

# **Reframing ABC Prevention:**

# The Value of Ethnographic Research in Creating Culturally Relevant HIV Programs in Belize

# **Erynn Monette**

McMaster University

Since its emergence in 1983, public health professionals have worked to effectively prevent the transmission of HIV. The ABC method of prevention, which includes the promotion of abstinence, condoms, and being faithful, has been employed extensively throughout sub-Saharan Africa. In contrast, the Belizean HIV epidemic has received very little attention from researchers looking to implement ABC. Although some research exists on the determinants of sexual HIV transmission in Belize, very little is understood about the cultural norms that perpetuate these factors. In order to make recommendations for the efficient implementation of ABC programs in Belize, case studies from Botswana, the former Zaire, and Uganda will be used to review past experiences of ABC in Africa, and to identify the cultural challenges faced. These case studies illustrate that programs that relied heavily on abstinence and condom promotion did not work well in these contexts due to opposing views of sexuality, while balanced programs that emphasized being faithful were more successful. Ethnographic research is needed to fill knowledge gaps regarding Belizean sexuality. Namely, future research could seek to understand male views of sexuality in particular, as well as differences in generational views of sex. Public health workers could also aim to create programs that engage the community in order to build trust, as well as to understand the role of community leaders and celebrities in influencing local views of sex. These insights provide future researchers with a starting point for building effective ABC programs that work within a given culture rather than against it.

#### Introduction

Since its emergence in 1983, the human immunodeficiency virus (HIV) has spread to become the world's most prevalent sexually transmitted infection (Crawford, 2007). Affecting over 36 million people worldwide, HIV's rapid rate of transmission and mutation make it difficult to cure (UNAIDS, 2017a). Spread of the disease is exacerbated by human habits, such as having unprotected sex and engaging in sexual activity with multiple partners within a short period of time. These behaviours allow for multiplication and transmission of the virus from person to person, often before victims know they are infected. Medications to slow HIV progression have been developed and commercialized, however, access to treatment is often difficult in

areas, especially in countries with rural developing healthcare systems. If a family does not live close to a formal caregiver, there is often little means or motivation to seek antiretroviral treatment until symptoms become more serious. At this point, it is often too late for medication to have a significant impact. Because of this, rural health workers worldwide have employed prevention as the primary strategy for combating HIV spread. Although these prevention programs are creative and resource-sensitive, they are often implemented rapidly, without consideration of unique cultural dynamics that may affect the success of these programs. In order to rectify this, ethnographic studies of a given culture should be included in HIV prevention research. This would allow for the creation of culturally relevant

Author correspondence should be directed to *monettem@mcmaster.ca* (Faculty of Science, McMaster University, Hamilton, ON, Canada)

programs specific to the community in which they operate.

HIV has had a particularly large effect on countries in sub-Saharan Africa, with 69% of the world's affected population residing in this area (UNAIDS, 2017a). Because of this, most research on HIV prevention has been conducted in sub-Saharan Africa. Although this research provides useful information, it is limited to African contexts, and is difficult to apply in other parts of the world. One area that has been neglected with regard to HIV research is Central America. In particular, Belize has received little attention from researchers despite its prevalence rate of 1.8%, the highest in mainland Central America (UNAIDS, 2017b). Although prevention programs to combat HIV exist in Belize, there has not been any decrease in prevalence, indicating that these programs have been ineffective. This could be due to incompatibilities between provided educational material and actual sexual practices in Belize (UNAIDS, 2015).

The most commonly employed prevention strategy worldwide is referred to as the ABC method. "ABC" refers to the compounded promotion of abstinence, being faithful to one partner, and condom use (Shelton et al., 2004). ABC programs aim to prevent HIV transmission by transforming local views of sex via community education programs (Shelton et al., 2004). Although these programs aim to create achievable change within the scope of available resources. they are often generalized in nature, and do not take cultural differences between contexts into account. Broad assumptions about community needs are often made during the creation of these programs, and public health organizations often face cultural barriers to their success. With HIV prevention in particular, assumptions can easily be made regarding community views on sexuality. For example, after the HIV outbreak in the United States was contained using heavy condom promotion, many public health organizations assumed that the same method would work elsewhere in the world (Su, 2010). However, different cultures have different perceptions about sex (Parker, 2001), and no one solution can be universal. In order for adequate prevention programs to be created in rural Belize, it is critical

that the cultural dynamics of Belizean communities be considered in order to create unique programs specific to local views.

