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EDITORIAL

Preventing HIV and Hepatitis Infections Among People Who Inject Drugs: Leveraging an Indiana Outbreak Response to Break the Impasse

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Abstract Providing clean needles through syringe services programs (SSPs) prevents the spread of disease among people who inject drugs (PWID). The recent HIV outbreak in Scott County, Indiana was a wakeup call with particular significance because modeling suggests that Scott County is but one of many counties in the United States highly vulnerable to an HIV outbreak among PWID. It is a painful recognition that some policy makers ignored the evidence in support of SSPs when it was primarily blacks in inner cities that were affected, yet swung into action in the wake of Scott County where 99% of the cases were white. Too many Americans have been taught to shame and shun drug users (irrespective or race or ethnicity). Therefore, we need lessons that afford benefits to all communities. We need to understand what made opinion leaders change their views and then change more hearts and minds before, not after the next outbreak.

Resumen El suministro de agujas limpias a través de programas de servicios de jeringa (SSP) evita la propagación de la enfermedad entre las personas que se inyectan drogas (PWID). El reciente brote de VIH en el condado de Scott, Indiana, fue una llamada de atención con particular importancia porque el modelado sugiere que el condado de Scott es uno de muchos condados en los Estados Unidos altamente vulnerable a un brote de VIH entre PWID. Es un doloroso reconocimiento que algunos políticos ignoraron la evidencia en apoyo de los SSPs cuando fueron principalmente negros en las ciudades internas que fueron afectados, sin embargo, entró en acción tras el condado de Scott, donde el 99% de los casos eran blancos. Demasiados estadounidenses han sido enseñados a avergonzar y evitar a los consumidores de drogas (independientemente de su raza o etnia). Por lo tanto, necesitamos lecciones que proporcionen beneficios a todas las comunidades. Necesitamos entender lo que hizo a los líderes de opinión cambiar sus opiniones y luego cambiar más corazones y mentes antes, no después del próximo brote.

Keywords HIV · Syringe services programs (SSPs) · People who inject drugs (PWID) · Scott County · Medicaid

Introduction

The evidence has been clear for decades. Providing clean needles through syringe services programs (SSPs) prevents the spread of transmittable disease among people who inject drugs (PWID) and offers a bridge to addiction treatment services [1]. The effectiveness of SSPs at preventing HIV is rarely matched by other HIV prevention interventions for PWID [2]. According to Centers for Disease Control and Prevention (CDC), the sharpest decline in HIV diagnoses between 2005 and 2014 were among PWID (declining 63% during this period) [3]. Because controlling HIV among PWID has been an unequivocal public health success, the recent HIV outbreak in Scott County, Indiana was a wakeup call to everyone. This is of particular importance since CDC modeling suggests that Scott County is not unique, but one of many counties, concentrated in the southern United States (US),

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with a high incidence of Hepatitis C infections that are also highly vulnerable to an HIV outbreak among PWID [4].

Scott County, a rural county in the southern part of Indiana, experienced an outbreak of HIV infection, starting in late 2014, tied to injection of the opioid drug Oxycodone. Whereas the county had averaged only about 5 HIV diagnoses per year in the past [5], 181 cases were diagnosed from November 2014 through November 2015 [6]. Ninety-two percent were co-infected with Hepatitis C and phylogenetic testing revealed that the overwhelming majority of cases (157 of 159 cases who had blood specimens tested) were linked to one infected person who was introduced into the county's network of PWID [6]. The outbreak eventually led to a comprehensive response from state and federal authorities. By May 2015, Governor Mike Pence (now the Vice President of the US) had signed into law a statute that authorizes the establishment of SSPs by counties and municipalities in certain circumstances [7].

In this issue of the journal, Myerson and colleagues examine policy adoption by jurisdictions since this law was enacted [8]. They note that 24 Indiana counties have engaged in SSP planning and they describe challenges that these counties have faced in actually establishing SSPs due to historic underinvestment in public health services and constrained capacity to design and implement these programs. Myerson's study makes a case for a "commons" approach to SSP implementation and describes challenges due to constraints of the law and perhaps, policy views of some staff of the Indiana State Department of Health. We believe that Myerson's study provides practical insights into implementation of SSPs, especially in resource-constrained environments. We aim here to reflect on a different component of policy change. What happened in Scott County challenged the conception of many policy makers and members of the public of "who" abuses drugs and forced many to grapple, perhaps for the first time, with whether shunning people and ignoring drug use is an effective way to protect their families and communities. Scott County provides an opportunity to look at drug abuse anew and adopt more effective approaches to preventing it and the harms that arise from it. How can we spur this dialogue?

