the use of opiates in order to avoid addiction have actually contributed to increasing mortality from opioids. New restrictions on opioid prescriptions may have deprived patients of medication needed to alleviate their pain, driving them to seek relief from illegal drugs. One of the new control mechanisms is the Electronic Prescription Drug Monitoring Program (PDMP), in which all fifty states and the District of Columbia participate in some way.³⁰ These systems monitor the prescription of opioids to deter and identify physician shopping and pill-farms. The PDMP has decreased opioid prescriptions by as much as 66% in some states.³¹ Such a large reduction in prescriptions could

2015.

²⁷ Ernesto Solis Jr, Keaton T. Cameron-Burr, and Eugene A. Kiyatkin. *Heroin Contaminated With Fentanyl Dramatically Enhances Brain Hypoxia and Induces Brain Hypothermia*. National Institute on Drug Abuse-Intramural Research Program (Baltimore, MD: National Institutes of Health, 2017), 2.

²⁸ US Department of Justice. *2018 National Drug Threat Assessment* (Washington, DC: Drug Enforcement Agency, October 2018), 48.

²⁹ *Ibid*, 47.

³⁰ Brady, Joanne, Hannah Wunsch, Charles DiMaggio, Barbara Lang, James Giglio, and Guoha Li. "Prescription Drug Monitoring and Dispensing of Prescription Opioids." *Public Health Reports*, (March/April 2014): 139.

³¹ *Ibid*, 139.

not occur without depriving some patients of analgesics necessary to treat their pain. Many of these unfortunate individuals turned to illicit drugs such as heroin and fentanyl.

Coping with the increased demand for fentanyl caused by these factors poses serious difficulties for law enforcement. Fentanyl that is used illegally comes from one of two paths: diversion from the legal prescription stream and through the manufacturing of IMFs.³² Although tracking down and enforcing the diversion of prescribed narcotics can be a difficult task, there are structures to deal with this, including the Diversion Control Division of the DEA. The Diversion Control Division is specifically chartered to enforce the laws and regulations that prevent legally manufactured narcotics that are meant to be prescribed to legitimate patients from being diverted into the illicit economy.

Detection of IMFs, however, is much more difficult. Illicitly produced fentanyl IMF constitutes the vast majority of illicit fentanyl in the North America and poses a greater challenge.³³ China, which, until very recently, did not show much interest in controlling the shipment of these chemicals, does not regulate the production of the precursors or fentanyl itself effectively. In many cases, buyers in the United States were able to buy fentanyl through the internet and shipped to the United States. Fentanyl shipments from China, whether directly or through Canada, are usually smaller but far purer and more potent than shipments across the southwest border from Mexican suppliers.³⁴ Until the threats of illicit fentanyl were understood, minimal procedures had been put into place to manage the overwhelming amounts of packages and freight being shipped from China to the United States. The immense volume of freight

³² Katarzyna Kuczynska, Piotr Grzonkowski, Lukasz Kacprzak, and Jolanta B. Zawilsa, "Abuse of Fentanyl: An Emerging Problem to Face." *Forensic Science International*, 289 (June 2018):208.

³³ *Ibid*, 208.

³⁴ US Department of Justice. *2018 National Drug Threat Assessment* (Washington, DC: Drug Enforcement Agency, October 2018), 33-35.

coming to the U.S. from China and recent trade disputes have made interdicting fentanyl shipments difficult. China has explicitly denied that it is the source of most of the IMFs smuggled into the United States.³⁵ The DEA disagrees emphatically. Until there is agreement that a problem exists, there is little hope of a solution.

Tracking IMF shipments from Mexico is equally difficult but for different reasons.³⁶ Generally produced in the same small, low-capital facilities that make other synthetic drugs such as methamphetamines, IMF's small volume makes it harder to detect than more common illicit narcotics. The entire interdiction apparatus on the southwest border of the United States has been developed to counter the flow of humans, and of more common illicit narcotics, such as cocaine and marijuana. Fentanyl seized at the Southwest Border of the United States tends to be a higher-volume, lower grade narcotic. It is often interdicted as part of large, multi-drug type seizures.³⁷ Traditional mechanisms of detection and interdiction have not yet caught up with the challenge of fentanyl.

Once fentanyl has reached transited the market, additional challenges exist for law enforcement personnel. Fentanyl's high potency makes accidental exposure to it nearly as dangerous as deliberate use, putting law enforcement officers and medical first responders at severe risk. The threat has become dangerous enough that the National Institute for Occupational Safety and Health has published guidelines for law enforcement professionals to manage their risk of exposure.³⁸ The literature suggests that transdermal exposure is not a great risk unless the

³⁵ Erika Kinetz and Gillian Wong, "Beijing Denies It Is Top Synthetic Drug Source; U.S. Agencies Say Fentanyl, Related Drugs Tied to China." *Dayton Daily News*, December 20, 2016.