In order for prevention programs to be informed by cultural dynamics, research is needed to identify common sexual views and practices in Belize. This can seem like a large and difficult task, given that perspectives can vary according to geographical region, historical experience, and people group within the country. Anthropologists help with this daunting challenge. Anthropological research attempts to understand cultural dynamics using a holistic perspective, and to apply this understanding to propose relevant solutions at a community level. In this way, anthropological methods could identify connections between cultural perceptions of sex and the HIV epidemic, allowing for the creation of more effective programs.

Given its relative success in sub-Saharan Africa, it is reasonable to suggest that some form of the ABC method could slow the transmission of HIV in Belize. This paper aims to identify areas in which this could be achieved by reviewing past experiences with ABC in Uganda, the former country of Zaire, and Botswana. In each of these cases, it was observed that the abstinence and condom promotion components of ABC were only slightly effective, while programs that emphasized the "be faithful" component experienced a significant decline in HIV prevalence. Upon further examination of these cases, examples of cultural challenges that arise within ABC programs will be identified. By considering challenges faced in the past, future public health researchers can aim to avoid them in the present. In this way, similar challenges can be accounted for upon ABC implementation in Belize. This paper will also make suggestions for areas of future ethnographic research focus in Belize. These projects should aim to identify specific views on Belizean sexuality in order to better inform the implementation of ABC. A clear understanding of male sexual perceptions, differences in sexual views between generations, the importance of community-based participatory research in local program creation, and the role of celebrities and community leaders in influencing views of the HIV epidemic could serve to fill this knowledge gap. Ethnographic research is critical for creating adequate prevention programs, and will assist public health workers in implementing effective, culturally adapted versions of the ABC method in order to reduce the spread of HIV in Belize.

#### Previous Research In Belize

In recent years, research into exacerbating factors for HIV transmission has been conducted in Belize. A study by Buszin, Nieto-Andrade, Rivas, and Longfield (2012) explored the views of the Garifuna, an ethnic group in Belize, regarding current ABC education programs. Buszin and colleagues (2012) were able to identify some of the beliefs of the Garifuna people surrounding HIV. In general, the Garifuna considered it normal to have multiple concurrent sexual partners. This practice was mostly prevalent among men and young women. It is common for Garifuna men to travel to find work throughout the country, leaving their wives and families at home. While they are away, both men and women considered it reasonable for a man to seek sexual fulfilment from other people since their wives were unavailable to them (Buszin et al., 2012). These results indicate that the practice of having multiple sexual partners is culturally normalized, but Buszin et al. (2012) state that the motivations behind this practice are unclear. Although this research does not identify cultural factors contributing to the epidemic, it reveals that additional anthropological research is needed in order to understand the motivations behind sexual practices that influence transmission.

Some anthropological research performed in Belize has aimed to identify sexual perceptions and practices within specific populations. One such study explored the sexual habits of men who have sex with men throughout Latin America and the Caribbean (Cáceres, 2002). This research aimed to understand HIV transmission based on the sexual dynamics of this group, and concluded that sex is commonly exchanged among men in return for material goods (Cáceres, 2002). Another study by Anastario et al. (2011) attempted to do the same for military personnel, who were frequent consumers in the Belizean sex trafficking industry. This study concluded that HIV risk behaviours were associated with post-

traumatic stress and alcohol abuse within this population (Anastario et al., 2011). These studies were helpful for understanding the transmission of HIV in vulnerable groups; however, Belize is experiencing a largely general epidemic. This means that the disease is typically transmitted from person to person without any correlation with factors like sexual orientation or economic status (Wilson & Halperin, 2008). This differs from concentrated epidemics, in which the disease is most prevalent in a particular group within the population, for example in sex workers or men who have sex with men (Wilson & Halperin, 2008). Despite this, there has been very little research into general views of sexuality in Belize. For this reason, an examination of cultural challenges and norms that play into the spread of HIV in the general population is needed.