Lessons from Scott County

Of particular interest are the demographics and the corresponding response to the Scott County outbreak. As with US heterosexuals affected by HIV, until recently, the largest number of HIV infections among PWID in the US were among blacks that resided in urban areas [9]. For many persons, it is a painful recognition that some policy makers in Congress and some state legislatures ignored the evidence in support of SSPs and gave a low priority to funding services for people who use drugs when it was primarily blacks in inner cities who were affected. State, local and national policy makers, however, seemingly moved mountains and swung into action in the wake of Scott County where 99% of the cases were white [6]. Although there is more than an element of truth to this assertion, the issue is more complex. Too many Americans have been taught to shame and shun drug users (irrespective or race or ethnicity). Many Americans think of people who abuse drugs as 'others' apart from themselves—weak persons with moral deficits. This estrangement is magnified when race is introduced. Therefore, we need to find lessons from the Scott County response that afford benefits to all communities. Five such lessons include the need to:

Bolster State and Local Public Health Systems

Drug abuse and disease transmission do not exist in isolation. Communities heavily impacted by these challenges also tend to be facing poverty, and have high rates of unemployment, incarceration, or other challenges. While public health cannot solve every social ill, a notable cause of the outbreak was the lack of basic services and the weak public health infrastructure along with above average joblessness. Indiana often ranks last among the states on its public health capacity, and Scott County is among the poorest counties in the state, that has historically had some of the worst health outcomes [10]. State and federal legislators seem to perceive public health as an abstract, low priority item that does not primarily benefit taxpaying voters and competes poorly with tax cuts or investment in roads or other public services. In recent years, the state has slashed funding for public health resulting in the sole Planned Parenthood Clinic serving the county closing its doors [11]. Cumulatively, it will cost an estimated $59 million for lifetime HIV care for those infected during this outbreak, illustrating the price that can be paid for the lack of investment in basic public health services [12].

Develop Integrated Approaches to Prevention, Treatment, and Support for Recovery

One of the notable features of the drug using patterns observed in Scott County was its intergenerational nature, with three generations of some families using drugs together—as well as the fact that women were just as likely as men to abuse drugs and become infected with HIV. Most PWID cases nationally have historically occurred among men. Given the important role of family in supporting health, this complicates efforts, as other family members may be triggers or facilitators of drug abuse. Therefore, new efforts may be needed to promote resiliency among

children and youth and expand funding for interventions that prevent drug abuse, at even younger ages than in the past. In 2016, the Surgeon General issued a comprehensive assessment of addiction in America providing the available evidence for responding to a spectrum of needs from prevention to treatment to recovery [13]. In addition to providing for testing and screening for infectious diseases, states and local governments also should consider scalable programs and services that prevent drug abuse, provide drug treatment, and support recovery.

Protect Medicaid's Ability to Respond to the Opioid Crisis

At a time when Washington is consumed with whether and how to change or dismantle the Affordable Care Act (ACA), a key component of which is the Medicaid expansion, the exploding opioid crisis once again demonstrates the central role of Medicaid in protecting the public health. Just as when HIV first came along and Medicaid was there to shoulder the response to caring for people with AIDS, or after the 9–11 terrorist attacks and New York State implemented Disaster Relief Medicaid, or when states affected by Hurricane Katrina turned to the program to help people displaced by the natural disaster, Medicaid is the most powerful tool available to states to combat the opioid crisis. Medicaid is the largest purchaser of behavioral health services in the US (including services for persons with substance use disorders) and the expansion population who gained Medicaid coverage through the ACA, many of whom are single adults, is more likely to have a substance use disorder than previously eligible Medicaid beneficiaries [14].

