



Historical and Current Trends in HIV Criminalization in South Carolina: Implications for the Southern HIV Epidemic

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Abstract

In the 1980s, human immunodeficiency virus (HIV) criminalization laws became widespread across the United States. Today, such laws continue to be used to prosecute people living with HIV for a variety of behaviors though there is limited evidence that doing so curbs HIV transmission. HIV criminalization remains understudied, especially in the Deep South. Therefore, the purpose of this paper was to trace the emergence, maintenance, and enforcement of HIV criminalization laws in South Carolina—a Southern state disproportionately burdened by HIV. Specifically, Nexis Uni and other criminology databases were used to identify HIV-related laws and criminal cases in South Carolina. Results indicate that the state's criminalization laws have remained nearly unchanged for over 30 years and continue to be used to prosecute individuals, a majority of whom are African–American. Findings support the need to reconsider HIV-related laws and devote more efforts to studying the impact of HIV criminalization on the Southern epidemic.

Keywords HIV · Criminalization · Criminal justice · Stigma · Southern US

Introduction

In the 1980s, legislators began to enact laws in jurisdictions across the United States (US) that criminalized various aspects of human immunodeficiency virus (HIV) and were intended to reduce HIV transmission [1–3]. Today, many such laws remain enforced, particularly in the Southern US, which bears a greater burden of HIV morbidity and mortality than any other region [4]. Examining criminal laws related to HIV provides an opportunity to understand how the criminalization of a medical condition impacts not only the individuals accused of such crimes, but also the broader public discourse and societal attitudes surrounding the health condition.

Emergence of HIV Criminalization Laws in US

Following the first reported US cases in 1981, HIV incidence increased rapidly, quickly exacting a staggering toll, particularly among men who have sex with men (MSM) [5]. By 1983, the CDC had identified all major routes of HIV transmission, (i.e., sexual contact, contact with contaminated needles or infected blood) and had ruled out the possibility of acquiring HIV through casual contact, food, water, air, or environmental surfaces [6]. In the mid-1980s, lawmakers—in response to the demands of vocal constituents, religious groups, and politicians—began to rapidly enact legislation across the US to criminalize HIV-positive individuals who allegedly exposed others to the virus [7]. Early HIV criminalization laws were developed within the context of a high mortality rate, lack of understanding of the virus, and general fear and panic among the public. The primary aim of such laws was to control the behaviors of people living with HIV (PLHIV) and thus presumably reduce the spread of the virus. In 1990, passage of the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act ushered in a new era of federal HIV legislation. States that received federal funding through the CARE Act (e.g., for testing, surveillance systems, treatment, etc.) were required to have legal mechanisms to prosecute HIV-positive individuals who knowingly

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exposed others to the virus [8, 9]. Of note, HIV criminalization laws are not exclusive to the US, but, in fact, are present in around 70 nations despite lack of evidence that punitive measures reduce transmission [9].

Initially, US prosecutors often used general criminal laws against various violent crimes (e.g., assault, battery, reckless endangerment, attempted murder) to charge PLHIV who allegedly exposed others to the virus [7]. Cases tried using general criminal law in the 1980s prosecuted a variety of behaviors, ranging from biting and spitting, to the case of a Virginia man who was accused of “infected sexual battery” when he transmitted HIV to his wife through sexual intercourse [10]. In the US, both a criminal act and criminal intent must typically be present for an individual to be found guilty of a crime [11]. However, intent is often difficult to prove in cases of HIV transmission. This is one likely reason that states began to implement HIV-specific laws that criminalized perceived exposure behaviors, regardless of intention to cause harm. According to the Center for HIV Law and Policy [12], between 1986 and 2017, 34 states, two territories, and the federal government enacted HIV specific legislation that prohibited PLHIV from engaging in a variety of behaviors (e.g., sexual activity, sex work, needle sharing) without first disclosing their HIV-positive status.