### From Africa to Belize

Most research on ABC effectiveness has been conducted in Africa, resulting in an Africaspecific understanding of the cultural challenges associated with ABC implementation. Although targeted research is needed to identify ways in which ABC can be tailored to Belizean culture and society, examination of African cases allows researchers to look to the past and predict potential barriers before hitting them. It is never appropriate to generalize the effectiveness of a method from one area to another; however, certain similarities exist between the natures of the African and Belizean epidemics that suggest the ABC method could be used as a baseline strategy in Belize. Like in Belize, the epidemics experienced in Uganda, the Democratic Republic of the Congo, and Botswana are general epidemics, and are not isolated to any one particular social group (Wilson & Halperin, 2008). For this reason, many of the challenges faced in these countries are likely to be present in Belize as well.

In both Belize and many areas of sub-Saharan Africa, it is considered normal to have multiple concurrent sexual partners (Buszin et al., 2012; Shelton et al., 2004). Because of this, it is easy for HIV to spread from person to person. Awareness of this norm will allow public health workers to adapt ABC strategies to be effective in a Belizean

context. Although the success of an ABC model in one area does not guarantee its success elsewhere, this similarity allows us to draw comparisons between sub-Saharan Africa and Belize. Specific attitudes regarding sexuality may differ in each area, but both experience challenges with cultural compatibility due to this shared sexual norm. In learning from the African experience of ABC, Belizean health workers can avoid disregarding cultural norms in an area with similar sexual practices.

## Bringing Anthropology into the Mix

Anthropological research is needed to understand sociocultural determinants of the HIV epidemic. Field anthropologists such as Farmer (1992) stress the importance of giving attention to cultural factors in prevention efforts; however, most health research has focused on the political, economic, and social factors that underlie the spread of HIV (Leclerc-Madlala, 2009). Although each of these elements gives a snapshot of the causes of HIV transmission, the full image cannot be seen until all of the pieces have been put together. Anthropological research explicitly aims to present a holistic perspective of culture. In this way, it provides insight into why and how HIV is transmitted in Belize.

The anthropological tool of ethnography could be particularly helpful in identifying sexual motivations in Belize. Ethnographies are public extremely beneficial to health professionals; they can be used to develop more culturally sensitive questions for surveys and interview guides, allowing for deeper and more culturally informative results (Carrier & Bolton, 1991). In the past, ethnographies have been used to explore the sexual practices of men who have sex with men in Central America, and have identified many areas where disease prevention could be encouraged (Carrier & Bolton, 1991). Ethnographies reviewing the sexual practices of groups within the general population, such as geographical communities and ethnic groups, could extend the same benefit of understanding to the Belizean epidemic as a whole.

Culturally Inefficient Components of ABC: Abstinence and Condom Promotion

Abstinence, the "A" component of the ABC method, has had only a slight effect in decreasing prevalence in sub-Saharan HIV Abstinence has been heavily encouraged in Uganda since the beginning of nation-wide prevention efforts in 1997 (Shelton et al., 2004). Religious institutions played a large role in this, encouraging young people to remain abstinent until marriage. The method achieved some success, and the average age of sexual debut increased by one year between 1997 and 2004 (Potts et al., 2008). However, most HIV infections in Uganda occurred in individuals 20 years or older (Shelton et. al, 2004). This suggests that, although slightly helpful, the abstinence method of prevention was not particularly significant, as it did not target the cohort most actively transmitting the disease.

