Research Article

Factors Influencing Adolescents’ Sexually Risky Behaviours in Botswana

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Abstract:
Adolescents’ sexual behaviours are a public health challenge as it exposes them to health risks. Psychosocial pathways may lead to accumulation of risks that may disrupt normal developmental trajectories and sexual and reproductive health among adolescents. Some factors linked to sexual and reproductive health risks occur because of cultural and traditional practices. This paper explores factors influencing adolescents’ sexual behaviours using the Modified Social-Ecological Model. The Modified Social-Ecological model examines the dynamic, integrative, multilevel, and multidimensional influences in the person-environment transactions. Interventions should focus on all the level as these impacts on the life course to address adolescents’ sexual behaviours. Policies at the macro level can have positive outcomes on other levels by ensuring the availability and accessibility of relevant services to help strengthen families.

Keywords: Adolescents, Sexually Risky Behaviours, Modified Social-Ecological model, HIV.

Introduction:
Botswana is one of the countries heavily impacted by HIV around the world, accounting for 18.5% of all people living with HIV, and 1.35% of all new infections (BAIS 2014). With 18.5% of the population aged 18 months, and above reported HIV positive, Botswana is classified as one of the African countries with more than 10% of its population infected with HIV (UNAIDS, 2014). Since new rates have demonstrated heterosexual contact as a source of HIV infections among Batswana (NACA, 2013; 2009), it is important to examine factors that could influence HIV prevention among adolescent populations. Of grave concern, however, is the finding that prevention is failing to keep pace with the HIV epidemic and the number of new infections (15 500 in 2008) surpasses the number of deaths (9 757 in 2008) (BAIS IV, 2013). Globally, the high prevalence of sexually-risky behaviours among adolescent is a significant concern for the majority of parents, guardians and stakeholders (Odeyemi, et al., 2009; Okigbo, et al., 2015; Oluwatoyin& Modupe, 2014). The World Health Organisation (WHO) describes adolescents as young people who are aged between 10 and 19 years. The population of Botswana is estimated at 2,027,326 people (Statistics Botswana, 2011). Adolescents aged 10-19 years constitute 20.6% (418,247) of the general population (UNAIDS/UNICEF, 2014). Young adults under the age of 25 years make up 54% (women 27.4% and men 26.4%) of the population and those aged 20-24 years constitute 10% (200,315) of the population (NACA, 2015). Approximately 11,200 adolescents (6100 females, 5100 male) and 15,300 young adults were living with HIV by 2013 in Botswana (NACA, 2015). WHO (2014) stated that 16 million adolescents (15 to 19 years) experienced their first sexual intercourse with adverse outcomes. Additionally, about one (1) million adolescent girls from Low and Middle-Income countries give birth yearly (WHO, 2014). Adolescents are exposed to regional variations and
diverse experiences due to various social, cultural, political, and economic factors. Additionally, adolescents are heterogeneous through a developmental stage, living environments and changing needs by sex, age, migration, schooling, residence, and socioeconomic status (Chandra-Mouli, et al. 2013; Morris & Rushwan, 2015). Identifying factors that influence adolescents’ sexual behaviours can be enhanced by exploring factors that influence their lives. Since HIV has disproportionately impacted adolescents, research has begun to focus on the need for better understanding the sexual behaviours and practices for this particular population. Literature support that there could be risk and protective factors that either increase or decrease the risk of HIV infection among other populations. Understanding the risk and protective factors through exploring the social, behavioural, and medical factors can help in designing HIV prevention interventions (Todd, et al., 2006). This paper examines the complex and dynamic factors within the context of the ecological context that create and reinforce exposures to risk, creating vulnerabilities among adolescents. Identifying such factors can help focus interventions at multiple levels, which can promote safe sex, prevent pregnancy, and avoiding sexual violence and coercion. This article uses a risk, protective and resilience model through consideration of the Modified Social-Ecological factors to explore factors influencing adolescents’ sexual behaviours (Baral, et al., 2013). The proposed framework can help in identifying major areas, and significant players in the adolescents’ life that can help understand levels exposing them to risk, which could be entry points for interventions.