Variation in HIV-Related Laws Across the US

Across US jurisdictions, HIV criminalization laws vary to a large extent in regard to the specific acts that are prohibited and their corresponding penalties. Disclosure of positive serostatus to sexual partners and/or needle-sharing partners is required in 24 states [13]. Twenty-five states prohibit one or more acts that pose low or negligible risk for HIV transmission, such as oral sex, biting, spitting, or throwing bodily fluids [13]. Additionally, various practices currently known to be safe, such as manual stimulation, are prohibited in a number of jurisdictions [14]. Only four states recognize condom use as a defense, and none appear to take other risk reducing factors into account, such as adherence to antiretroviral therapy (ART) or pre-exposure prophylaxis (PrEP) [13]. Several statutes do not specify the actual behaviors that are criminalized, but rather simply prohibit any act that exposes another person to HIV, which has been criticized as “unconstitutionally vague” [10]. Moreover, statutes in a few states have been so ambiguously worded as to criminalize exposure to HIV regardless of whether a person’s positive status has been disclosed, in effect criminalizing every act of sex among all PLHIV [15].

In 2013, bipartisan legislation was introduced in the US Congress that called for a review of federal and state HIV-specific laws, policies, and regulations. This legislation—collectively known as the Repeal Existing Policies that Encourage and Allow Legal HIV Discrimination Act of

2013 (i.e., REPEAL HIV Discrimination Act of 2013) called for (1) a joint review of criminal and civil cases against PLHIV to be undertaken by the Department of Health and Human Services, Department of Defense, and Department of Justice, and (2) the development of guidance and best practices regarding HIV criminalization for US states. The proposed legislation also would have established a monitoring and evaluation system to ensure that states were making progress toward achieving such recommendations; however, the legislation stalled after referral to appropriate committees and subcommittees, and thus US states continue to have widely varying policies and laws.

Criticisms of Current HIV Criminalization Laws

Since the emergence of HIV criminalization laws in the 1980s, scientific understanding of the virus has radically advanced, and effective means of preventing transmission have been developed. Most notably, the advent of combination ART and evidence for “treatment as prevention” (TasP) has ushered in a new era of HIV prevention [16, 17]. With adherence to ART, the virus can now be suppressed, and rapidly accumulating evidence suggests that with an undetectable viral load, an individual has effectively no risk of transmitting HIV to another person [18–20]. HIV criminalization laws, however, have largely failed to make comparable advances to reflect current scientific evidence on transmission.

Thus, statutes reflect the climate of the period in which they were enacted—including an exaggerated perception of the risk of transmission, public fears of “contamination”, and a penchant for punishing PLHIV. Since this time, scientific understanding of the virus has drastically increased, yet most legislation remains unchanged, resulting in a disconnect between the current state of HIV science and how HIV is treated within the legal context. In 2010, the Obama administration released its National HIV/AIDS strategy, which stated that it may be necessary to reexamine existing laws to ensure they adequately promote public health and are in the best interests of the public [13, 21]. A 2014 report sponsored by the Department of Justice and the CDC [22] recognized that many state laws prohibit conduct that is highly unlikely to transmit the virus, and that most laws do not consider measures known to reduce the risk of transmission, such as condom use, ART, or PrEP. The report encouraged states to “assess the laws’ alignment with current evidence regarding HIV transmission risk, and consider whether the laws...achieve their intended purposes” [22, p. 997]. These recommendations, however, are not legally enforceable, and many state legislatures are unlikely to seriously consider them since there is little incentive to do so.

Another criticism of current HIV criminalization laws is that the associated penalties have historically been harsh.

HIV exposure is a felony offense in all but two states that have such legislation [13]. Among states that have felony penalties, the average minimum sentence is 11 years [23] and maximum sentence ranges from 10 to 20 or more years [13]. Critics argue that such sentences are far more severe than penalties for violent crimes such as assault and rape, which tend to result in prison sentences ranging from 1 to 10 years [14]. Many have also argued that HIV criminalization may hinder access to care, treatment, and support [24], as well as exacerbate HIV-related stigma [25–27]. A broader concern is that such laws disproportionately impact vulnerable members of society [28, 29].