Uganda's success in this regard is unique, and should not be generalized to other cultural contexts. In Botswana, abstinence was not considered to be feasible simply due to the social function of sex in rural communities (Su, 2010). Suggesting that a woman avoid receiving a man's semen was considered harmful due to the belief that sexual fluids and childbearing were symbols of cleanliness (Su, 2010). Efforts to prevent HIV spread did not take these cultural factors into account, and were insufficient for prevention. Additionally, abstinence programs encouraged young people to delay their first sexual experience, but failed to specifically identify risky behaviours for the transmission of HIV. Individuals may have avoided vaginal intercourse. but instead engaged in oral or anal sex, allowing for the sharing of sexual fluids and subsequent transmission of HIV (Su, 2010). In this way, it is important to identify which activities constitute sexual activity in a given community, and to understand what common risky behaviours exacerbate the spread of HIV.

Condom promotion was among the first strategies implemented in African contexts to combat the increasing spread of HIV (Su, 2010). Unfortunately, public health workers found that local perceptions of sexuality made condom use

irrelevant or unrealistic in many countries. For example, Schoepf's (1988) study on the HIV/AIDS epidemic in Central Africa noted cultural norms that acted as barriers to condom promotion in the former rural Zaire, now the Democratic Republic of the Congo. For Zairian men and women, male semen was considered lifegiving due to its necessity for procreation, and was an important substance for maintaining women's health. As a result of this view, condoms were seen as unnatural and dangerous to the survival of Zairian life and culture. Because of this, many Zairians refused to use them (Schoepf, 1988).

Su (2010) outlined similar perceptions in Botswana in response to condom promotion. In this context, the promotion of condoms was considered to be an attempt by western society to control Africans, as community doctors and traditional healers were not consulted about their introduction. Not only did cultural norms oppose the use of condoms, but continuing western-led prevention efforts in spite of these norms led to active rebellion against western interventions (Su, 2010). This further highlights the need for anthropological research when bringing new ideas into communities. If local perceptions and attitudes regarding birth control had been considered before prevention efforts began, this mistrust might have been avoided, and the needs of Botswana better met

Uganda's experience with condom use is perhaps the most informative, as a substantial and continuous decline in HIV prevalence has been observed since the beginning of the country's prevention campaign (Murphey, Mihailovic, & Olupot-Olupot, 2006). Research by Shelton et al. (2004) revealed that, despite this decline, levels of condom use remained modest. In fact, condom use did not see a significant increase until after 2000, at which time HIV prevalence was already dropping (Murphey et al., 2006). This indicates that condom use was unlikely to have had a significant effect on the decrease in HIV prevalence in Uganda.

Given these African examples, condom promotion programs in Central America should be approached carefully. The evidence from these case studies suggests that stigma associated with condoms makes them difficult to promote. Even once this stigma is overcome, it can be seen based on the Ugandan situation that condoms may only make a minimal difference in HIV prevalence. In light of this, a prevention approach that relies heavily on the promotion of condoms may not be the most effective strategy for preventing HIV in Belizean contexts, and programs should aim to balance focus between all components of ABC.

The general HIV epidemic in Central America has been heavily exacerbated by sex tourism, a service commonly provided to clients within the travel industry (Kane, 1990). Sex in this context occurs in exchange for money, but is built on an illusion of love and friendship to ensure an enjoyable experience for the client. Condoms are less likely to be spoken about in these instances, as locals believe that they ruin the illusion of mutual desire (Kane, 1990). Another cultural norm that has been particularly noted in Belize is family values surrounding sex. The primary role of women in the context of a Belizean family is to procreate (Huedo-Medina et al., 2010). For this reason, women should not suggest the use of condoms or attempt to prevent pregnancy, as this is viewed as a dismissal of feminine duty (Huedo-Medina et al., 2010). In accordance with this norm, Belizean women were found to be less likely to express a desire to use condoms than men in their sexual encounters (Vu et al., 2015). Public health workers should be careful in their approach to condom promotion, and should attempt to present local men and women with information on HIV in a manner that is sensitive to their views on sexuality.