Modified Social-Ecological Model:
Ecological systems theory was formulated in 1949, by Urie Bronfenbrenner. The theory assumes that a human being does not exist as an isolated entity, but rather in constant interaction with other systems such as the individual, family, community, society and the global world (Bronfenbrenner, 1977; 1994; Bronfenbrenner & Morris, 1998). The ecological model takes into consideration the social and environmental factors. Individual behaviour is therefore analysed within the context of the larger environment. Bronfenbrenner (1977) argued that one must consider the entire ecological system in which growth occurs (Bronfenbrenner, 1994). Even though its initial focus was on human development in the ecology, it was later expanded to be bio ecology. This development included how an individual is influenced by not only the context, but the person characteristics, historical time and the interaction among family members which is part of the proximal processes (Rosa & Tudge, 2013). The Modified Social Ecological Model (MSEM) is derived from the ecological model, which focuses on individual behaviour and environmental determinants (mcleroy, et al., 1988) as well as the personal characteristics and the interactions among family members (Rosa & Tudge 2013). The model was developed from Urie Bronfenbrenner’s (1973) ecological systems theory. The environment where populations are born and grow influences and is influenced by the micro (families, peers and dyads); meso (communities, organizations/institutions); exo (nations); and the macro (global community); time, events, and transitions (chrono) systems of the ecology, viewed from the innermost to outermost. Individual outcomes are therefore analysed within the context of the environment and its transactions. The nested levels of the ecology affect each level through the interactions between the individual with his/her immediate environment. Bronfenbrenner’s original labels for each level of contextual analysis were replaced with the language proposed by Carlson (1984) and Heise (1998). The model states that individuals develop within “nested” levels of the environment or the ecology, that interact with one another and shape attitudes, beliefs, and behaviours. The principles of social-ecological models are consistent with social cognitive concepts that suggest that creating an environment conducive for behaviour change is vital to make it easier to adopt healthy behaviours. A nested ecological model accounts for the interconnectedness of relationships between individuals and their environments and can advance understanding adolescents sexually risky behaviours. Svanemyr, et al. (2015) argue that focusing on different levels is more effective than using models that focus on one level. Focusing on
more levels, helps to examine individual interactions, in their context at the micro, meso, and exo systems. Unpacking adolescents’ SRH requires an understanding of risk and vulnerability patterns in the ecology. Risk factors would make adolescents vulnerable and prone to poor health outcomes (Kamndaya, et al., 2014; Kirby & Fraser, 1998, Pascoe, et al., 2015). Adolescents tend to underestimate risks of certain actions and behaviors as they perceive invulnerability (Nightingale & Fischhoff, 2002). There are also some adolescents who have feelings of vulnerability leading to hopelessness (Fischhoff, 2000). Protective factors tend to shield populations from risk factors. Protective factors reduce the interpersonal and environmental challenges families face and build a network of protective or supportive factors that can help families and adolescents cope with risks (Landers, 2013). The term “resilience” is reserved for unpredicted or markedly successful adaptations to adverse life events, trauma, stress, and other forms of risk (Fraser, Richman, & Galinsky, 1999). Resilience factors help populations deal with the risk factors and make them shape their lives in a better way. The origins of risk among adolescents have centered on the factors that can be organized into four systems: (1) the individual/child factors; (2) the family factors; (3) the community factors, the peer factors; and (4) the institutional and societal factors. Risk factors tend to be nested within the different levels of the ecology and make adolescents vulnerable, prone or exposed to abuse and neglect.

**Intrapersonal Factors:**
McElroy, et al. (1988:355) defines intrapersonal factors as “characteristics of an individual such as knowledge, attitudes, behaviour, self-concepts, skills, etc. This includes the developmental history of the individual” (p.355). These factors include biological, biophysical, cognitive, emotional, behavioural, cultural and motivational factors, and how, interact with people and institutions in individual contexts (Hepworth, et al. 2013; McLeroy, et al., 1988). An adolescent’s sexual and reproductive health is linked to their biological, social, cultural, and economic environment. The adolescent stage is often characterised by emotional, physical, mental as well as psychosocial development (WHO, 2014). Adolescence is viewed as “storm and stress” period, and decisions taken at this stage can have lifelong effects on one’s life course. At this stage, adolescents establish patterns of sexual behaviours, and health problems experienced during this stage can have long-term consequences (Arnett, 1999; Casey, et al., 2010). Sexual and other life experimentation, often a result of defining their values and wellbeing, and seeking their independence, may lead to risky sexual behaviours such as early sexual initiation, concurrent sexual partnerships, inconsistent condom use, limited self-efficacy skills, inter-generational sex, inadequate health care seeking behaviours for early STI treatment, to name the most dominant factors (Adongo, 2018; Kaponda et al., 2007; McCree et al., 2008; Underwood, et al., 2011). These factors acting alone or in concert with other factors may negatively affect the adolescents’ sexual behaviours (Svanemyr, et al., 2015). The ability to use behavioural and cognitive strategies to cope with life stressors, and how one might cope might be reduced or augmented by growing up in certain households (Thorsteinsson, et al., 2013). As such, maladaptive coping might influence adolescent engagement in risky sexual behaviours (Thorsteinsson, et al., 2013). Botswana is an oral society and there are certain messages that are passed through proverbs, which shape adolescents' behaviours, hence might lead to the spread of HIV (Chilisa, et al., 2016). Some of the messages instil a sense of insecurity in staying in monogamous relationships resulting in in adolescents opting for multiple sex partners (Chilisa, et al., 2016). Another study in Botswana among adolescents indicated that self-efficacy was a predictor of intention to practice safe sex (Chilisa, et al., 2013). This therefore indicates that those adolescents who lacked confidence in ability to practice safe sex, were more likely to engage in unsafe sex practices.

