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Systematic Review

Revision of Maryland Minor Consent Law on Human Immunodeficiency Virus Infection Prevention: An Outcome of Advocacy

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ABSTRACT

Objectives
To date, only few United States (US) states have explicit regulations that allow minors to independently give consent for human immunodeficiency virus infection (HIV) prevention treatments. This manuscript will reflect upon key advocacy efforts leading to the revision of the Maryland Minor Consent Law, evaluate current human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) prevention laws for minors in U.S. states, and highlight resources for health advocacy.

Methods
Between 2018-2019, public health professionals in Baltimore, Maryland reviewed the Maryland Minor Consent Law and other adolescent consent laws within the U.S. The professionals advocated for a legal review of the gap by the State Senate and the Office of Attorney General.

Results
In May 2019, the public health advocates were successful in their effort for a revision of the Maryland Minor Consent Law to include Treatment for the Prevention of HIV-Consent by minors. Upon their review of all adolescent consent laws within the U.S., they found that only eleven states currently have explicit language indicative of an adolescent's ability to give consent for pre-exposure prophylaxis (PrEP).

Conclusion
This inquiry can change upstream factors such as laws, regulations, policies and institutional practices.

Keywords
HIV, Prevention, Pre-exposure prophylaxis, Adolescents, Minor consent law.

INTRODUCTION

The prevention of human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS)remains an ongoing problem for the United States (US) and many countries around the world. In the US, nearly 1.1 million people are currently living with HIV.[1] In 2018 approximately 37,968 people were diagnosed with HIV in the US and dependent areas of American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the US Virgin Islands.[2] Among those people diagnosed with HIV, 69% were gay, bisexual and other men who have sex with men (MSM), 24% were heterosexuals, and 7% were individuals who inject drugs.[2] Youths aged 12-24-years make up more than 20% of HIV diagnosis in the US; this age group has the lowest rates of antiretroviral (ARV) therapy uptake and adherence, and the lowest level of awareness of their HIV status

among all age groups.[3] Despite well-documented progress in the treatment of individuals living with HIV in the US, much work is still needed to prevent HIV infections, especially in young adults and adolescents. Data shows that between 2012 and 2016, HIV diagnoses among adolescents and young adults in the US increased by six percent, while rates of HIV diagnoses among adults decreased or stabilized during the same period.[4] Maryland was ranked sixth among U.S. states and territories in adult/adolescent HIV diagnoses rates at 19.6 per 100,000 in 2018.[5] Sadly, Maryland youths aged 13-24-years accounted for 19.2% of the 994 new HIV diagnoses in 2018, with 56 of the new HIV diagnoses among people younger than age 20.[6]

Adolescents, Risky Behaviors and Pre-Exposure Prophylaxis

Hosek et al[7] the World Health Organization (WHO) and the United Nations (UN) describe adolescence as a phase in the growth and development of humans following childhood and before adulthood, from ages 10 to 19.[7] In this paper, we adopt the definition of "adolescents" used by Allen et al[8] which refers to youth under age 18-years and "young adults" between ages 18-24-years.[8] Adolescence is a unique developmental phase where many young individuals are identifying and expressing their sexuality.[9] Undeniably, this stage comes with risks and dangers that manifest as sexually transmitted infections (STIs), HIV, and unplanned pregnancies.[9] During this phase, many seek autonomy and their actions can have life-threatening consequences.[10] Although adolescents' brain maturation increases their impulsivity and thrill-seeking tendencies, they possess the essential qualities required for effective decision making especially decisions related to maximizing their protection against certain important risks.[10]