It is important to note that condom promotion has only been an insufficient strategy when used alone against a general epidemic. Concentrated epidemics have experienced success via heavy condom promotion elsewhere in the world. Thailand, for example, employed a 100% condom promotion method to reduce the spread of HIV among sex-workers, and saw a dramatic decrease in HIV prevalence in brothels across the country (Shelton et al., 2004). Similarly, the few condom promotion programs that have been introduced in Central America have been successful in preventing HIV spread among military personnel

and sex workers (Carrier & Bolton, 1991). Ultimately, condoms have been successful at the individual level of prevention and in high-risk groups, but not as a quick-fix solution for a general epidemic like that in Belize (Huedo-Medina et al., 2010). With this in mind, public health organizations should seek to balance their ABC programs, and be careful to avoid a heavy reliance on condom promotion in general epidemics.

Culturally Efficient Component of ABC: Partner Reduction

The "B" component of the ABC method, "Be Faithful", refers to discouraging individuals from having multiple concurrent sexual partners. This component has proven most successful in reducing the prevalence of HIV in sub-Saharan Africa, although little is known about why this is so (Potts et al., 2008; Wilson & Halperin, 2008). Very little research has been conducted on the motivations behind why individuals prefer to have multiple sexual partners. Ethnographic research could shed some light on this topic.

An effective example of partner reduction can be observed in Uganda. Before HIV prevention interventions began, having multiple sexual partners was common practice among Ugandans. Although it is impossible to retrospectively determine what specific ideas changed in Ugandan culture without adequate knowledge of former views of sexuality, various hypotheses have been proposed based on what we know now. Green, Halperin, Nantulya, and Hogle (2006) suggest that the participation of faith-based organizations and political figures in promoting marital fidelity helped to bring about this change. A large decline in premarital sex has been observed since the beginning of these efforts in 1997, particularly among young men. This decline may have empowered women to limit their number of sexual partners as well (Green et al., 2006). This is merely speculation, however, and does not provide specific evidence for the reasoning behind the cultural shifts that have been observed.

In their study of sexual habits amongst the Garifuna people, Buszin et al. (2012) found that

the cultural norm of having multiple sexual partners was the primary contributor to the spread of HIV, and suggested that research is needed to look into the motivations behind this habit in particular (Buszin et al., 2012). Ethnographies exploring this norm could provide deeper insight into Belizean sexuality. Additionally, it could present a framework from which evidenced-based practices could be developed for prevention programs focused on partner reduction.

Exploring Cultural Dynamics in Belize: Considerations for Future Research

Further investigation into the social and cultural norms surrounding sex is necessary to create tailored HIV prevention tactics in Belize, but it is difficult to know where to start with such a broad research area. Ethnographic research is very timeconsuming, and thorough ethnographies relating to HIV are not yet available because of its fairly recent emergence. Additionally, due to the pressing nature of the HIV anthropologists do not have the luxury of time to ensure the completion of full ethnographies documenting the entirety of a culture. Because researchers are time-pressed to get the epidemic under control, it is useful to identify some specific areas of interest that could be explored to create a more culturally informed understanding of sex in Belizean communities. These smaller areas can be undertaken as "mini ethnographies", and may shed some light on pressing issues while larger studies are still being undertaken.

#### *Understanding Male Sexuality*

In order to combat HIV transmission, future research could focus on understanding the role of male sexuality in Belizean culture. A clear power dynamic between genders has been observed in both Belize and Uganda; men are considered to be authoritative figures, while women are generally submissive to the aspirations of the men in their communities (Buszin et al, 2012; Parker, 2001). Although both men and women typically have more than one sexual partner, Buszin et al. (2012) found that Belizean men were more likely than women to believe that having multiple partners is exciting. Buszin et al. (2012) also discovered that men were more likely to believe that it is

important to know one's HIV status, and were more willing to disclose this information to their partners. This suggests that it is considered to be men's responsibility to take charge during sex. and that men are more likely to practice behaviours that affect the spread of HIV. Further studies in neighbouring Honduras and Guatemala found that men were more likely than women to have multiple concurrent sexual partners, as well as less likely to disclose their HIV status to their partner (Vu et al., 2015). In contrast, women were more likely to engage in extramarital sex (Vu et al., 2015). This implies that men in Central America are more mobile hosts for the disease, and have more power over the circumstances of sexual transmission than women.