**Interpersonal Factors:**
Interpersonal factors play a significant role in influencing adolescents’ sexual behaviours. Interactions that individuals have in the environment can be the cause of and solution to problems (Tracy & Brown, 2011). The family
acts a major socializing agent in adolescents’ behaviours (Babalola et al., 2005; Okigbo et al., 2015). Interpersonal relationships with family, friends, neighbours and others can influence health and health behaviours (mcleroy et al., 1988). As illustrated by Mackenbach, et al (2008) and Viner, et al. (2012) family relationships and possibilities provided by family, peers, school and the neighbourhood play a role in adolescent health. Family relationships and other interactions are critical in the life of adolescents as adolescents can adopt health habits, socialise and formulate individual and behavioural development, attitudes and thoughts (Bronfenbrenner & Evans 2000; Achenbach, et al., 2008). Changes in the family systems through divorce, criminal involvement of parents, alcohol abuse in the family, family socioeconomic status, communication and access to information, importation and adoption of alien cultures significantly influence the sexual behaviours of adolescents (Farid et al., 2015). Even though interpersonal stressors has been cited as a stressor for adolescents, these can also be the main source of support and protect them from experiencing some risks (Camara, Bacigalupe, & Padilla, 2017; larue & Herrman, 2008). Kirby and Fraser (1998) argue that having supportive interpersonal relationships can be a buffer against life stressors. Social networks influence health and sexual behaviours. Social support from parents, siblings, sexual partners and friends are critical buffers in adolescence (Kirby &Fraser, 1998; mcleroy et al., 1988). Tracy and Turner (2011) also argue that strong social support networks are buffers to life stressors, as individuals can draw from these when responding to stressors. Interpersonal relationships with family, friends, neighbours and others can influence health and health behaviours. Activities that can influence adolescents’ sexual behaviours among their networks include social engagement and influence, social and sexual networks, as well as access to information (Poundstone, Strathdee, & Celentano, 2004). Social influence is mostly from parents, siblings, sexual partners and friends/peers. From the Botswana Violence Against Children survey, there is prevalence of emotional violence that young people are exposed to at the hands of a parent, adult caretaker, or other adult relative (Ministry of Local Government and Rural Development, 2019). The survey indicates that 9.3% females and 5.5% males have experienced sexual violence. Sexual violence was experienced at or before the age of 13 (22.8% for females and 13.4% for males), and 52.2% females and 52.3% males experienced it between 16 and 17 years. As a result of this early exposure, adolescents are prone to engaging in risky sexual behaviours. Family: The family is the first place where socialization takes place. Socialization first begins where adults provide the foundation for the adolescent’s first experiences and the family provides the context where they form relationships and sense of belonging as part of identity development (mcgoldrick, Carter, & Garcia-Preto, 2011). It is within the family setup where,adolescent,girls are,exposed to inequitable g ender norms, expectations and prescriptions that later shape how they think about themselves and others, as well as how they view members of the opposite sex. Family and social networks can be supportive and reinforce healthy behaviours that deter adolescents from engaging in risky sexual behaviours. For example, cultural norms and gender inequality (Bates et al., 2004) that family prescribes can be influential to adolescents’ sexual behaviours. In the family context adolescents learn the behaviours to expect from others as well as how to interpret and send emotional signals to others. Quality of the parent-adolescent relationship and parent-adolescent communication about sex are associated with lower sexual risk behaviour among adolescents (Namisi et al., 2013; Visser, 2017). Let’s Talk, an HIV prevention intervention offered in a support group format to adolescents aged 13+ and their primary caregivers decreases distress among adolescents and their caregivers and offers protective individual and family-level factors which support HIV prevention (diclemente, et al., 2008; Thurman, et al., 2018). In abusive families, adolescents are exposed to physical, sexual and emotional abuse and a host of maladaptive forms of emotional communication and behaviour and receive poor models of adaptive self-regulation (Ammerman et al., 1999; Besinger et al., 1999; Sahlberg, 2012). Poverty, violence and
abuse are said to expose adolescents to risky behaviours leading to HIV infection (Jewkes, et al., 2010). For example, exposure to household dysfunction (parental violence, parental substance use) has been linked to internalizing and externalizing problems and social problems among adolescents (Howells, and Rosenbaum 2008). Violence in the home, lack of proper parenting or communication skills, and parental alcohol abuse may lead to forced sex, which in turn may negatively influence early sexual involvement, teenage pregnancy and family conflict, and the ability of family members to access support. A history of violence and psychotic illness in parents including hallucinations and delusions such as paranoia also includes child exposure to the vulnerability. Material deprivation and poverty, exposure to physical abuse and violence, a chaotic home environment, parental job losses, death of parents and orphan hood and household compositions also heighten vulnerability to sexually risky behaviours and influence sexual decision-making (Birdthistle, et al., 2008; Jennings, et al., 2017), poor school attendance (Gavin et al., 2006) and low socio-economic status (Jennings et al., 2017; Schenk et al., 2008; Kirby & Fraser 1998; Skinner et al., 2006). These factors expose the family to distress and impact on supervision risking adolescents to have behavioural difficulties (Kirby & Fraser, 1998). Child maltreatment can inhibit parent-child bonding, while interparental conflict can be a barrier to parent-child communication and effective parenting (Kirby & Fraser, 1998). These factors can influence adolescents to engage in behaviours to cope with filling the negation they may be experiencing. Such behaviours can influence adolescent females to engage in sexual encounters leading to early childbearing which can be highly disruptive for normative development. Even though the family at large is expected to provide guidance and acknowledgement on issues of SRH, in most cases, parents have no Knowledge, or avoid engaging young people in conversations about SRH and –they lack the skills to engage adolescents in such sensitive sexual matters (Skinner, Osman, & Schwandt, 2011). Family support is critical during this stage in terms of providing material resources, emotional support, and clear communication about SRH (Remes et al., 2010). Also, Skinner, Osman, and Schwandt (2011) noted adult-child relationship and effective communication could be vital in mitigating factors that can expose girls to vulnerability. They however, also note that adults are helpless as they work long hours and fail to supervise their adolescents, or adolescents could resist adult supervision due to their dependency on social media and peers. In Botswana, some of the dominant factors that expose adolescents to sexually risky behaviours are family maltreatment and neglect, peer group influence, adoption of substance abuse behaviours, and inadequate parental guidance. Family maltreatment has been found to negatively impact on, developmental capacity of adolescents, hence might hinder how they make decisions, lower their self-esteem, security and belonging. Another factor that influences adolescents’ sexual behaviours in families is the way sex is viewed in families. There are families where intergenerational sex is encouraged through pressuring girls to have sexual relations with their adult uncles (Ntshwarang & Malinga–Musamba, 2015). Such was also reported by Ntseane (2004) where maternal uncles expect sexual favours from their nieces, which therefore fosters the belief that it is acceptable for young girls to engage in sexual relations with older men. Family maltreatment therefore exposes adolescents to adversity; hence they tend to engage in early sexual activities as a way to boost their self-esteem (Blum & Mmari, 2005, Lee et al. 2006). This was also illustrated by letamoandmokgatle (2013) that adolescents with exposure to risk factors such as experience of sexual coercion, substance use, and experienced sexual intercourse before reaching age 15 were more likely to report having engaged in risky sexual behaviours. Chilisa, et al. (2013) also reported that early sexual debut before the age of 15 among Botswana adolescents was a risk factor to multiple sexual partners and transactional sex, exposing them to negative health outcomes. Recently, the Botswana Ministry of Local Government and Rural Development (2019) examined the association between childhood violence exposure and sexual risk-taking behaviours. The survey showed that those who were exposed to violence were more likely to have multiple sexual partners, infrequent condom
use, and sexual exploitation, which exposes them to HIV infection risk. Friends/Peers: Influence from adolescent peers can determine whether they engage in sexual relationships or not and whether they use protection if they do engage in sexual relations. Mmari and Sabherwal (2013) found that peers who had had sex were a risk factor across health outcomes. Peers can be influenced by sexual behaviours through normative mechanisms where they want approval through engaging in specific behaviour. Also, those adolescents enmeshed or with a close circle of friends may find themselves in a social context that encourages engaging in sexual behaviours (Miller, et al., 1997). The desire to conform to peer norms influences engaging in risky sexual behaviours (Steinberg, 2008). Chilisa, et al. (2005) also report that peer norms and behaviours can influence the timing of sexual initiation and whether protection is used. Peers provide networks which can lead to sexual partners (E llen, et al. 2001). Moreover, adolescents’ position in social networks might influence their decisions on whether to engage or not engage in sexual behaviours (Prinstein, Meade, & Cohen, 2003). Fearon, et al. (2015) found an association between peer exposure and adolescent sexual behaviours. Ntshwarang and Malinga-Musamba (2015) found that adolescents are pressured by their peers to engage in sexual relations, and hence have developed their own culture where they value acceptance by peers as they get a feeling of belonging.