³⁶ US Department of Justice. *2018 National Drug Threat Assessment* (Washington, DC: Drug Enforcement Agency, October 2018), 31.

³⁷ *Ibid*, 34.

³⁸ "Preventing Occupational Exposure to First Responders," *The National Institute for Occupational Safety and Health, Centers for Disease Prevention and Control*, August 24, 2017, <https://www.cdc.gov/niosh/topics/fentanyl/risk.html>.

officer is exposed to large amounts of fentanyl, such as in a distribution or manufacturing facility. Greater risks occur from inadvertent needle exposure, inhalation, ingestion and mucous membrane contact.³⁹ There are some, however, who argue that the risks to law enforcement are not as dangerous as is feared. Some researchers claim that overdoses due to incidental exposure are unlikely.⁴⁰ These arguments, however, are often promoted by those who have additional motives to decrease the stigma of opioid addiction and encourage addicts to seek treatment. As fentanyl trafficking and use increases, these threats to law enforcement also rise, thereby complicating enforcement efforts.

A final factor currently being encountered with the increase of fentanyl overdoses is the relative ineffectiveness of existing medical techniques and resources to deal with overdoses. The development of naloxone, commonly known as Narcan, to quickly and efficiently deal with opioid overdoses, has been critical in decreasing the amount of heroin overdoses in the United States.⁴¹ There are significant barriers to effective and timely use of naloxone products when trying to combat overdoses. Upon encountering a patient, first responders and physicians must first identify that they have an overdose to deal with. Next, they must determine the type and amount of narcotic consumed, along with additional information about time and proximity. These important pieces of information are not often available for victims of overdose. Certain populations, however, are more susceptible to opioid overdoses. Overlapping cohorts including

³⁹ "Preventing Occupational Exposure to First Responders," *The National Institute for Occupational Safety and Health, Centers for Disease Prevention and Control*, August 24, 2017, <https://www.cdc.gov/niosh/topics/fentanyl/risk.html>.

⁴⁰ Savannah O'Neill and Eliza Wheeler, "Myths and Misinformation About Law Enforcement and Fentanyl Exposure: Perpetuating Stigma, Causing Harm," *Harm Reduction Coalition*, <https://harmreduction.org/blog/fentanyl-exposure/>.

⁴¹ Jacqueline Ellison, Alexander Y. Walley, James A. Feldman, Edward Bernstein, Patricia M. Mitchell, Elisa A. Koppelman, and Mari-Lynn Drainoni. "Identifying Patients for Overdose Prevention With ICD-9 Classification in the Emergency Department, Massachusetts, 2013-2014." *Public Health Report* Vol. 131, no. 5 (September/October 2016): 671.

those who have overdosed before and those who are prescribed opioids overlap and create populations that are more likely to overdose.⁴² By targeting these vulnerable populations, medical providers can provide pre-overdose training and attempt to mitigate negative effects.

Recent studies and street level experience, however, have shown that these medications must be utilized at much higher doses and for longer periods of time to achieve the same effectiveness.⁴³ Even in cases in which fentanyl overdose is immediately identified, it is still unclear what amounts and frequencies must be administered to appropriately deal with the situation. When heroin is discretely cut with fentanyl to increase profits or produce greater highs, the risks increase. If an unconscious overdose victim was never even aware that they had been exposed to fentanyl, there is little that the first responder or medical provider can do to help them.

Numerous factors in the current opioid crisis have combined to create a near-disaster. A high-potency narcotic has entered the distribution scheme, is difficult to detect, and is not effectively regulated. Poor levels of education about the effects of this change in drug culture only exacerbate the problems that have been created. Fortunately, policymakers in the United States have identified that a problem is occurring and that current measures are not working. Are their efforts enough.

What Is Being Done?

⁴² Jacqueline Ellison, Alexander Y. Walley, James A. Feldman, Edward Bernstein, Patricia M. Mitchell, Elisa A. Koppelman, and Mari-Lynn Drainoni. "Identifying Patients for Overdose Prevention With ICD-9 Classification in the Emergency Department, Massachusetts, 2013-2014." *Public Health Report* Vol. 131, no. 5 (September/October 2016): 673.

⁴³ Mark Faul, Peter Lurie, Jeremiah M. Kinsman, Michael W. Dailey, Charmaine Crabaugh, and Scott M. Sasser. "Multiple Naloxone Administrations Among Emergency Medical Service Providers Is Increasing." *Prehospital Emergency Care* Vol. 21, no. 3 (February 2017): 412.