Heterosexually active young women and young gay, bisexual, and other men who have sex with men (YGBMSM) are the subgroups with the most vulnerabilities and greatest burden of disease.[11] Other at-risk adolescents and young adults include those who inject drugs, youth involved in sex work or those who are sexually exploited, and young transgender women with male sexual partners.[11] Moore et al[12] suggest that high rates of HIV infection among individuals aged 13-24-years, who account for 26% of new HIV infections in the US, make this age group an excellent target population for primary prevention. Tanner et al[13] also support efforts to prevent HIV among adolescents because adolescents who end up acquiring HIV may be at increased risk for poor medication adherence, for difficulty achieving viral suppression, for viral rebound, and for loss to follow-up when compared to adults with HIV. Adolescents may bear other risks such as transmitting the virus to others, developing antiretroviral resistance, and having a compromised immune system.[13] To identify challenges faced by HIV-infected adolescents, Kapogiannis et al[14] conducted a multisite initiative to investigate the referral, linkage, engagement and retention in HIV care among youths aged 12-24-years who were receiving care at 13 urban HIV care centers in the US. Barriers included poor linkage to care, poor engagement in care, and lower rates of viral suppression which might ultimately affect HIV-infected youths' care continuum outcomes.[14] Among 1,411 HIV-positive youth, 1,053 (75%) were linked to care, 839 (59%) were engaged in care, and 473 (34%) were retained in care; 474 youth (34%) were started on antiretroviral therapy, but only 166 (12%) achieved viral suppression.[14]

Oral-Pre-Exposure Prophylaxis and Human Immunodeficiency Virus Infection Prevention

Moore et al[12] define pre-exposure prophylaxis (PrEP) in the context of HIV as "*the use of antiretroviral medications in HIV-negative individuals to prevent HIV transmission.*" For individuals who are at risk, oral PrEP in the form of Truvada is available, and when taken correctly, is more than 90% effective in preventing HIV infection.[15] In 2012, the U.S. Food and Drug Administration (FDA) approved Truvada as daily oral PrEP for use in at-risk adults over age 18.[15] Relatedly, in 2018, Truvada was approved for use in at-risk adolescents weighing at least 77 pounds (35 kg).[13,15] To decrease the risk of HIV infection from sex, Descovy was also approved by the FDA in 2019 for HIV PrEP in at-risk adults and adolescents with the same weight indication, as an HIV-1 prevention treatment, excluding individuals who have receptive vaginal sex.[13,16]

Although, the U.S. Preventive Services Task Force (USPSTF) found sufficient evidence that PrEP is linked with minor harms, including adverse kidney and gastrointestinal effects, they concluded with high assurance that oral PrEP therapy to reduce the risk of acquisition of HIV infection in high-risk individuals is of significant benefit.[1] USPSTF made a recommendation that PrEP should to be offered with effective antiretroviral therapy to people at high-risk of contracting HIV,[1] including:

1. Sexually active men who have sex with men (MSM) and who report one of the following: a serodiscordant sex partner, inconsistent condom use while having receptive or insertive anal sex, or history of a STI with gonorrhea, chlamydia or syphilis within the past six months

2. Heterosexually active men and women who report one of the following: a serodiscordant sex partner, inconsistent condom use during sex with a partner of unknown HIV status and who is at high-risk for HIV acquisition, or history of a STI such as gonorrhea or syphilis within the past six months

3. People who inject drugs and possess one of the following characteristics described above or those who share equipment during injection drug use.

Human Immunodeficiency Virus Infection Trends among Maryland Adolescents

Although the Centers for Disease Control and Prevention (CDC) estimates that 89.2% of individuals living with HIV in Maryland in 2019 have been diagnosed, approximately 3,830 individuals living with HIV in Maryland have not yet been identified and diagnosed.[5] Recent statistics from the Maryland Department of Health indicate that there were 931 people aged 13+ newly diagnosed with HIV infection in Maryland during 2019 with approximately 31,630 individuals aged 13+ living with diagnosed HIV in Maryland at the end of 2019.[5]

Unfortunately, the increase in new HIV diagnosis among youths in some U.S states, including Maryland, may be indirectly enhanced by the unclear written guidelines associated with the states' Minor Consent Laws. Burda surveyed Minor Consent Laws across U.S. states in 2015 and found a lack of uniformity among states regarding what medical services may be provided to adolescents without parental consent.[10] Burda observed that many providers were confused about existing laws and worried about liability, noting that "*only seven United States jurisdictions explicitly permitted minors to consent to preventive care*",[10] which in this context means minor's capacity to give consent for PrEP.[10] Burda also suggested that federal endorsement is key to establishing PrEP programs for youths.[10] Failure to revise such perplexing state laws could be problematic for prescribing providers and for at-risk adolescents interested in accessing PrEP without the consents of their parents or guardians.