Community Factors:
Community factors include relationships between organizations and groups; and groups that individuals belong to (mcleroy et al., 1988). Hepworth, et al. (2013) also illustrates that these include the context of the adolescent’s environment and includes the physical environment and social support systems. Examples of community factors include family, church, neighbourhood, and informal social networks. Billy, Brewster, and Grady (1994) propose that community level factors can influence adolescents’ sexual behaviours at two levels. One is where there are opportunity structures that influence how adolescents perceive the cost of engaging in early sex, such as exposure to stis and risking unplanned pregnancy. Another one is normative environment where boundaries of acceptable behaviours are defined. Adolescents that are raised in poverty are at increased risk of a wide range of adverse outcomes that are identified at birth and can extend into adulthood (Moore et al., 2009). This is an example of opportunity structures where adolescents perceive engaging in sex as beneficial for them, especially for those with limited resources. Adolescents growing up in dysfunctional households where there is exposure to domestic violence, substance use, neglect, parental death and incarceration are more likely to engage in risky behaviours. Adolescents, who had experienced some form of aces, were more likely to engage in early sexual debut (Kidman & Kohler, 2019). Chandra-Mouli, et al. (2013) also illustrate that during the adolescent stage, gender and social expectations begin to shape how adolescents behave and relate with the opposite sex. Svane myr, et al. (2015) argue that such expectations can promote adolescent girls to be submissive, hence preventing them to being assertive with their sexual partners (since young men can be taught to be risk takers in matters of sexual and health). These can be an example of normative environment as the community is the one prescribing such rules and norms. Enul adu, et al. (2017) report that adolescents engaged in sexual relations because they are forced or because of what they perceived as societal expectations. Furthermore, gender roles and unequal power relations ascribed by the society can affect the reproductive health of adolescent. This is because of the superiority of the man and the expectations that a female should submit to the demands of the man (Olade po & Fayemi, 2011). This can, therefore, result in adolescent girls being forced into unwanted sex, failure to negotiate condom use, among other factors (Chandra-Mouli et al., 2013). Underwood, et al. (2011) note that unsafe spaces like the market, bars where alcohol is sold, unregulated access to alcohol, unsafe public transportation systems, unsafe housing, and poor electricity provision are some of the factors that may negatively influence adolescents’ sexual behaviours. Also, in communities adolescents’ girls are exposed to sexual violence and physical
violence where they are coerced to engage in sex (Skinner, Osman, & Schwandt, 2011). Svanemyr, et al. (2015) argue that mobilization of community leaders can foster intergenerational communication in support of adolescent SRH. In Botswana, there are certain behaviours that are sanctioned in the community which influence sexual risky behaviours among adolescents (Chilisa, et al. 2016). There are cultural beliefs and practices that encourage men to have multiple sex partners, hence exposing them to HIV infection. As these are sanctioned in the community, adolescents tend to adopt them; as boys perceive sex as a sign of masculinity and power domination (Chilisa, et al., 2013). Some communities also have a level of condonation or even approval of customs such as child marriages, female genital mutilation, polygon, and the general subordination of women and minority groups which might promote negative beliefs among adolescents leading to engaging in risky sexual behaviors (Ntseane, 2004).