The fact that the term “Opioid Crisis” has been coined and there has been significant media and political attention placed upon the dangers of fentanyl is a clear indicator that the problem has at least been identified. Multiple entities have dedicated themselves to addressing this pressing issue. Governmental and non-governmental actors have made great strides to combat the opioid crisis. In the fields of prevention, law enforcement and medical response, the fight against fentanyl overdoses has seen many successes. Current counter-narcotics efforts, however, do not fully address all of the issues driving the current increases in fentanyl-related overdoses and deaths.

In the field of prevention and education, much good is being done regarding the dangers of fentanyl and its effects on humans. This is often controversial, however, because studies and efforts often assist addicts in determining whether or not their heroin supply has been illicitly cut with fentanyl products. To some, any assistance at all to the destructive behaviors of addicts is not beneficial. Assisting addicts in policing their own narcotics supply, however, leads to a safer product. It has been determined that there may be some ways for heroin users to determine if there is fentanyl in their heroin. One company has recently been working on a project to provide low-cost drug testing strips to vulnerable populations. For the cost of \$1, researchers supported by the Bloomberg American Health Initiative developed testing strips to help heroin users determine if there is fentanyl in their product.⁴⁴ While distasteful to some, this has the benefit of preventing perhaps some of the overdose deaths related to the inadvertent consumption of fentanyl.

An interesting benefit has been achieved by the creation of Syringe Exchange Programs (SEPs). Although sometimes controversial because they can be seen to condone the use of illegal narcotics, SEPs were developed to mitigate some of the worst effects of syringe-injected drugs such as heroin. After observing the skyrocketing rates of HIV infection in the heroin-using

⁴⁴ Dori Henry, “\$1 Test Strips Find Fentanyl In Street Drugs,” *Futurity*, February 7, 2018, <https://www.futurity.org/fentanyl-test-strips-1673542/>

population, activists and policy-makers advocated for programs that would provide for clean syringes and the ability to take infected needles off the streets.⁴⁵ With the current rise in fentanyl-related overdoses, centralized locations where addicts congregate to consume their narcotics have been effective. In one location in the New York City housing projects, an SEP's bathroom has become a congregation point for users to consume narcotics. Organizers of the SEP have claimed that over sixty lives have been saved from overdose because of the more closely monitored environment.⁴⁶ Because of the potential benefits of providing safe, monitored locations for the consumption of narcotics, some have advocated for the creation of Safe Injection Facilities (SIFs). Much like a SEF, a SIF works to minimize the harmful effects of narcotics use through the principles of "harm reduction". Harm reduction is a unique, and controversial, subject for Americans, because it focuses on the reduction of harm as opposed to reducing the drug itself.⁴⁷ Harm reduction is a medical theory concerning unhealthy behaviors, such as unprotected sex and illegal narcotics abuse, that accepts that a certain amount of unhealthy behavior will always be present within society. If this level of unhealthy behavior is accepted to be part of the existing environment, then resources can be diverted from trying to eradicate the behavior completely to reducing the adverse consequences.⁴⁸ At the current time, there are no formal SIFs in the United States, and only two in Canada. Their legal status is particularly dubious, and they often politically infeasible because they can be portrayed as accommodating illegal behavior. With the increasing amounts of fentanyl-laced heroin, however, efforts to control the environment of drug abusers can provide more positives than negatives.

⁴⁵ Melissa Vallejo "Safer Bathrooms in Syringe Exchange Programs: Injecting Progress into the Harm Reduction Movement." *Columbia Law Review* Vol. 118, no. 4 (May 2018): 1186.

⁴⁶ *Ibid*, 1188.

⁴⁷ *Ibid*, 1190.

⁴⁸ Karen Mary Leslie. "Harm Reduction: An Approach to Reducing Risky Health Behaviours in Adolescents." *Paediatric Child Health* 13(1), (January, 2008): 53.

On the medical side, advances have been made in determining the treatment protocols necessary to deal with fentanyl overdoses. Numerous drugs, such as Narcan, have been developed to immediately deal with and prevent some of the most harmful repercussions of heroin overdoses. The increased potency of fentanyl, along with its increased use as an added narcotic to street heroin, has posed significant problems for first responders and medical personnel. When presented patients who have seemingly overdosed on heroin, typical protocols are enacted. When fentanyl is present, however, these are often not enough. Treatment protocols are slowly improving, such as in Philadelphia, where first responders are now able to administer twice as much of the life-saving drug as they previously were.⁴⁹ Recent research, however, is blazing a path forward.