Potential Impacts of HIV Criminalization

Theoretically, prohibiting acts with laws that mandate punishment for violation should deter individuals from engaging in such acts [30]. Based on the context at the time HIV criminalization laws originated, it can be assumed these laws were intended to prevent PLHIV from engaging in behaviors that were believed to transmit HIV. The potential advantage of such laws then, lies in their ability to change the behavior of PLHIV in ways that would reduce HIV transmission. Some initial attempts have been made to examine the impacts of HIV criminalization, and these generally suggest that criminalization is unlikely to produce the desired behavioral changes [8, 31]. One recent modeling study demonstrated that state laws criminalizing HIV exposure are negatively associated with HIV testing (and subsequent diagnoses) and positively associated with increased HIV prevalence [32]. This study supports the notion that criminalization laws may undermine HIV prevention efforts by discouraging routine HIV testing [33, 34] and by making it less likely that PLHIV will disclose their positive status to others [25, 35, 36].

A reexamination of HIV criminalization may be most urgently needed in the Southern US. Over the past two decades, the epicenter of the US HIV epidemic has rapidly shifted from eastern and western urban centers to the “Deep South” [4]. Eight of the 10 states with highest rates of HIV incidence are found in the South, and Southern states now account for 44% of new HIV diagnoses [37, 38]. The drivers of this regional disparity are numerous and intersecting, likely including both socio-cultural factors (e.g., socio-religious norms, racism, stigma and discrimination toward sexual and gender minorities) and structural factors (e.g., high poverty, poor healthcare access) [39, 40]. South Carolina is representative of the HIV challenges faced by the Southern region. The state currently ranks 7th in the nation for HIV diagnoses (i.e., rate of 18.1 per 100,000) and AIDS cases [41]. In addition, only 53% of PLHIV in South Carolina are estimated to be virally suppressed [42].

Present Study

In the past decade, the center of the US HIV epidemic has shifted to a nine-state region of the “Deep South” (i.e., Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas) [43]. The current National HIV/AIDS Strategy specifically targets this geographic area due to its significant HIV disparities, and many efforts are underway to improve the HIV care continuum of the region [44]. However, few published studies have sought to trace the history of HIV criminalization in Southern states, describe case studies of individuals prosecuted for HIV exposure crimes, or understand how HIV criminalization may impact the broader epidemic. Thus this paper provides a scoping review and critical analysis of HIV criminalization in South Carolina. Specifically, we aim to (1) describe the emergence, maintenance, and enforcement of HIV-related statutes in South Carolina, and (2) document a sampling of recent (i.e., since 2009) convictions of PLHIV in South Carolina for exposure-related crimes.

Methods

To examine the development and maintenance of HIV exposure laws within South Carolina, a thorough examination of the state’s current and historical code of laws was completed. To understand enforcement of the laws, cases of individuals charged with exposing another person to HIV in South Carolina were identified through a multi-faceted web-based search that was completed with Nexis Uni, the HIV Justice Network, and Google. The search was performed by author DC in the Fall of 2018. Nexis Uni is an online database of legal sources that allow scholars to search cases by jurisdiction, state, keywords, and date. Within this platform, state-level HIV-related cases prosecuted in South Carolina were searched using the keyword “HIV”, with no date specifications. The HIV Justice Network is an online database of international news coverage on HIV-related court cases that allows users to search by case type, location, and date. This network was searched for alleged HIV exposure cases within South Carolina, again without any date specifications. Lastly, the broad-based search engine Google was also utilized to find any additional cases using keywords of “HIV”, “exposure”, “crime”, “transmission”, “charges”, and “South Carolina”. Cases were included in our analysis if they entailed an initial charge (i.e., not an appeal) of exposing another individual to HIV within South Carolina at any time period.