Similar dynamics between men and women were observed in Uganda. Huedo- Medina et al. (2010) noted that it is considered masculine for men in Uganda to have multiple sexual partners. Men are encouraged to take sexual risks in the name of masculinity, including refusing to use a condom (Murphey et al., 2006). This view leads to risky behaviour that further exacerbates the spread of HIV, but this trend is subject to reversal if change occurs among the men of the community. Recently, Uganda has seen large declines in premarital sex among men in correlation with its declining rate of HIV prevalence (Green et al., 2006). This evidence implies that attitude change among male social leaders in these societies could result in a corresponding change in HIV prevalence.

Considering this information, an understanding of male views on sexuality in Belize could add significant insight to HIV prevention strategies. With this knowledge available, more culturally relevant solutions can be presented that will diffuse into the general population. If men can make changes in their lives, then women and children are likely to follow. This contrasts the current common practice of attempting to empower women and allow them agency to refuse sex from the men around them. Although important, this does not appear to be a culturally realistic solution when employed on its own. Murphey et al., (2006) noted that most messages associated with the ABC method are not within the power of women in most developing

countries. It is also more difficult to inspire societal change by acting through more vulnerable groups. Thus, starting solutions with men allows public health workers to tackle the problem from the top of the power cascade. It is more realistic to bring about change through men in these societies, who hold more agency over the problem.

#### Generational Perceptions of Sexuality

Seeking to understand interactions between sexuality and the HIV epidemic from a generational perspective could also reveal significant cultural norms. In Uganda, Shelton et al. (2004) found that different methods of prevention worked for different generations. This was likely due to differences in sexual views between age groups. For example, adolescents in Uganda were less likely to use a condom due to their tendency to demonstrate impulsive or risky behaviours. In contrast, condom use became more common among older couples (Huedo-Medina et al., 2010). This implies that attitudes regarding sex differ by age cohort. This might be something for public health workers to look for as they attempt to implement effective ABC programs in Belize. Prevention programs should vary in style and content according to target age group.

More research is needed on the average age of HIV infection in Belize (Carrier & Bolton, 1991). This would help public health workers understand how and why HIV is spread. The sexual behaviours behind transmission, as well as the motivations surrounding them, may differ between age groups. Middle-aged individuals may be spreading disease primarily via intercourse with multiple partners, while it may be more common for HIV to spread in other ways among adolescents. Evidence from existing prevention programs throughout Central America suggests that it is more effective to inspire behavioural change in adolescents than in middle-aged adults (Huedo-Medina et al., 2010). Future research could focus specifically on the process of perception formation related to sex among adolescents. With a better understanding of this process, public health workers will be better able to create education programs for age groups that are most likely to accept the information, andhave the power to use it to bring about positive change.

Emphasizing Community-Focused Prevention Strategies

Future research should aim to be communitybased. Further, it should be focused to specific ethnic groups. Past research demonstrates that interventions at the national level are not specific enough for targeted change, and many researchers argue that in-depth knowledge of specific communities is desperately needed to create more effective programs (e.g., Carrier & Bolton, 1991; Kane, 1990; Parker, 2001). Within a nation, there can be varying views on sex between different ethnic groups. In Belize, the Garifuna people are experiencing a more severe epidemic than other people groups such as the Maya and Creole (Buszin et al., 2012). This can be attributed to differences in sexual habits between these groups. The Garifuna have different customs, values, and cultural habits that need to be taken into account in order to create targeted interventions that are sensitive to the group's specific needs (Buszin et. al., 2012). Based on this evidence, research in Belize should aim to identify the sexual perceptions and habits of a given people group, and create unique programs to address these in each community.