Progress is also being made on the front of attempting to control the flow of both precursor chemicals and illicitly manufactured fentanyl. These efforts, however, require the cooperation and consent of foreign powers. The recent trade difficulties between the United States and China have put a stumbling block in the way of increased cooperation on minimizing the effects of fentanyl overdoses. While China has indicated that it will emplace measures to decrease the amount of illicit fentanyl headed to the United States, it is still too early to see if this will turn into useful action.⁵⁰ Its continuing presence as a factor in the negotiations provides hope that continuing progress will be made.

Although not a concrete factor, perhaps the greatest indicator that changes are on the way is the increasing visibility of the opioid crisis and its presence on the priority list of significant players in the United States political establishment. From the Executive and Legislative branches, down to all levels of state and local governments, the opioid crisis has received notice. In 2017,

⁴⁹ John Sullivan, "City Altering Heroin Overdose Treatment," *Philadelphia Enquirer*, August 27, 2006.

⁵⁰ Reuters, "Trade Frictions Raise Questions About China's Fentanyl Promise," *Reuters*, May 9, 2019, <https://www.reuters.com/article/us-usa-china-fentanyl/trade-frictions-raise-questions-about-chinas-fentanyl-promise-idUSKCN1SF2GK>

for example, the President declared the opioid epidemic to be a public health emergency.⁵¹ While this may not have yet come with significant tangible accomplishments, its presence on the list of top priorities bodes well for the issue's longevity and publicity.

A Problem Still Awaiting Solutions

It has been identified that there are numerous factors that are contributing to the increasing deadliness of the opioid epidemic in America. A cursory overview of the statistics of rising levels of opioid addiction and fentanyl overdoses, and the increasing percentage of overall American deaths that can be attributed to it, shows that this problem has been easily identified. While effort have been made to address the problem, and some results have been achieved, not enough has been done yet. Making a discernible dent in the opioid epidemic will require a coordinated effort by all levels of government, in concert with support from the medical community, law enforcement, and various non-governmental organizations. A coordinated campaign, such as those which achieved success in decreasing drunk driving, lack of seat belt use, and the fight against cancer, can limit the effects of one of the largest killers of Americans today.

The first critical effort that must be taken is to secure the agreements necessary to staunch the illegal flow of fentanyl from China through Mexico onto the streets of America. The relentless flow of illegal narcotics over the border from Mexico makes any efforts to control the supply of dangerous substances immeasurably harder. If the flow of fentanyl over the border is minimized, then policing the illegal fentanyl within the borders of the United States will be much easier. Fentanyl procured within the United States is either manufactured illegally on a very small scale, or diverted from the legitimate prescription stream. Each of these two sources is much simpler to

⁵¹ Department of Health and Human Services Press Office, "HHS Acting Secretary Declares Public Health Emergency to Address National Opioid Crisis," *Department of Health and Human Services*, October 26, 2017, <https://www.hhs.gov/about/news/2017/10/26/hhs-acting-secretary-declares-public-health-emergency-address-national-opioid-crisis.html>

isolate, regulate and control. Stemming the flows across international borders simplifies the problem and will make enforcement easier.

At the same time, a critical eye must be put on the current restrictions on the prescription of opioids and other pain-relieving medications within the United States. While this may seem counter-intuitive, the undertreatment of pain is a major factor in the explosion of opioid addiction and dependence in the United States. When prevented from seeking legitimate pain relief under the supervision of a qualified physicians, patients will often turn to whatever means are at their disposal. When the alternative means are illegal narcotics, a recipe for disaster is created. Fentanyl, like all medicinal opioids, was developed to be utilized in very specific ways under the supervision of a doctor. When patients are forced out of the legitimate market and attempt to self-medicate, overdoses and chemical dependence become more common.

Efforts must also be made to increase educational outreach to those communities most susceptible to opioid addiction. The fact that the United States is suffering from an opioid crisis is not unknown throughout the wider community. What is not clearly understood, however, is that there are ways to help prevent it. From poorer communities to pain patients and policymakers, increasing the base level of knowledge about the dangers of fentanyl must be a top priority. School children throughout the country are indoctrinated from an early age on the dangers of succumbing to the allures of illegal narcotics. What needs to be emphasized at a greater rate, however, is practical knowledge on how to appropriately seek medical treatment, properly manage prescription medications, and avoid self-medication of legitimate medical needs.