Venereal disease, now referred to as sexually transmitted disease[17] is defined as "*a class of contagious diseases typically transmitted during sexual intercourse and which according to traditional theory may include syphilis, gonorrhea, chancroid, venereal lymphogranuloma and inguinal granuloma etc.*"[18] Prior to the amendment of the law on May 25, 2019, the Maryland Minor Consent Law for section HIV/AIDS Testing and Treatment [Md. Code Ann., Health-Gen. II § 20-102(c)(1)-(5)] stated that "*a minor (i.e., a person under the age of 18) has the same capacity as an adult to consent to treatment for or advice about venereal disease.*"[19] The focus of the legislation was on the minor getting treated after infection and none on the minor seeking treatment for the prevention of venereal diseases such as HIV.

While the Maryland statute permits minors to independently give consent for HIV testing and/or treatment, it is not clear about: 1) consent for "HIV prevention" which would include explicit language that permits minors to independently access PrEP or give consent for HIV prevention treatments; or 2) well-defined prohibition of minors' access to PrEP without parental or guardian consent. These points should be considered when amending existing Minor Consent Laws with similar gaps. Despite the lack of clear language used in many U.S. Minor Consent Laws under the sections relating to HIV/AIDS Testing and Treatment or Diagnosis and/or Treatment for Sexually Transmitted Diseases, the CDC found that "*no jurisdiction explicitly prohibits minors' access to PrEP without the permission of parents or guardians.*"[20] Therefore, the Minor Consent Law should be clear on a minor's ability to seek for HIV prevention without the involvement of a parent and/or guardian.

METHODS

The data collection for this study consists of a comprehensive manual review of Minor Consent Laws in all 50 U.S. states and the District of Columbia which occurred from May 1, 2020 to May 12, 2020. With the exception of the recently revised Maryland Minor Consent Laws, links to all other states' statutes were obtained from the CDC website entitled "*State Laws that address high-impact HIV prevention efforts.*"[21] All existing U.S. adolescent consent laws were evaluated for legislative language regarding (1) statutes permitting minors to self-consent in certain healthcare-related situations, particularly relating to STI diagnoses and treatment; and (2) laws with specific indication on HIV/AIDS Prevention or "preventative care".

Brief Advocacy Story

In early 2018, several healthcare providers were worried about the increasing rate of new HIV infections among young people in Baltimore, similar to the national trend. Later in 2018, the FDA approved oral PrEP for use among at-risk adolescents weighing at least 77 lbs,[15] and some Maryland providers in community-based centers and private clinics started prescribing PrEP due to an increase in requests for PrEP prescription among at-risk adolescents. While the availability of PrEP was an exciting news for some providers who were considering adding PrEP to their services, many healthcare providers expressed concerns about the lack of clarity in the Maryland Minor Consent Law for HIV/AIDS and how that might prevent them from prescribing PrEP. Some providers felt their hands were tied because the Maryland Minor Consent law at that time did not make provisions for adolescents to give consent for HIV prevention treatment. This issue therefore became the stimulus for our inquiry.