**Institutional Factors:**
Institutional factors include rules and regulations of how programs are implemented, and how they are financed. As individuals spend more time in institutions, the structures and processes in such places might influence the health behaviours of individuals. As a result, it is worthy to note some social and cultural barriers at play that obstruct service delivery to adolescents (Chandra-Mouli, et al., 2013). Organizations such as schools teach social norms and values and can encourage positive behaviour change. As such it is critical that they should share correct knowledge of contraceptive use in order to address the sexual and reproductive health problems of adolescents without limiting what they share or only emphasising abstinence (Envuladu, et al., 2017). UNICEF (2018) also emphasise that there should be access to gender-responsive adolescent health services and covering their health rights with focus on their needs and circumstances. Furthermore, gender roles and unequal power relations ascribed by the society can affect the reproductive health of adolescent. Institutions that provide health services might have harmful practices that can deter adolescents’ ability to seek and obtain health services (Temin, Levine, & Stonesifer, 2010). Additionally, in Envuladu, et al. (2017) study, adolescents reported that services were not readily accessible hence they end up engaging in unsafe sexual practices. Also, fear of being stigmatised was another reason advanced by adolescents. As such, health service providers should be adolescent friendly to ensure that adolescents can be free in seeking services without requiring that they are accompanied by an adult. Chandra-Mouli, et al. (2013) argues that adolescent-centred health services promote adolescents’ sexual and reproductive health as they are afforded privacy and confidentiality. In schools, adolescent girls should be provided with comprehensive sexuality education so that they can acquire the necessary information and knowledge of sexual and reproductive health (Chandra-Mouli, et al., 2013). Once equipped with life skills knowledge, adolescents should also be involved in designing of age-appropriate interventions (UN, 2012).

**Public Policy Factors:**
Public policy factors cover national laws and policies. This also encompasses structural interventions such as social, cultural, economic, legal, organizational, or policy responses to adolescents’ sexual behaviours. Svanemyr et al. (2015) indicate that at this level, frameworks for SRH programming are formulated as governments are obligated to protect adolescents from harm. International agencies focus on improving adolescent sexual and reproductive health, providing support to local government and ensuring that these governments are accountable (Chandra-Mouli, et al., 2013). Governments commit to international, regional, and national frameworks whose goal is to ensure human rights, including access to sexual and reproductive health services. Chandra-Mouli, et al. (2013) indicate that governments should dialogue about SRH issues with respective stakeholders who are involved in service provision to promote and ensure the comprehensive provision of SRH services to the adolescents. As governments engage in developing policies and strategies, they should not, however, be clouded by culture and tradition, as these can have harmful practices (Chandra-Mouli, et al., 2013).
International Organizations: Several International Organizations to support adolescent girls’ health as part of the general human rights, developed frameworks which guide how the needs and concerns of adolescents can be addressed by the international community, national governments, and civil society. Governments are therefore required to be signatories to such agreements as their way to support and ensure their responsibility for improving and upholding human rights. They need to have the political commitment and ensure that such programmes bound by these agreements are allocated funds to implement. For example, UNICEF (2018) has committed to advocating for adolescents’ right to health, promoting appropriate legislation, policies and regulations and supporting the development of strategies and budgeted plans which ensure access to health services and health care facilities for adolescent boys and girls, regardless of their age, marital status, guardian consent, education level, ethnic origin, disability status, gender identity or sexual orientation (pg. 13). Governments should also enforce laws that protect adolescent girls from sexual violence and abuse; and provide economic opportunities to families living in poverty. Poverty is a risk factor as it exposes adolescent girls to multiple stressors (Kirby & Fraser, 1998). Living in poverty and having limited resources to meet the basic needs are likely to expose adolescent girls to vulnerabilities across their life course (Svanemyr et al., 2015). Makiwane, Gumede, and Molobela (2018) also found that poverty was perceived as a factor increasing vulnerability among female adolescents and exposing them to risks. They found that female adolescents living in poverty were more likely to engage in non-consensual transactional sex. Lack of resources influences adolescents to engage in transactional sex for survival. Adolescent girls are vulnerable to SRH issues, as they engage in sexual relations for monetary benefits. Government’s failure to provide recreational facilities for adolescents was cited as another factor influencing them to engaging in sexual activities. Botswana through the UNFPA has an Adolescent Sexual and Reproductive Health programme which ‘aims to strengthen national capacity to improve and expand comprehensive adolescent sexual and reproductive health programmes including HIV prevention.’ The programme is focused on helping protect adolescent from STI and pregnancies (UNFPA, xx). Despite the efforts of the government to ensure that they provide Youth Friendly Services (YFS), in some cases, they are not accessible, acceptable, appropriate, effective and affordable. Furthermore, UNFPA Botswana argues that Botswana still lags behind in having YFS standards aligned to WHO global standards for provision of YFS.