Additionally, the inclusion of community members in the battle against HIV has been found to significantly improve the cultural relevancy of prevention programs. Uganda experienced success with this when the government trained community educators (Green et al., 2006). Having community members educated by their peers created a sense of trust in the program. Success was mostly achieved by word-of-mouth, and was more effective than impersonal mass media approaches (Green et al., 2006). In contrast to this, community doctors were not consulted in Botswana when the ABC approach was introduced bv western nongovernmental organizations. Because of this, community members did not trust foreign health workers, and programs were extremely unsuccessful (Su, 2010). This goes to show that research must involve community members in order to maintain reputability. Engaging the community also better ensures relevant results that are helpful to those attempting to battle the disease in their own communities. Anthropological research that actively aims to avoid ethnocentrism would have a massive impact on these kinds of projects, and would help to introduce inclusive methods to community HIV research.

#### The Role of Influential Persons

Future research should seek to understand the relationship between culturally influential individuals and decline in HIV prevalence. In Uganda, the observed reduction in HIV infections appears to have begun with actions taken by Ugandan president Yoweri Musveni. The president announced HIV as the newest war on his country, and invited citizens to fight back alongside him (Green et al. 2006). This inspired openness and patriotism within the HIV prevention movement. Additionally, religious leaders began to speak about HIV from the pulpit, opening the conversation about HIV and, in turn, de- stigmatizing the disease at the community level. Because of this, citizens felt more confident in admitting to HIV infection, and felt empowered to fight back against the disease (Green et al., 2006). In understanding these dynamics of human influence, researchers can predict the direction of cultural views, and can learn to work within them to create better prevention programs.

Efforts to educate community members in Belize have been slow to start. This is mainly due to discomfort among schoolteachers in talking about sex. Without this leadership, adolescents are taught to fear speaking about sexuality and HIV, further stigmatizing the disease (Huedo-Medina et al., 2010). In response to this, researchers should aim to identify perceptions underlying the stigmatization of sex. This way, teachers and other community leaders will feel more comfortable with the curriculum they are using. Identification of high influencers within a community allows for education to start with powerful individuals and spread to the general population from the top down.

#### Conclusion

In order for public health workers to improve current prevention programs and stop the spread of HIV in Belize, research is needed to identify cultural perspectives on sexuality. Based on observations from similar epidemics in sub-Saharan Africa, the ABC approach could provide a starting point for program creation, provided that it is modified to emphasize partner reduction in a culturally relevant manner. In order to create these modified programs, insight into perceptions of and motivations behind sexual behaviour is needed. In order to gather this information, future research could explore male perceptions of sex in Belize. This will allow identification of areas where men, as powerful individuals within Belizean society, could make a difference in HIV progression in their communities. Differences in generational perceptions of sex could be studied to tailor education programs for specific age groups. Public health workers could aim to make these programs community-based, and to involve local individuals in the research process to build strategies that directly relate to community needs. In addition to current efforts, research could look to understand the role of powerful persons in the war against HIV. Considering celebrities' and influential community members' views of sex when creating education programs would allow for a broader understanding of local views, including why they exist and where they came from.

More information is needed on local cultural determinants of HIV transmission. Anthropologists and anthropological methods and approaches could effectively address these factors. Ethnographic research regarding cultural norms would contribute holistic background information relevant to public health efforts, and allow for the creation of culturally relevant programs tailored to specific contexts. Along with understanding of cultural dynamics in specific communities, the spread of HIV can be combatted holistically with methods that, while varied in practice, are united in principle.

#### Acknowledgements

The author would like to thank Laura Lockau for her guidance and encouragement in the production of this article.