In October 2018, a small group of public health professionals (two registered nurses and a physician assistant) who were affiliated with Morgan State University School of Community Health and Policy, University of Maryland School of Nursing Department of Family and Community Health, and Chase Brexton Health Care, Baltimore Maryland met to analyze the Maryland Minor Consent Law section HIV/AIDS Testing. During their review, they noted that the legislation at that time lacked a clear indication that would permit minors to give consent for HIV prevention. Between November and December 2018, the public health professionals participated in meetings with several groups of adolescent providers in Howard County, Maryland, providers at Chase Brexton Health Care Baltimore, Maryland, and providers at the Maryland Chapter of the American Academy of Pediatrics, bringing their attention to the issue. Their advocacy efforts also involved the use of communication methods such as phone calls, letters and emails to the Maryland Department of Health Infectious Diseases Bureau and legislators. This group of public health professionals decided to advocate for a legal review of the gap by the State's Senate and Maryland's Attorney General. In early December 2018, 1,199 Service Employees International Union (SEIU), United Healthcare Workers East, joined with Chase Brexton Health Care Baltimore to submit a request for the HIV/AIDS section of the Maryland Minor Consent Law to be reviewed by Senator Clarence Lam (S, Tiffin. Maryland State Senate, personal communication, September 2019). Their request was corroborated by testimony documents, including the SEIU fact sheet which highlights the legal gap and proposes solutions to effect legislative change.[22]

Senate Bill 251 (SB 251) was sponsored by four Maryland Senators, and the hearings were also attended by representatives from SEIU and Chase Brexton. In late December 2018, the coalition of public health professionals who were advocating for the legal review of the gap met again to track progress with SB 251 and sent follow-up emails to the primary sponsoring Senator. In summary, the advocacy process was initiated in October 2018, and the legal review session was introduced in January 2019.[23]

RESULTS

Revision of the Maryland Minor Consent Law

The first reading for SB 251 took place in January 2019; first hearing in February 2019; vote on the Senate floor and passage of the third reading occurred on March 13, 2019.23 A vote and passage of the third reading also took place on the House floor on March 18, 2019.[23] In addition, regarding Maryland House Bill 1183, the third reading passed on the House floor on March 12, 2019 and on the Senate floor on March 27, 2019.[24]

On May 25, 2019, the law was enacted, and on October 1, 2019, it went into effect. The previous section, "*Article-Health-General Section 20-102 Annotated Code of Maryland*" was repealed and reenacted with amendments to read: "*An Act concerning Public Health–Treatment for the Prevention of HIV–Consent by Minors: For the purpose of providing that a minor has the same capacity as an adult to consent to treatment for the prevention of human HIV and generally relating to consent to medical treatment by minors.*"[23]

Minor Consent Laws- The National Perspective

CDC reported that all U.S. jurisdictions had laws or regulations that "*explicitly allowed minors of a particular age to independently consent to STI diagnosis and treatment although the age for access varies by jurisdiction.*"[20] Our review indicated that only eleven U.S. states currently have provision in their Minor Consent Laws that permits adolescents to give consent for PrEP: California,[25] Colorado,[26] Delaware,[27] District of Columbia,[28] Iowa,[29] Kansas,[30] Maryland,[23] Montana,[31] North Carolina,[32] Oklahoma,[33] and South Carolina.[34] Table 1 provides an overview of specific language used by these eleven U.S. states to denote a minor's capacity to consent to "preventative care".

DISCUSSION

Implications for Pre-Exposure Prophylaxis Prescription and Use

The mid-adolescence period is a time of inevitable inclination for HIV-associated risk behaviors.[9] Unfortunately, the customary methods of preventing HIV among youth "*have been, and are likely to continue to be, ineffective*"[9] without considering pharmacological HIV prevention strategies. PrEP is not merely a daily medication, it encompasses a multi-team, comprehensive prevention approach for at-risk individuals.[9,35] PrEP involves a combination of several components for high-risk individuals: a prescribed daily oral antiretroviral therapy, routine HIV testing to monitor for infection, coordination of care, use of condoms, sexual risk-reduction counseling and education, substance-abuse counseling, medication-adherence counseling, and ongoing case management to monitor for medication side effects.[35]

Table 1. *U.S. States with Language on "Preventative Care" in their Minor Consent Laws*