The most effective way to prevent opioid dependency (which reduces the risk of HIV and other disease outbreaks) and overdose deaths is to identify and treat mental health issues, substance abuse, and physical health problems before substance use disorders develop [15]. Medicaid greatly facilitates access to such timely services. Expanded Medicaid has particularly benefitted states hit hardest by the opioid epidemic [15]. Moreover, while private insurance covers a range of behavioral health services, Medicaid programs tend to have broader coverage that is more appropriate to preventing and treating opioid dependence, including greater coverage of buprenorphine and naloxone, medications used to treat opioid withdrawal [16]. As states respond to the opioid crisis, there is a natural learning curve that is creating greater knowledge of effective interventions such as SSPs. At least one state, New York, has requested federal approval to add some harm reduction services to their Medicaid program [17].

Push the Envelope to Deliver Innovative Services that Further Minimize the Harm from Drug Abuse While Increasing Treatment Uptake

Both of us served in senior policy making roles in the last Administration (as Director and Senior Policy Advisor in the White House Office of National AIDS Policy, ONAP, respectively) when the Congress was debating and enacting changes to the ban on federal support for SSP services in 2010. At the time, we believed that the most effective approach was to go slowly and solidify support for SSPs before tackling other more controversial or misunderstood interventions. As time has passed, however, and as the recognition of the opioid crisis has grown, a go-slow approach is insufficient.

It is time to test and implement medically supervised safe injection facilities (SIFs) in the US. Just as with SSPs, the concept of creating a space where individuals can bring illicitly obtained drugs and use them without risk of sanction by law enforcement seems inappropriate to some. Experience from the first North American SIF (established in British Columbia, Canada), however, has shown impressive results. This includes reducing needle sharing [18], achieving a 70% greater likelihood of entry into drug detoxification programs [19], a 35% decline in overdose deaths in the first two years after the SIF was opened [20], and the prevention of an estimated 84 infections annually with savings in lifetime HIV care costs totally approximately $18 million [21]. Impressive results notwithstanding, the deployment of SIFs—like SSPs—calls for further experimentation and implementation research on different models and how to legally deploy and finance SIFs in various localities and settings across the US. Indeed, in January 2017, Seattle and King County (of which the city of Seattle is a part) approved the establishment of two new SIFs (one in the city of Seattle and one elsewhere in the county) [22]. Policy makers must be pushed to support programs and demonstration projects for comprehensively addressing the medical and social conditions underlying rising overdose deaths, drug abuse and addiction while concomitantly working to educate the public about the value of new tools to further reduce the likelihood of HIV or HCV infections and drug overdoses.

Foster Local Responses Based on Community Engagement and Support

Prior to the outbreak, SSPs were prohibited in Indiana. In an interesting chronology of how the unfolding crisis led Governor Pence to eventually support SSPs, Megan Twohey in the *New York Times* shows how the rapid growth of HIV diagnoses created urgency, but it was the voices of a local leader, the Scott County Sheriff, as well as the State

Health Commissioner that played a critical role in persuading the Governor to change his mind and allow SSPs to be established [23].

As important as good science and strong advocacy are to changing policy, for an issue such as this that is grounded in deeply held moral views, community members and local leaders are often the most effective messengers for policy adoption. It may be that recounting the experience following the Scott County outbreak can show skeptics in other parts of the country that now is the time to take action. As discussed, it was not only the Governor, but also legislators, law enforcement, public health, religious and other community voices that were critical to achieving momentum for change. We cannot let only our coastal cities or large urban areas perfect models to be told later that they will not work or will not be accepted in rural America or more conservative places in the country.

Conclusions

At the federal level, after modifying the ban on federal funding for SSPs in 2010, the Congress re-instated a complete ban in 2011. Nonetheless, in 2016, in response to the Scott County outbreak and increasing urgency to address the opioid crisis, congressional leaders who had previously been the most hostile to public support for SSPs negotiated their own modification of federal law to bar federal funds only from actually purchasing syringes, but permit such funds to pay for the operation of programs and the provision of services that are integral to effective SSPs [24]. While the ideal policy change would have gone further, this is a major step forward.

More insistently exclaiming the science in support of SSPs, on its own, is not likely to offer a path forward. Rather, the opportunity may be in trying to understand what it was that made Governor Pence, congressional leaders, and others look at people newly infected with HIV and hepatitis with compassion instead of derision and find approaches to achieving this type of change of hearts and minds before, not after the next outbreak.

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