Conclusion:
This paper explored factors influencing adolescents’ risky sexual behaviours in Botswana using the Modified Social-Ecological Model. The paper argued that to understand adolescents’ behaviour, it is critical to explore all the interactions that they have with their families, peers, community institutions, as well as government level agencies. The paper showed that in Botswana, there are still some gaps that are critical in influencing adolescents’ lives. The paper has implications for that the development of preventive intervention for adolescents. Early interventions should focus on instilling a sense of self-worth and build positive self-esteem on adolescents. Furthermore, there is need to include family as part of the sex education.

References:
1. Adongo, B. W. (2018). Assessing factors influencing early sexual initiation among adolescents (13 to 19 years) in Ghana: a qualitative study. International Journal of Caring Sciences, 11(1), 53-60.
2. Arnett, J.J. (1999). Adolescent storm and stress, reconsidered. American psychologist, 54(5), 317-326.
3. Baral, S., Logie, C.H., Grosso, A., Wirtz, A.L. & Beyrer, C. (2013). Modified social ecological model: A tool to guide the assessment of the risks and risk contexts of HIV epidemics. BMC public health, 13(1), 1-8.
4. Bates, I., Fenton, C., Gruber, J., et al. (2004). Vulnerability to malaria, tuberculosis, and...
HIV/AIDS infection and disease. Part 1: determinants operating at individual and household level. Lancet Infectious Diseases, 4(5), 267-277.

5. BAIS IV. (2013). Preliminary Results: Botswana AIDS Impact Survey IV (BAIS IV), 2013. Gaborone: Statistics Botswana.

6. Billy, J.O., Brewster, K.L. & Grady, W.R., (1994). Contextual effects on the sexual behaviour of adolescent women. Journal of Marriage and the Family, 387-404.

7. Birdthistle, I. J., Floyd, S., Machingura, A., Mudziwapasi, N., Gregson, S., & Glynn, J. R. (2008). From affected to infected?Orphanhood and HIV risk among female adolescents in urban Zimbabwe. AIDS, 22(6), 759-766.

8. Bronfenbrenner, U. & Evans, G.W. (2000). Developmental science in the 21st century: Emerging questions, theoretical models, research designs and empirical findings. Social development, 9(1), 115-125.

9. Bronfenbrenner, U. & Morris, P.A. (1998). The ecology of developmental processes. Handbook of child psychology, edited by R. Lerner, 1(5), 993-1028. New York, N.Y.: John Wiley.

10. Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and Design. Cambridge, Mass.: Harvard University Press.

11. Camara, M., Bacigalupe, G. & Padilla, P. (2017). The role of social support in adolescents: Are you helping me or stressing me out?. International Journal of Adolescence and Youth, 22(2), 123-136.

12. Casey, B.J., Jones, R.M., Levita, L., Libby, V., Pattwell, S.S., Ruberry, E.J., Soliman, F. & Somerville, L.H. (2010). The storm and stress of adolescence: insights from human imaging and mouse genetics.” Developmental Psychobiology: The Journal of the International Society for Developmental Psychobiology, 52(3), 225-235.

13. Chandra-Mouli, V., Greifinger, R., Nwosu, A., Hainsworth, G., Sundaram, L., Hadi, S.,...& Schoening, E. (2013). Invest in adolescents and young people: It pays. Reproductive Health, 10(1), 51.

14. Chilisa, B., Dube-Shomanah, M., Tseko, N., & Mazile, B. (2005). The voices and identities of Botswana school children gender HIV/AIDS and life skills in education. Nairobi, UNICEF.

15. Chilisa, B., Mohiemang, I., Mpeta, K.N., Malinga, T., Ntshwarang, P., Koyabe, B.W. & Heeren, G.A. (2016). Contextualized theory-based predictors of intention to practice monogamy among adolescents in Botswana junior secondary schools: Results of focus group sessions and a cross-sectional study. Journal of Human Behavior in the Social Environment, 26(6), 533-540.

16. Chilisa, B., Mohiemang, I., Mpeta, K., Malinga-Musamba, T., Ntshwarang, P. & Heeren, G.A. (2013). Why wait ‘til marriage? The determinants of premarital sex among adolescents in a country in sub-Saharan Africa: Botswana. Journal of human behavior in the social environment, 23(8), 972-979.