State	Citation	Significant Text
California	California Code, Family Code - FAM § 6926- (b).	"*A minor who is 12-years of age or older may consent to medical care related to the prevention of a sexually transmitted disease.*"[25]
Colorado	Colorado Revised Statutes Title 25. Health § 25-4-409. Minors--treatment—consent- (1a).	"*The health care provider or facility shall treat the minor for a sexually transmitted infection, if necessary; discuss prevention measures, where applicable; and include appropriate therapies and prescriptions.*"[26]
Delaware	Title 13, Chapter 7. § 710-(a).	"*A minor 12-years of age or over who professes to be either pregnant or afflicted with contagious, infectious or communicable diseases . . . may give written consent, except to abortion, to any licensed physician, hospital or public clinic for any diagnostic, preventive, lawful therapeutic procedures, medical or surgical care and treatment. . . .* "[27]
District of Columbia	22-B600.7 (c) Minor's Health Consent.	"*A minor of any age may consent to health services which he or she requests for the prevention, diagnosis, or treatment of the following medical situations: . . . A mental or emotional condition and sexually transmitted disease.*"[28]
Iowa	Iowa Code Title IV. Public Health [Chs.123-158] § 139A. 35. Minors.	"*A minor shall have the legal capacity to act and give consent to provision of medical care or services to the minor for the prevention, diagnosis, or treatment of a sexually transmitted disease or infection by a hospital, clinic, or health care provider.*"[29]
Kansas	Kansas Statutes Chapter 65. Public Health § 65-2892.	"*Any physician, upon consultation by any person under eighteen (18) years of age as a patient, may, with the consent of such person who is hereby granted the right of giving such consent, make a diagnostic examination for venereal disease and prescribe for and treat such person for venereal disease including prophylactic treatment for exposure to venereal disease whenever such person is suspected of having a venereal disease or contact with anyone having a venereal disease.*"[30]
Maryland	Article II, Section 17(c) of the Maryland Constitution - Chapter 728-(9).	"*Providing that a minor has the same capacity as an adult to consent to treatment for the prevention of HIV.*"[23]
Montana	Montana Title 41. Minors § 41-1-402-(2c).	"*The consent to the provision of health services . . . by a health professional may be given by a minor who professes or is found to meet any of the following descriptions: . . . this self-consent applies only to the prevention, diagnosis, and treatment of those conditions specified in this subsection. The self-consent in the case of pregnancy, a sexually transmitted disease, or drug and substance abuse . . .* "[31]
North Carolina	North Carolina General Statutes Chapter 90. Medicine and Allied Occupations § 90-21.5-(a).	"*Any minor may give effective consent to a physician licensed to practice medicine in North Carolina for medical health services for the prevention, diagnosis and treatment of (i) venereal disease and other diseases reportable under G.S. 130A-135.*"[32]
Oklahoma	2014 Oklahoma Statutes Title 63. Public Health and Safety §63-2602-(3).	"*Any minor who is or has been pregnant, afflicted with any reportable communicable disease, . . . , however, that such self-consent only applies to the prevention, diagnosis and treatment of those conditions specified in this section.*"[33]
South Carolina	2016 South Carolina Code of Laws. §63-5-340.	"*Any minor who has reached the age of sixteen years may consent to any health services from a person authorized by law to render the particular health service for himself . . .* "[34]

While this paper underscores the benefits of PrEP for at-risk individuals, it is important to note that the implementation or prescription of PrEP come with some challenges. Mullins et al[36] conducted semi-structured interviews on 15 U.S. providers caring for high-risk and HIV-positive youth and found the following barriers to prescribing PrEP: concerns about confidentiality, legality of prescribing PrEP to minors without parental consent, and young people's comprehension and understanding of risk and benefits of the medication, side effects of PrEP use on the bone; "*off-label use of PrEP among minors, and the high costs associated with PrEP use*." Additionally, the clinicians who were interviewed in the study perceived PrEP as a short-term intervention rather than a comprehensive approach to HIV prevention for youth; however, the clinicians indicated the following facilitating factors to prescribing PrEP to youth which included: the provision of PrEP-specific education to communities and other clinicians, guaranteeing adequate financial resources and infrastructure for PrEP delivery, establishing formal guidance on efficient behavioral interventions provided with PrEP, and obtaining individualized experience with prescribing PrEP.[36]

