

**Briefing Summary**  
**“Chronic Pain in Women and its Relationship to Opioid Addiction”**  
**July 12, 2017**

On July 12, 2017, the Women’s Congressional Policy Institute (WCPI) sponsored a briefing, “Chronic Pain in Women and its Relationship to Opioid Addiction,” in cooperation with Reps. Susan Brooks (R-IN) and Lois Frankel (D-FL), Co-Chairs of the Congressional Caucus for Women’s Issues (Women’s Caucus), and Reps. Mimi Walters (R-CA) and Brenda Lawrence (D-MI), Vice-Chairs of the Women’s Caucus. The briefing was the twelfth event in a women’s health series sponsored by WCPI over several years, with support from the Robert Wood Johnson Foundation. Cindy Hall, President of WCPI, thanked the Foundation for its support and its work to improve the health and health care of all Americans through its support for research and programs working to help build a national Culture of Health.

**Members of the Women’s Caucus**

Serving her third term representing the 21<sup>st</sup> District of Florida, Rep. Lois Frankel serves on the Foreign Affairs and Transportation and Infrastructure Committees. Rep. Frankel stated that the issue of drug addiction is incredibly timely, is a huge problem in her district, and that she would be staying to listen to the briefing in its entirety because of its importance.

Serving her third term representing the 5<sup>th</sup> district of Indiana, Rep. Susan Brooks chairs the Ethics Committee, serves on the Energy and Commerce Committee where she is a member of the Health Subcommittee, and has authored several bills on the topic of drug addiction. Rep. Brooks mentioned Indiana’s HIV outbreak as one of the many consequences of the opioid epidemic.

**Speakers**

**Nora D. Volkow, MD**

The first speaker was Nora D. Volkow, MD, Director of the National Institute on Drug Abuse (NIDA) at the National Institutes of Health (NIH). NIDA supports most of the world’s research on health aspects of drug use and addiction.

Dr. Volkow’s work has been instrumental in demonstrating that drug addiction is a disease of the human brain. As a research psychiatrist and scientist, Dr. Volkow pioneered the use of brain imaging to investigate the toxic effects and addictive properties of abusable drugs. Her studies have documented changes in the dopamine system affecting, among others, the functions of frontal brain regions involved with motivation, drive, and pleasure in addiction. She also has made important contributions to the neurobiology of obesity, ADHD, and aging.

Dr. Volkow stated that she would be discussing the topic of opioids on two levels: the opioid crisis in general terms and how the opioid crisis is unique as it relates to women. Three notable concerns about the opioid crisis were cited by Dr. Volkow:

- *The number of people dying.*
  - In 2015, 33,000 people died from an opioid overdose. The impact on the health care system as it relates to maternal mortality and economics is substantial.
- *This is a crisis born out of the health care system.*
  - We need to change the practice and structure by which we provide care as it relates to the treatment of pain and the treatment of substance use disorders, including opioid addiction.
- *This epidemic has affected a vast set of individuals who normally and traditionally are not associated with drug taking.*
  - In the epidemiological data for all patterns of drug taking, women have much lower prevalence ratings than males. However, in the opioid crisis, equivalent numbers of females and males are impacted.

Opioid prescriptions are predominately utilized to address very severe pain. Opioids can be lifesaving when prescribed properly and used for the indications for which they are prescribed. As a consequence of overuse, opioids are particularly prevalent in the misuse data. There are three classes of prescription medications that are generally misused: opioid analgesics, stimulants, and sedative hypnotics. Dr. Volkow stated that whether you are taking heroin or an opioid for pain, the drug activates and binds to the mu receptors of the brain and inhibit sensations of pain. The brain consists of a network that allows an individual to perceive pain, but also the emotional reactions to it. The problem lies in other areas of the brain (accumbens) where the opioid targets and the individual receives pleasure. The pharmacological effect is so powerful that it can activate a chain of events that can result in addiction. The main cause of opioid death is when the drug binds to the receptors in the brain stem that control breathing. When the drug manipulates that area it triggers respiratory depression, and an individual can stop breathing.

In the 1990s, a campaign was launched to treat pain very aggressively because the outcomes of pain left untreated were incredibly poor. The number of prescriptions skyrocketed during this time, but we did not yet have a clear understanding of the effects opioids had on chronic pain as doctors typically prescribed opioids for patients with acute pain. Today, Americans consume 80-85 percent of the opioids in the world. The over-prescribing has led to diversion, abuse, and addiction/overdose for individuals who have never before had a history of dependency.

Dr. Volkow presented a comparison map of overdose death rates in the United States. In 1999, only small pockets in West Virginia and New Mexico had high incidences of overdosing. In 2015, the whole country was affected by this crisis with overdose death rates scattered in high levels across the U.S. Opioid abuse is unusual in that women and men are about equivalent in their use, which typically is not seen for other substance use disorders.

Since 2011, aggressive campaigns to reduce the number of opioid prescriptions have been introduced with some success. Dr. Volkow stated that between 2010-2015 opioid prescriptions decreased by 15

percent, but there needs to be a further reduction. Researchers and health care providers were expecting death rates to decrease equally over this time period, but the overdose rate continues to increase. Dr. Volkow noted that 4-6 percent of individuals prescribed opioids become addicted and turn to heroin because it is cheaper and more accessible than prescription drugs. Eighty percent of the new heroin users in the U.S. started with prescription opioids, which explains the continual increase in deaths despite the decrease in opioid prescriptions.