#### References

- Anastario, M., Manzanero, R., Blanco, R., Reyes, E., Jaramillo, R., Black, L., ... & Chun, H. (2011). HIV infection, sexual risk behaviour and condom use in the Belize defense force. *International Journal of STD & AIDS, 22*(2), 73-79.
- Buszin, J., Nieto-Andrade, B., Rivas, J., & Longfield, K. (2012). Multiple partnerships and risk for HIV among the Garífuna minority population in Belize. *Health*, *4*(8), 474-482.
- Carrier, J., & Bolton, R. (1991). Anthropological perspectives on sexuality and HIV prevention. *Annual Review of Sex Research*, 2(1), 49-75.
- Cáceres, C.F. (2002). HIV among gay and other men who have sex with men in Latin America and the Caribbean: A hidden epidemic? *AIDS*, *16*(3), S23-S33.
- Crawford, D. (2007). *Deadly Companions*. New York: Oxford University Press.
- Farmer, P. (1992). New disorder, old dilemmas: AIDS and anthropology in Haiti. In G. Herdt & S. Lindenbaum (Eds.), *The time of AIDS: social analysis, theory, and method* (pp. 287-318). Newbury Park, California: Sage Publications.
- Green, E., Halperin, D., Nantulya, V., & Hogle, J. (2006). Uganda's HIV prevention success: The role of sexual behavior change and the national response. *AIDS and Behaviour*, 10(4), 335-346.
- Huedo-Medina, T., Boynton, M., Warren, M.,
  LaCroix, J., Carey, M., & Johnson, B.
  (2010). Efficacy of HIV prevention
  interventions in Latin American and
  Caribbean nations, 1995–2008: A meta-analysis. AIDS and Behaviour, 14, 1237–1251.
- Kane, S. (1990). Reconceptualizing "risk groups" in AIDS intervention: An analysis of prostitution and the military in Belize. Paper

- presented at the annual meeting of the American Anthropological Association, New Orleans.
- Leclerc-Madlala, S. (2009). Cultural scripts for multiple and concurrent partnerships in southern Africa: Why HIV prevention needs anthropology. *Sexual Health*, *6*, 103-110.
- Murphey, E., Greene, M., Mihailovic, A. & Olupot-Olupot, P. (2006). Was the "ABC" approach (Abstinence, Being Faithful, Using Condoms) responsible for Uganda's decline in HIV?. *PLoS Medicine*, *3*(9), e379.
- Parker, R. (2001). Sexuality, culture, and power in HIV/AIDS research. *Annual Review of Anthropology*, *30*, 163-179.
- Potts, M., Halperin, D., Kirby, D., Swidler, A., Marseille, E., Klausner, J., ... & Walsh, J. (2008). Rethinking HIV prevention: Public health. *Science*, *320*(5877), 749-750.
- Shelton, J., Halperin, D., Nantulya, V., Potts, M., Gayle, H., & Holmes, K. (2004). Partner reduction is crucial for balanced "ABC" approach to HIV prevention. *British Medical Journal*, *328*, 891-893.
- Schoepf, B. (1988). Women, AIDS, and economic crisis in central Africa. *Canadian Journal of African Studies*, 22, 625-644.
- Su, Y. (2010). The failure of the American ABC HIV prevention model in Botswana. *Studies by Undergraduate Researchers at Guelph*, 4(1), 93-100.
- Vu, L., Nieto-Andrade, B., DiVincenzo, A., Rivas, J., Firestone, R., Wheeler, J., & Lungo, S. (2015). Effectiveness of behavior change communications for reducing transmission risks among people living with HIV in 6 countries in Central America. *AIDS and Behaviour*, 19(7), 1203-1213.
- Wilson, D., & Halperin, D. (2008). "Know your epidemic, know your response": A useful approach, if we get it right. *The Lancet*, *372*, 423-426.

- UNAIDS. (2015). *Annual HIV statistical report*. Retrieved from http://www.unaids.org/en/regionscountries/countries/belize.
- UNAIDS. (2017a). Fact sheet Latest statistics on the status of the AIDS epidemic. Retrieved 25 October 2017, from http://www.unaids.org/en/resources/fact-sheet.
- UNAIDS. (2017b). *Belize*. Retrieved from http://www.unaids.org/en/regionscountries/countries/beliz