Regarding patient-level concerns, the use of oral PrEP has been associated with an increase in STIs. A recent study conducted on Gay and Bi-sexual men using PrEP reported a rise in STI incidence among study participants from 69.5 per 100 person-years before enrollment to 98.4 per 100 person-years during follow-up.[37] In the same vein, there are some issues that could limit PrEP effectiveness among youth which include adherence, stigma, risk compensation, and ethical concerns and legal concerns.[38] To address the issue of adherence to oral PrEP, some studies have evaluated preferences for PrEP modality and have found promising results. Tolley et al[39] examined the acceptability of a long-acting injectable PrEP among 136 HIV-negative women in Zimbabwe, South Africa and two U.S. phase 2 trial sites and found that the majority of the participants (>75%) rated long-acting injectable PrEP as very acceptable. At baseline, 56% of US participants and 81% of African participants favored using a bi-monthly injectable to other non-injectable methods, including daily oral pills, a vaginal ring or gel.[39] At 28-weeks, 79% of the study participants strongly approved of the statement that they would "*definitely use an injectable PrEP product for some time*" if it were available in the future; while (88%) strongly agreed that they would be more interested in using an injectable that prevents both HIV and pregnancy.[39] Similarly, Kidman et al. surveyed 2,089 adolescents living in Malawi between ages 10-16 and their caregivers to assess PrEP interest, facilitating factors to PrEP use, and preferences for PrEP modality.[40] The authors found that young adolescents who are engaging in behaviors that increase their risks of acquiring HIV would likely find PrEP beneficial: most (82%) were interested in using PrEP, preferred to receive an injection rather than taking a daily pill, and were largely discouraged by the prospect of side effects.[40]

Additionally, some serious side effects of using Truvada may include "*kidney failure, severe liver problems, lactic acidosis, or bone problems*"[41]; and for Descovy, some common adverse reactions may include "diarrhea, nausea, headache, fatigue, and abdominal pain."[42] These patient-level, organizational-level, and systems-level barriers could influence the implementation and effectiveness of PrEP for minors, as well as the passage or revision of Minors' HIV prevention laws across U.S. states.

Significance of Human Immunodeficiency Virus Infection prevention laws

Many US states have yet to revise their laws to include specifications that would allow minors to give consent for HIV prevention services. The hesitation or delay in revising such laws could largely be due to the states' uncertainties regarding ethical and legal considerations for PrEP use among minors. Unfortunately, the lack of clarity in US states minors' consent laws for preventive services has caused significant barriers to providing PrEP services, and continue to create problems for clinicians who do not have guidance on prescribing HIV prevention to minors without parental consent.[12] Recent clinical data indicate the efficacy of PrEP as a powerful HIV prevention tool in populations at high-risk for HIV acquisition, including MSMs, HIV-1-serodiscordant heterosexual couples, and IV drug users.[38] Sadly, without the right laws in place to grant minors the right to independently give consent for PrEP, the goal of ending the HIV epidemic by 2030 will be far from achievable. Ending the HIV Epidemic: A Plan for America (EHE) is an initiative from the US Department of Health and Human Services (HHS) that specifies a strategy to decrease the number of new infections in the U.S. by 75% within 5-years and by at least 90% within 10-years.[43] Therefore, to reduce the alarming rates of new adolescent HIV infections in the U.S. and to improve the health of adolescents who are at increased risk for contracting HIV, it is important that states increase access to HIV prevention strategies including risk reduction counseling, HIV testing, and PrEP for minors. States should also evaluate existing consent laws for minors and make provisions to allow minors independently give consent for PrEP.