The emergence of synthetic opioids has compounded the addiction crisis because these drugs are easy to manufacture and are incredibly potent. Fentanyl and its various even stronger analogues – used in a pure form or laced into drugs like heroin – are an exceptional challenge. Dr. Volkow stated that the northeastern part of the U.S. has seen a doubling or tripling of overdose deaths due to the addition of fentanyl.

Dr. Volkow and NIDA are working to research different treatments for chronic pain management, but it is a very complex challenge to address. Additionally, she stated that we need to develop treatments for individuals who become addicted, so they don't turn to heroin. Equally important, NIDA is taking into consideration differences in pain and treatment outcomes between women and men. Women release a larger inflammatory response from pain versus men, which is important to understand when addressing treatment options.

Another consequence of the opioid crisis is neonatal abstinence syndrome (NAS). Dr. Volkow stated that 17-19 percent of pregnant women in the U.S. receive an opioid prescription, which further validates the need to change prescribing practices. The babies born with NAS and treated improperly can lead to death or poor health outcomes. There are multiple areas where we can address the issue of the opioid crisis as it relates to pregnant women. For example, a recent study has shown that the use of Buprenorphine in the treatment of NAS resulted in a shorter duration of treatment and length of hospital stay for the newborn versus a morphine treatment.

Dr. Volkow concluded her presentation by stating the importance of pain education among doctors, nurses, and pharmacists to prevent over-prescribing of medication that could lead to addiction.

### **Jerome M. Adams, MD, MPH**

The second speaker was Dr. Jerome M. Adams, Indiana State Health Commissioner, who was introduced by Rep. Brooks. In this role, he oversees the Public Health Protection and Laboratory Services, Health and Human Services, Health Care Quality and Regulatory, and Tobacco Prevention and Cessation Commissions. Dr. Adams has been nominated to become the next Surgeon General of the United States.

Additionally, he serves as secretary of the Indiana State Department of Health's executive board, as chairman of the Indiana State Trauma Care Committee, and as co-chairman of the Indiana Perinatal Quality Improvement Collaborative Governing Council.

Dr. Adams began his presentation by imploring the audience to reach out to their state health departments to get a better understanding of how federal laws present challenges, opportunities, and

change on the state and local levels. Over-prescribing is harmful and has led to overdose, Hepatitis C, and HIV, and we must work harder to address this crisis.

In Indiana, unintentional drug poisoning has seen an 894.6 percent increase as a leading cause of death. Similarly, from 2003-2015 the unintentional drug poisoning rate in Indiana increased by 771 percent. Around 2005, Indiana had surpassed the U.S. in unintentional drug poisoning deaths.

Dr. Adams restated Dr. Volkow's earlier assertion that painkillers affect women differently as women are more likely to:

- have chronic pain
- be prescribed a prescription painkiller
- be given higher doses
- use them for longer periods of time than men
- engage in "doctor shopping"
- become dependent more quickly

During his presentation, Dr. Adams stated that the opioid crisis is significantly impacting people during their prime parenting years with the largest number of deaths occurring in the 25-54 year age range. Moreover, women are surpassing men in drug poisoning deaths after the age of 65 years. From 2009-2015, there was a 621.4 percent increase in the number of non-fatal emergency department visits by women due to heroin use. These statistics are clear evidence that the epidemic affects women and men differently.

Given the alarming statistics, it is no surprise that Indiana was the location of the largest HIV outbreak related to injection drug use in U.S. history. Scott County now has 219 confirmed cases of HIV—132 men and 87 women. 95 percent of the 219 cases are co-infected with Hepatitis C. All of the individuals are white, experience poverty, have a limited education, high unemployment, a lack of insurance, and live in a rural setting. Dr. Adams underscored the importance of studying the societal impacts that put individuals at higher risk for developing drug misuse.

Dr. Adams further explained the environmental impacts of this particular outbreak by noting that the infected community was immediately next to a major highway truck stop. There is a complex interplay between opioids and the victimization of women and the easy money women can receive from sex work. Additionally, there is intergenerational drug misuse occurring in the county in which families use together, teaching each other how to use and/or inject their young children as a calming method.

Dr. Adams and his colleagues have been working hard to treat the individuals in Scott County and the surrounding counties in Indiana with evidence of significant progress being made. For example, 73 percent of the individuals with HIV are virally suppressed, meaning they are unable to transmit the disease to others. This percentage is significantly higher than the CDC goal of 25-50 percent viral suppression of a community. Dr. Adams stated that this figure is important because it is evidence that the problem can be tackled in communities that are resource-impoveryished.

Another consequence of the opioid epidemic is that infant mortality rates have increased in the state. Infants born with neonatal abstinence syndrome (NAS) has been another development. Dr. Adams noted that there is no single definition of NAS across states or a common practice to assess risk factors. A hospital pilot program to identify the number of cases of NAS was conducted in the state and some of the findings included:

- Drug of choice changes depending on location
- Comorbidities can affect the outcomes
- Lack of treatment programs
- Interruption in care when a referral is made
- Lack of support services during and after pregnancy
- Culture of providers and pregnant women need improvement

Dr. Adams concluded his presentation by addressing how substance use disorders affect children and families. The number of children in need of services through the Department of Child Services in Indiana increased from 13,048 in June 2012 to 23,950 in June 2017, which is an 84 percent increase. Almost 53 percent of children removed from the home in 2016 were the result of an alcohol and/or substance use disorder. A number of strategies to tackle this problem include:

- Supporting implementation of evidence-based practices and interventions for children and families with substance use disorders.
- Contracting for specialized residential treatment services that enable mothers with substance use disorders to receive treatment while remaining with their children.
- Contracting for transitional housing programs for clients transitioning from residential treatment programs.
- Expanding the Sobriety Treatment and Recovery Teams (START) model to additional communities.