Next, all identified cases involving HIV exposure were confirmed through the South Carolina Judicial Department’s Case Records Search website. This case records search engine stores case record data from all 46 South Carolina

counties, and was used to obtain official data on case outcomes. Supplemental Google searches of each case were also performed to identify any associated media reports (e.g., local or state newspaper coverage, local or national television coverage). The search revealed 11 individuals in South Carolina who have been charged and convicted of criminally exposing another individual to HIV. Some individuals had multiple charges, resulting in a total of 14 separate cases that were then reviewed. Following data extraction, authors SH and SQ confirmed inclusion of cases in the review.

Results

History and Content of South Carolina's HIV Criminalization Laws

South Carolina legislation includes laws that regulate several HIV-related services such as testing, screening, reporting, and treatment. However, the focus of this paper is on legislation that prohibits and criminalizes exposure to HIV. A search of relevant South Carolina legislation indicated that the South Carolina General Assembly first criminalized exposure to HIV in 1988 through the addition of a section to the state's criminal code (44-29-145 of Act 490) that stated, "it is unlawful for anyone infected with Human Immunodeficiency Virus (HIV), the virus which causes Acquired Immunodeficiency Syndrome (AIDS), to knowingly expose another person, through the sale, donation, or exchange of blood products or body fluids, to HIV infection without first informing the other person of the risk of exposure to HIV infection." Violation of this section was specified as a felony offense punishable by a fine of up to \$5000 or imprisonment up to 10 years. This original version was sufficiently vague to cover a wide variety of behaviors, and essentially served as a "catch-all" instrument that could be applied to any instance of HIV exposure. In 1990, the Ryan White CARE Act required states to have legislation enabling the prosecution of individuals who knowingly exposed others to HIV in order to receive federal funding for their HIV/AIDS programming. In response to this act, the South Carolina General Assembly amended section 44-29-145, maintaining the same punishments, but specifying more clearly the prohibited acts. Our examination of historical versions of South Carolina's code of laws indicates that no additional amendments have been made regarding this legislation. As such, current legislation specifies that it is "unlawful for a person who knows he or she has HIV to:

- (1) knowingly engage in sexual intercourse, vaginal, anal, or oral, with another person without first informing that person of his HIV infection;
- (2) knowingly commit an act of prostitution with another person;
- (3) knowingly sell or donate blood, blood products, semen, tissue, organs, or other body fluids;
- (4) forcibly engage in sexual intercourse, vaginal, anal, or oral, without the consent of the other person, including one's legal spouse; or
- (5) knowingly share with another person a hypodermic needle, syringe, or both, for the introduction of drugs or any other substance into, or for the withdrawal of blood or body fluids from the other person's body without first informing that person that the needle, syringe, or both, has been used by someone infected with HIV."

Data from the scoping review identified 14 recent cases of HIV criminalization in South Carolina, with demographic and criminal case details provided in Table 1. South Carolina's HIV criminalization law has remained unchanged since its sole amendment in 1990. The earliest prosecution identified by the scoping review occurred in 2009. Up to three HIV-related prosecutions per year have occurred since that year in South Carolina, with one case currently pending. Of the 11 convicted PLHIV, two were convicted of two counts of HIV exposure during the same trial, and one received separate convictions in 2009 and 2014. All others were convicted for one offense. The mean age of those convicted was 46 years, with an age range of 28–59. All defendants were male except for one, and the vast majority (45%) were African-American. Other races of defendants included Caucasian (27%) and Hispanic (18%). One individual was listed in court records as African-American and Hispanic. Among the 10 resolved cases, three cases went to trial; all others were resolved with a guilty plea. In regard to sanctions, one individual was sentenced to time served and immediately deported to Mexico. The remaining sentences ranged from 3 to 10 years of incarceration, with a mean sentence of 5.4 years. Most sentences also included a term of probation, which ranged from 6 months to 6 years. One individual was required to register as a sex offender.

Media reports retrieved from the web-based search indicate sexual activity was the method of exposure reported in all but two cases, for which this information was not specifically mentioned. Additionally, sex work was a factor in one case, and, in at least two cases, the individual was convicted of additional sexual offenses.