There is also room for more controversial education. There will always be a subset of the population that willingly makes the choice to engage in the destructive behaviors of consuming illegal narcotics. There are opportunities to at least minimize the detrimental effects on both users

and their communities. First, educational efforts must be made to demonstrate the need to verify the safety of a user's narcotics supply and prevent the unknown contamination of heroin with fentanyl. Users must also be educated on the proper medical responses to opioid overdoses, to recognize it in themselves and their companions, and how best to efficiently elicit help from proper resources.

Despite the opportunities presented by casting a more tolerant eye on opioid use, there is still a role for law enforcement to play in stemming the opioid epidemic. Additional resources must be given to the Drug Enforcement Agency to increase the outstanding work that has been accomplished by marrying the investigative powers of its special agents with the industry knowledge of its Diversion Control Program. A great deal of success has been seen in its current development of Tactical Diversion Squads, but these efforts must be expanded. Longer-lasting, more formal ties between its two methods of enforcement can attack the massive influx of opioids from both sides, and at least manage the flow of these destructive narcotics.

Finally, the medical community must continue its efforts to develop appropriate, effective responses to unknown overdoses. The increasing presence of fentanyl in the narcotics stream will only continue to negatively affect the emergency treatment protocols available to first responders when dealing with opioid overdoses. Continued research on the effectiveness of Narcan and methadone to treat fentanyl users will pay dividends in saving lives when overdoses do occur.

Conclusions

The enduring Opioid Epidemic in the United States meets all of the requirements of an emergency requiring an "all of government" response. It influences lives across the nation,

materially affects the welfare and well-being of a large portion of the nation, seriously stresses the public's resources and ability to respond, and creates a public outcry. In an attempt to shove the problem into the framework of "War on Drugs", opportunities to solve or mitigate the problem have been lost. The opioid epidemic retains some characteristics of the drug struggles of the past several decades, but also brings unique characteristics that must be addressed in a unique manner. An approach focused on medical investment, law enforcement flexibility, and appreciation of the factors causing addiction provide the most beneficial and optimistic manner to improve the well being of U.S. citizens and the public health.

The first area in which improvement must be sought is in the medical field. Fentanyl presents a challenge to existing medical protocols due to its lethal concentration and applicability as a legitimate analgesic. Typically, drugs are presented with either an illicit or a legitimate use. Fentanyl and other opioids, however, complicate this matter. It is insufficient to simply legislate these narcotics out of legitimate commerce. Their benefits are tangible and necessary. Legislators must accept the legitimate uses of opioids while also remaining sensitive to the incredible havoc that they can wreak.

Law enforcement must also remain flexible in the face of the fentanyl epidemic. Current law enforcement techniques and strategies emphasize the interdiction of bulk narcotics shipments, the targeting of elaborate distribution networks, and the prosecution of criminal enterprises. In many ways, fentanyl challenges these structures. Whether it is diverted from the legitimate stream or smuggled across the southern border or through ports, fentanyl diverges from typical narcotics trends. Its insidious entrance into the "mainstream" supply has also increased overdoses and impeded efforts to inform addicts of its true danger. Law enforcement

and first responders must modify their approaches to this danger, and develop new procedures that acknowledge the legitimate uses of fentanyl while working to minimize its misuse.

In the end, the medical community, addiction specialists, and those responsible for drug abuse education must bear the burden of dealing with the fentanyl crisis. The long decades of the War on Drugs have demonstrated that strategies based upon interdiction, incarceration and prohibition have not effectively or efficiently dealt with the narcotics problem. The increasing deadliness and novelty of the fentanyl crisis serves to illustrate that deadlier options will continue to appear, despite the best efforts to interdict them. Education, directed specifically towards both legitimate and illegitimate opioid users, can help prevent needless overdose deaths due to lack of awareness about the dangers of fentanyl-laced narcotics. Furthermore, the efforts of medical providers and first responders can help to prevent the worst effects of overdose by learning to identify its effects and how to be proactive towards its dangers. Finally, those closest to the ground on this dangerous issue must advocate for laws and policies that, while retaining the ability to successfully deter criminals and smugglers, also retain the flexibility to humanely deal with those caught in the clutches of opioid addiction.

Innovative approaches to the fentanyl epidemic represent an important opportunity in the current War on Drugs. Although its unique characteristics pose challenges to existing structures, they are also an opportunity to try new techniques to tackle the detrimental effects of narcotics abuse. Fentanyl represents a unique counter-narcotics challenge due to its concentrated lethality, dual-purpose status as both an illicit and prescribed drug, and the lack of proper controls to prevent the importation of illicitly manufactured fentanyl. The United States government must foster and encourage innovative approaches to the problem of the fentanyl epidemic, and utilize this as an opportunity to undo some of the failures of the War on Drugs.

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