17. Chilisa, R., Tlhabano, K., Vista, C., Pheko, M., Losike, N., Mosime, S., Mpeta, K. & Balogun, S.K. (2013). Self-efficacy, self-esteem and the intention to practice safe sex among Batswana adolescents. IOSR Journal of Humanities and Social Science (IOSR-JHSS), 9(2), 87-95.

18. Decrement, R.J., Crittenden, C.P., Rose, E., Sales, J.M., Wingood, G.M., Crosby, R.A. & Salazar, L.F. (2008). Psychosocial predictors of HIV-associated sexual behaviors and the efficacy of prevention interventions in adolescents at-risk for HIV infection: what works and what doesn’t work? Psychosomatic Medicine, 70(5), 598-605.

19. Eaton, L., Flisher, A. J., & Aaro, L. E. (2003). Unsafe sexual behaviour in South African youth. Social Science & Medicine, 56(1), 149-165.
20. Ellen, J. M., Dolcini, M. M., Bir, N. D., Harper, G. W., Watson, S., & Valente, T. (2001). Social network centrality and sexual experience among a household sample of urban African-American adolescents. Connections, 24(2), 76-81.

21. Envuladu, E.A., Van de Kwaak, A., Zwanikken, P. & Zoakah, A.I. (2017). Exploring the factors influencing adolescent sexual behavior in plateau state Nigeria. American Journal of Medicine and Medical Sciences, 7(1), 1-6.

22. Fearon, E., Wiggins, R. D., Pettifor, A. E., & Hargreaves, J. R. (2015). Is the sexual behaviour of young people in sub-Saharan Africa influenced by their peers? A systematic review. Social Science & Medicine, 146, 62-74.

23. Fischhoff, B., Parker, A.M., de Bruin, W.B., Downs, J., Palmgren, C., Dawes, R. & Manski, C.F. (2000). Teen expectations for significant life events. The Public Opinion Quarterly, 64(2), 189-205.

24. Fraser, M. W. (1998). The ecology of childhood: A multisystem perspective. In M. W. Fraser (ed.), Risk and resilience in childhood: An ecological perspective (pp. 1-29). Washington, DC: NASW press.

25. Gavin, L., Galavotti, C., Dube, H., et al. (2006). Factors associated with HIV infection in adolescent females in Zimbabwe. Journal of Adolescent Health, 39(4), 596.e11e596.e18.

26. Greene, M. (2008). Poor health, poor women: How reproductive health affects poverty. Focus on Population, Environment, and Security. Washington, DC: USAID; Woodrow Wilson International Centre for Scholars

27. Hepworth, D.H., Rooney, R.H., Rooney, G.D., Strom-Gottfried, K. & Larson, J.A. (2013). Direct social work practice: Theory and skills. Belmont, CA: Brooks/Cole Cengage Learning.

28. Howells, N.L. & Rosenbaum, A. (2008). Effects of perpetrator and victim gender on negative outcomes of family violence. Journal of Family violence, 23(3), 203-209.

29. Jennings, L., Mathai, M., Linnemayr, S., Trujillo, A., Mak’anyengo, M., Montgomery, B.E. & Kerrigan, D.L. (2017). Economic context and HIV vulnerability in adolescents and young adults living in urban slums in Kenya: a qualitative analysis based on scarcity theory. AIDS and Behavior, 21(9), 2784-2798.

30. Jewkes, R.K., Dunkle, K.,Nduna, M. & Shai, N. (2010). Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. The lancet, 376(9734), 41-48. Doi:10.1016/S0140-6736(10)60548-X

31. Kaponda, C. P. N., Dancy, B. L., Norr, K. F., Kachingwe, S. I., Mbeba, M. M., & Jere, D. L. (2007). Community consultation to develop an acceptable and effective adolescent HIV prevention intervention. Journal of the Association of Nurses in AIDS Care, 18(2), 72e77.

32. Kamndaya, M., Thomas, L., Vearey, J., Sartorius, B. & Kazembe, L. (2014). Material deprivation affects high sexual risk behavior among young people in urban slums, South Africa. Journal of Urban Health, 91(3), 581-591.

33. Kidman, R. & Kohler, H.P. (2019). Adverse childhood experiences, sexual debut and HIV testing among adolescents in a low-income high HIV-prevalence context.” Aids, 33(14), 2245-2250.

35. Kirby, L. D. & Fraser, M. W. (1998). Risk and resilience in childhood. In M. W. Fraser (ed.), Risk and resilience in childhood: An ecological perspective (pp. 10-33). Washington, DC: NASW press

36. Larue, D.E. & Herrman, J.W. (2008). Adolescent stress through the eyes of high-risk teens. Pediatric nursing, 34(5), 375-380.

37. Letamo, G. & Mokgatlahe, L.L. (2013). Predictors of risky sexual behaviour among young people in the era of HIV/AIDS: evidence from the 2008 Botswana AIDS Impact Survey III. African journal of reproductive health, 17(3), 169-181.

38. Mackenbach, J. P., Stirbu, I., Roskam, A. J. R., Schaap, M. M., Menvielle, G., Leinsalu, M., & Kunst, A. E. (2008). Socioeconomic inequalities in health in 22 European countries. New England journal of medicine, 358(23), 2468-2481.
39. Makiwane, M., Gumede, N.A. & Molobela, L. (2018). Initiation of sexual behaviour and early childbearing: poverty and the gendered nature of responsibility amongst young people in South Africa. Journal of International Women's Studies, 19(5), 209-226.

40. Mcleroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. Health Education Quarterly, 15(4), 351-377.

41. Miller, B. C., Norton, M. C., Curtis, T., Hill, E. J., Schvaneveldt, P., & Young, M. H. (1997). The timing of sexual intercourse among adolescents: Family, peer, and other Antecedents. Youth & Society, 29(1), 54-83.

42. Ministry of Local Government and Rural Development. (2019). Report on violence against children survey (VACS)/ - National Survey on Life Experiences and Risk of HIV Infection Among 13-24 Year Old Males and Females in Botswana.Gaborone, Botswana: Department of Social Protection.

43. Mmari, K., & Sabherwal, S. (2013). A review of risk and protective factors for adolescent Sexual and reproductive health in developing countries: an update. Journal of Adolescent Health, 53(5), 562-572.

44. Morris, J. L., & Rushwan, H. (2015). Adolescent sexual and reproductive health: The global Overview. Journal of adolescent health, 31(1), 3-9.

45. Ntseane, P. G. (2004). Cultural dimensions of sexuality: Empowerment challenge for HIV/AIDS prevention in Botswana. Paper presented at the International Seminar/Workshop, Chiangmai, Thailand.

50. Challenges. International Journal of Gynecology & Obstetrics, 131, S40-S42

51. Namisi, F.S., Aarø, L.E., Kaaya, S., Onya, H.E., Wubs, A. &Mathews, C. (2013). Condom use and sexuality communication with adults: a study among high school students in South Africa and Tanzania. BMC public health, 13(1), 874. Doi:10.1186/1471-2458-13-874.

52. Nightingale, E.O. &Fischhoff, B. (2002). Adolescent risk and vulnerability: Overview. Journal of adolescent health, 31(1), 3-9.

53. Odeyemi, K., Onajole A. &Ogunowo B. (2009). Sexual behaviour and the influencing factors among out of female school adolescents in Mushin market, Lagos, Nigeria. International Journal of Adolescent Medical Health, 21, 101-109.

56. Oluwatoyin, F.E. & Modupe O.O. (2014). Risky Sexual Behaviour among Secondary School Adolescents in Ibadan North Local Government Area, Nigeria. IOSR-JNHS: 3(3), 34-44.

59. Pascoe, S. J., Langhaug, L. F., Mavhu, W., Hargreaves, J., Jaffar, S., Hayes, R., & Cowan, F. M. (2015). Poverty, food insufficiency and HIV infection and sexual behaviour among young rural Zimbabwean women. plos One, 10(1).

60. Poundstone, K.E., Strathdee, S.A. & Celentano, D.D. (2004). The social epidemiology of human immunodeficiency virus/acquired immunodeficiency syndrome. Epidemiologic reviews, 26(1): 22-35.

61. Prinstein, M. J., Meade, C. S., & Cohen, G. L. (2003). Adolescent oral sex, peer popularity, and perceptions of best friends’ sexual behaviour. Journal of Paediatric Psychology, 28(4), 243-249.

62. Rosa, E. M., &Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. Journal of Family Theory and Review, 5(4), 243-258.

63. Schenk, K., Ndhlouv, L., Tembo, S., et al. (2008). Supporting orphans and vulnerable...
Children affected by AIDS: using community-generated definitions to explore patterns of vulnerability in Zambia. AIDS Care, 20(8), 894-903.

Skinner, D., Tsheko, N., Mtero-Munyati, S., et al. (2006). Towards a definition of orphaned and vulnerable children. AIDS & Behavior, 10(6), 619-626.

Steinberg, L. (2008). A social neuroscience perspective on adolescent risk taking. Development Review, 28, 78-106. Doi:10.1016/j.dr.2007.08.002

Svanemyr, J., Amin, A., Robles, O. J., & Greene, M. E. (2015). Creating an enabling environment for adolescent sexual and reproductive health: a framework and promising approaches. Journal of Adolescent Health, 56(1), S7-S14.

Temin, M., Levine, R., & Stonesifer, S. (2010). Start with a girl: A new agenda for global health. Issues in Science and Technology, 26(3), 33-40.

Thorsteinsson, E.B., Sveinbjornsdottir, S., Dintsi, M., & Rooke, S.E. (2013). Negative life events, distress, and coping among adolescents in Botswana. Australian Journal of Educational and Developmental Psychology, 13: 75-86.

Thurman, T. R., Nice, J., Luckett, B., & Visser, M. (2018). Can family-centered programming mitigate HIV risk factors among orphaned and vulnerable adolescents? Results from a pilot study in South Africa. AIDS care, 30(9): 1135-1143.

Todd, J., Grosskurth, H., Changalucha, J., Obasi, A., Mosha, F., Balira, R., ... & Gavyole, A. (2006). Risk factors influencing HIV infection incidence in a rural African population: a nested case-control study. The Journal of infectious diseases, 193(3), 458-466.

Tracy, E. M., & Brown, S. (2011). Social networks and social work practice. Social Work Treatment, 447-459.

UNAIDS. (2014). The gap report. Geneva, Switzerland.