Case Studies of Recent HIV Exposure Prosecutions in South Carolina

The following case studies were extracted via the case search methodology described above, with additional details provided through reviewing relevant media. They provide

Table 1 Demographic and outcome data for individuals charged with HIV exposure in South Carolina, 2009 to present

Individual	Sex	Race	Year of birth	Means of alleged exposure	Date of disposition(s)	Disposition	Sentence
1	Male	Caucasian	1980	Unknown	10-21-2011	Pled/guilty	5 years imprisonment
1	Male	Caucasian	1980	Unknown	10-21-2011	Pled/guilty	5 years imprisonment
2	Male	Caucasian	1962	Unknown	11-11-2009	Trial/guilty	10 years imprisonment; 6 years probation
3	Male	African American	1974	Sexual activity	03-04-2010	Pled/guilty	3 years imprisonment
3	Male	African American	1974	Sexual activity	03-04-2010	Pled/guilty	3 years imprisonment
4	Male	African American	1968	Sexual activity	02-02-2009	Pled/guilty	4.5 years imprisonment
4	Male	Hispanic	1968	Sexual activity	04-07-2014	Pled/guilty	3 years imprisonment; 2 years probation
5	Male	African American	1970	Sexual activity	01-13-2016	Pled/guilty	5 years imprisonment
6	Female	African American	1972	Sexual activity via prostitution	12-20-2012	Pled/guilty	3 years imprisonment; 6 months probation
7	Male	African American	1972	Sexual activity	Pending	Pending	N/a
8	Male	Caucasian	1990	Sexual activity	06-29-2017	Trial/guilty	10 years imprisonment
9	Male	African American	1959	Sexual activity	07-27-2017	Trial/guilty	10 years imprisonment
10	Male	Hispanic	1978	Sexual activity	02-23-2011	Pled/guilty	Time served
11	Male	Hispanic	1966	Sexual activity	12-14-2015	Pled/guilty	3 years imprisonment; 1 year probation

illustrative examples of legal enforcement of South Carolina's HIV exposure legislation.

Arnold¹

Arnold, a 38-years-old white man from Aiken, South Carolina was arrested in January, 2011 on multiple charges, including first-degree harassment and exposing an individual to HIV. The investigation began when a woman pregnant with Arnold's child discovered his prescription for ART and contacted police. After initial charges were filed, a media report indicated that additional victims came forward from South Carolina as well as Georgia, but no information on these victims or any additional charges were provided. According to the solicitor, none of the victims acquired HIV. In October, Arnold pled guilty to two counts of HIV exposure; all other charges were dropped. As a result, Arnold was sentenced to 5 years in prison for each count, to be served concurrently.

David

David, a 50-years-old African-American man from Spartanburg, South Carolina was arrested in 2008 for allegedly exposing his girlfriend to HIV. The woman discovered she had acquired HIV through prenatal testing and pressed charges against David, who was sentenced to four and a half

years in prison after pleading guilty. In 2014, David was convicted again on the same charge for an exposure that had occurred prior to his first conviction. In this case, the victim did not acquire HIV and reportedly asked prosecutors to drop the case. The solicitor's office, however, stated that they "felt compelled to continue with the prosecution", and David was sentenced to another 3-years prison term.

Christina

Christina, a 46-years-old African-American woman from Rock Hill, South Carolina, was convicted of exposing another to HIV in 2012. The investigation began when a local man reported to police officers that he had picked up a local sex worker, engaged in sexual intercourse, and later discovered that she was HIV-positive. Christina was sentenced to 3 years in prison. Details regarding the use of condoms or other protective measures to reduce the risk of HIV transmission were not provided. Records do not indicate whether the alleged victim acquired HIV or if the victim was charged with solicitation of prostitution.

Luis

Luis, a 40-years-old Hispanic man from Latta, South Carolina, was convicted of exposing a person to HIV in 2010. The investigation began when Luis's girlfriend found his ART and contacted the police. Details regarding the use of condoms or other protective measures to reduce the risk of HIV transmission were not provided. Nor was it stated

¹ To protect privacy, all names have been changed.

whether the victim acquired HIV. Luis spent 5 months awaiting trial at which he plead guilty. Luis was sentenced to time served and was immediately detained by US Immigration and Customs Enforcement on immigration charges. He was deported to Mexico shortly afterward.