Expanding Minor Consent Laws to allow adolescents to give consent for HIV prevention has many benefits which include: the disruption of the state's HIV rates and improvement in public health, the dramatic extension of the lifespan of young black men particularly those living in poverty, and the overall positive impact on the community viral load.[22]

Other U.S. states should consider laws similar to Maryland. Public health professionals should work with legislators in their states to bring about change in public health policies which would enable minors to independently choose prevention; they should also continue to evaluate how state laws influence the prevention of HIV.

Practice Recommendations

Health professionals who wish to design programs and institute policies that will significantly improve the lives of others must learn how to effectively engage with communities.[44] Advocacy should be a fundamental part of public health dialogue and interventions through which social determinants of health are addressed and systemic change is achieved.[45] Public health professionals can advocate for changes in health legislations in their varying states through translating research findings into policy and practice, and

seeking transformative changes in supportive public opinion,[46] through active involvement in state legislative hearings, policy internships or workshops and by keeping informed about current issues and organizing groups through collaborative engagements with professional lobbyists,[47] and by building the capacity of current and upcoming public health professionals and the communities served, to participate in public health advocacy.[45] A long-term approach to investing in the public's health, is to incorporate public health advocacy into public health education and trainings, daily practice and research.[45]

In light of existing barriers and concerns, the benefits of PrEP should be considered for high-risk HIV-negative populations. For example, access to PrEP could save money in high-incidence settings.[38] Efforts to expand PrEP to minors must also include evaluation of ethical, political and medical implications of PrEP use. Public health agencies could provide trainings to adolescent providers and communities, and also address provider-related barriers to prescribing PrEP for adolescents; understanding the facilitators and barriers to prescribing PrEP for minors is the key. Also, ensuring adequate financial resources and infrastructure for PrEP delivery will encourage provider participation. For PrEP to become more widely available to youth at high-risk for HIV acquisition, the following topics should be better addressed: gender and race disparities associated with PrEP use, cost of PrEP medications, cultural and regional differences, and provider training.[38] Furthermore, to end the HIV epidemic, the following are required: "*adherence to published HIV testing recommendations, sexual health assessments, screening for STIs, and appropriate primary and secondary prevention education.*"[48] In agreement with these, aligning PrEP programs with the national objective to end the HIV epidemic could further help to keep programs focused and achieve set goals. Finally, PrEP program administrators should explore funding opportunities that would benefit clients who need financial support in the areas of medications and laboratory costs, in order to remain compliant with their medical visits.

CONCLUSION

Within a span of one year from the onset of advocacy to legislative action (October 2018-October 2019), it is highly commendable how the public health professionals were able to push for an effective change in HIV prevention laws for minors and took a step further by telling the story in this publication. Their works demonstrate the importance of public health advocacy. As a result of their efforts, high-risk adolescents in Maryland now have the same capacity as adults to consent to treatment for the prevention of HIV,[23] which is ultimately a step in the right direction to ending the HIV epidemic among this subgroup. The persistence and commitment of the teams involved also fast-tracked a naturally delayed process to completion in record time.

Eleven U.S. states currently have explicit provisions in their Minor Consent Laws that permit adolescents to give consent for PrEP. In order for PrEP to be well received by providers and adolescents, barriers such as provider training, stigma, ethical and legal concerns, and patient-level barriers such as side effects, adherence, stigma, risk compensation, ethical concerns, legal issues and cost need to be addressed. Through advocacy, public health professionals can change upstream factors such as laws, regulations, policies and institutional practices. Minor Consent Laws impact adolescent PrEP programs. The successful efforts documented in this publication can create a paradigm for future efforts to address Minor Consent Laws that prohibit young people across the United States from participating in PrEP programs to reduce further spread of HIV infections among minors. More states should revise their Minor Consent Laws to allow minors to give consent for PrEP.

ETHICAL CONSIDERATIONS

This study did not require approval from the Institutional Review Board (IRB).

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CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

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