Discussion

A critical analysis of South Carolina's HIV criminalization law reveals several inherent problems. First, conviction requires neither intent, transmission, nor evidence that the behavior poses a risk of transmission [12, 14, 23]. While intent is generally a requirement for criminal guilt in US courts, South Carolina's law was developed such that a person only need be aware of their own HIV status to indicate the presence of intent. Further, achieving viral suppression (i.e., TasP) and the use of PrEP by partners of those living with HIV are both now recognized as highly effective strategies to prevent transmission [18–20, 45–47]. These tools were not available when the South Carolina law was enacted and are not recognized as legal defenses against prosecution. Sexual behaviors that are prohibited by the law are vaguely defined and include acts such as oral sex that have been found to pose little to no risk of transmission [48, 49]. These characteristics of the law enable PLHIV to be prosecuted and sentenced to prison for engaging in consensual sexual activities that pose a non-existent risk of HIV transmission.

South Carolina's law may also unfairly discriminate against PLHIV by enforcing increased penalties on HIV-positive individuals for engaging in sex work when compared to the general public. Specifically, a person who is HIV-negative faces a penalty of up to 30 days in prison and/or a fine of up to \$200 for a first-time offense of prostitution in South Carolina, whereas the penalty for the same crime, committed by a PLHIV, is significantly greater—\$5000 or 10 years in prison. Importantly, South Carolina legislation defines prostitution as “engaging or offering to engage in sexual activity with or for another in exchange for anything of value” (S.C. CODE ANN.§ 16-15-375), which indicates that an individual need not actually engage in any sexual activity to be prosecuted, but simply propose an offer of services. Furthermore, the state defines sexual activity broadly to include behaviors such as masturbation; the touching of clothed or unclothed genitals, pubic area, buttocks, or female breasts; acts that depict bestiality, sadomasochistic abuse, or being physically restrained; or simulation of any of these activities (S.C. CODE ANN.§ 16-15-375). Based on these definitions, it is again legally possible for a PLHIV to be convicted and penalized with a \$5000 fine or 10 years in prison for committing an act that lacks any risk of HIV transmission.

The law also enforces harsher penalties for the exposure of HIV than for exposure to other sexually transmitted infections (STIs). South Carolina defines a number of STIs as dangerous to public health, including syphilis, gonorrhea, genital herpes, chlamydia, hepatitis B, hepatitis C, and pelvic inflammatory disease (SC CODE ANN.§ 44-29-60). The South Carolina Code of Laws declares that “it is unlawful for anyone infected with these diseases to knowingly expose another to infection” (S.C. CODE ANN.§ 44-29-60). However, criminal STI exposure is classified as a misdemeanor and punishable by a fine of up to \$200 or imprisonment up to 30 days—a substantially more lenient punishment than for HIV exposure. During the 1980s and 1990s, when such laws were developed, HIV was perceived as a far more serious health condition than STIs [14]. However, given the development of highly effective ART, this distinction may no longer be appropriate.

A case search of legal databases and other sources, with subsequent confirmation from state records, provides evidence that HIV exposure laws are currently being used to prosecute PLHIV in South Carolina. While the state's HIV exposure law has been in existence since 1988, the first conviction that we found evidence for occurred in 2009. This is notable when considering the ways that the epidemiologic profile of HIV epidemic has shifted from the 1980s to the present day. Specifically, in the 1980s, the US HIV epidemic largely impacted white MSM in metropolitan areas. Since that time, the epidemic has shifted to be one that disparately impacts individuals from racial and ethnic minority groups—most notably African Americans. While African Americans comprise 28% of South Carolina's total population, they currently make up 69% of PLHIV in the state [42]. In South Carolina, it is worthwhile to note that no identified HIV exposure convictions occurred in the 1980s or 1990s, during which time the epidemic was largely concentrated in the white MSM community. Data suggest the vast majority of individuals charged with HIV-related crimes in South Carolina are African-American males. While this mirrors the state's current epidemiologic profile, the initiation of prosecutions after the shift of the HIV epidemic to the African-American community should prompt careful examination of the role that race plays in HIV criminalization. Social inequities, structural racism, and implicit and explicit individual biases all likely contribute to the vast overrepresentation of African-American individuals in the US justice system, with African Americans currently 5.1 times more likely than whites to be incarcerated [50, 51]. Increased efforts are needed to understand the intersection of current disparities in the US criminal justice system and the HIV epidemic.

In addition, although major scientific advances have occurred since the 1988 passage and 1990 amendment of South Carolina's criminalization law, no further changes to

the law have been made. As currently written, South Carolina's law does not require transmission of HIV for a criminal act to take place. In fact, even behaviors that have zero risk of transmission can result in a felony conviction. From court case documentation and supplemental media data that were reviewed in the current study, among 11 recent convictions for HIV exposure in South Carolina, HIV was documented to have been transmitted in only one case. Current criminalization laws in the state do not require either intention or actual transmission for felony conviction to occur. In addition, the risk of transmission is not taken into account. Strong scientific evidence now suggests that PLHIV who are virally suppressed have effectively no risk of transmitting HIV to others, prompting the launch in 2016 of the "U=U" ("Undetectable=Untransmittable") campaign [52], which has been endorsed by over 760 organizations across 100 countries. There is optimism that the U=U consensus statement will aid in the reduction of HIV-related stigma, and efforts to reduce or end HIV criminalization may also help to achieve this goal.

HIV exposure laws have likely played a role in the development and maintenance of HIV-related stigma over the past decades by generating fear and mistrust, as well as exacerbating distinctions between PLHIV and seronegative individuals [14]. Moreover, the discriminatory nature of South Carolina's exposure law in imposing harsher penalties on HIV exposure than other exposure of infectious diseases (e.g., syphilis, hepatitis) may serve to discredit and devalue PLHIV [14]. Negative public attitudes toward HIV are a determinant of internalized stigma among PLHIV [53, 54], which, in turn, may negatively influence individual health behaviors, such as HIV testing or disclosure [55–58]. Thus, criminalization of HIV-related behaviors may actually undermine the prevention efforts that drove the laws' initial creation.

Limitations

This study has a number of important limitations that should be noted. First, the study is limited by the nature of databases that capture information on HIV-related prosecutions in South Carolina. While the databases and search engines utilized in this review were able to locate a number of cases of South Carolinians charged with exposing another to HIV, the search methods are unlikely to produce an exhaustive list of such cases. For instance, the Center for HIV Law and Policy's current Sourcebook on State and Federal HIV Criminal Law and Practice [30] reports that two cases of HIV-related prosecution occurred in South Carolina in 2007 and 2008. Neither of these cases were found using search terms and search engines employed for the current study. As such, this scoping review should not be considered exhaustive.

Future studies may wish to partner with the office of the state's attorney general to ensure access to comprehensive and potentially restricted statewide records. In addition, we selected a diverse collection of prosecutions to highlight as case examples of recent South Carolina prosecutions. We did not employ a particular sampling strategy to do so, and thus the highlighted cases should not be presumed to be representative of the broader group of prosecuted individuals.

Conclusions

There appear to be few empirical reasons to maintain South Carolina's HIV criminalization laws in their current state. Policy makers should work closely with public health, criminal justice, and legal scholars, as well as with infectious disease specialists, to ensure that any HIV-related laws reflect current scientific evidence. Additional research is urgently needed to evaluate the impacts of HIV criminalization on the general public and individuals living with HIV. Finally, because HIV criminalization may inadvertently worsen HIV outcomes through deterring testing and disclosure [32], examining the impact of criminalization on the HIV epidemic in the Southern US is critical for efforts to improve HIV outcomes in the region.

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Compliance with Ethical Standards

Conflict of interest All author declares that have no conflict of interest.

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