PERCEPTIONS OF SEXUALLY TRANSMITTED INFECTIONS IN SELECT YOUTH AND YOUNG ADULT AFRICAN NEWCOMERS IN REGINA, SASKATCHEWAN

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ABSTRACT

This study explores and describes perceptions of African youth and young adult newcomer populations living in Regina, Saskatchewan respecting sexually transmitted infections.

Using qualitative methodology, specifically interpretive description, the researcher conducted one-to-one interviews with eight young adult African newcomers. Each interview session lasted between 30 and 45 minutes. The researcher used open-ended questions with associated prompts. Interpretive description captures patterns and themes within the participants' subjective perceptions and experiences. This strategy generates knowledge and findings with practical implications.

Key findings revealed that knowledge deficit is a major problem. Participants displayed some knowledge or different understandings of sexually transmitted infections including how people can contract them. Knowledge levels differed depending on education, with individuals exposed to information from various resources. Youth living in urban areas had more knowledge because they are exposed to different resources (i.e., social media, reading materials, information at the health centres, televisions). Those participants with higher education showed higher perceptions of risks related to sexually transmitted infections. However, this high-risk perception did not significantly influence or motivate the individuals to change their behaviours.

Knowledge was affected by fear, isolation, taboo, ignorance, embarrassment, fear, misconception, and shame. Other findings include perceived barriers, such as lack of condom use, distrust, lack of awareness, fear of isolation/ labels/social stigma, and discrimination. Some participants discussed youth risk behaviours, such as inconsistency or low condom use related to peer pressure, alcohol intoxication, or cultural norm influences. They described how families are more concerned about preventing pregnancy than sexually transmitted infections. Lack of knowledge about sexually transmitted infections and associated risksinfections made it challenging to associate with risky behaviours. Other findings related to religion, cultural influences, and misconceptions. The study found that many newcomers delay seeking healthcare services, which may link to perceived barriers, information/knowledge gaps, detection, treatment, and lack of information regarding sexually transmitted infection related programs and services.

Youth newcomers face many challenges. There are no known studies about sexually transmitted infections in youth and newcomers in Saskatchewan; hence, lack of evidence may result in culturally inappropriate programs leading to underrepresentation of newcomer youth in uptake and utilization of services.

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DEDICATION

I dedicate this thesis to my husband Abdulrahman Ally, my children Amina, Ahmed and Aisha for their unbelievable patience, endless emotional support, and love. They have been there for me in every possible way, from being patience with my enduring working hours, helping with computer problems, preparing meals, and above all, the unconditional love during the duration of my study.

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ABBREVIATIONS

Aboriginal Nurses Association of Canada (ANAC)

Affiliation of Multicultural Societies and Service Agencies (AMSSA)

African Union (AU)

Association of Faculties of Medicine of Canada (AFMC)

Canadian Association of Schools of Nursing (CASN)

Canadian International Development Agency (CIDA)

Canadian Nurses Association (CNA)

Catholic Family Services (CFS)

Census Metropolitan Area (CMA)

Citizenship and Immigration Canada (CIC)

Department of Foreign Affairs Trade and Development (DFATD)

Health Belief Model (HBM)

Healthcare providers (HPs)

Human Immunodeficiency Virus (HIV)

Immigration medical examination (IME)

Immigration, Refugees and Citizenship Canada (IRCC)

Intimate partner violence (IPV)

Joint United Nations Programme on HIV and AIDS (UNAIDS)

'Keep It Safe, Saskatchewan' (KIS -SK)

National Aboriginal Health Organization (NAHO)

Newcomer Welcome Centre (NWC)

Physicians Association of Canada (IPAC)

Prevention of mother-to-child transmission (PMTCT)

Public Health Agency of Canada (PHAC)

Regina Immigrant Women Centre (RIWC)

Regina Multicultural Council (RMC)

Regina Open Door Society (RODS)

Research Ethics Board (REB)

Resource Centre for Adolescent Pregnancy Prevention (ReCAPP)

Saskatchewan Health Authority (SHA)

Saskatchewan Immigrant Nominee, Program (SINP)

Saskatchewan Ministry of Health (MOH)

Saskatchewan Registered Nurses' Association's (SRNA)

Saskatchewan Union of Nurses (SUN)

Sexually transmitted infections (STIs)

Traditional medicine (TM)

Universal health coverage (UHC)

World Health Organization's (WHO)

1 INTRODUCTION

Globally, sexually transmitted infections (STIs) have been a persistent and recurring public health issue. With more than one million new STI cases per day, the impacts on sexual and reproductive health are extensive and epidemic (World Health Organization (WHO, 2019). The complexity of these diseases transects borders, age groups and genders. It is important to recognize that STIs are perhaps one of the biggest 'hidden' epidemics with significant long-term impacts. They contribute to fatal/neonatal mortality rates, escalate infertility rates, and lead to morbidities, such as HIV, hepatitis, and cervical cancer (WHO, 2016).

Furthermore, STIs are embedded in a context of social, religious, cultural, and economic beliefs and practices that, at times, lead to stigma, discrimination, and invisibility. Globally, evidence suggests that minority ethnic groups, specifically adolescents and young adults, are highly vulnerable and at increased risk for acquiring STIs (Amare et al., 2019; Auli et al., 2015; Kajula et al., 2014). Youth and young adults are disproportionately impacted, leading the WHO (2016) to prioritize STI prevention in this age group over the last five years.

The WHO has set out global targets for ending the STI epidemic (Government of Canada, 2017). Members of the World Assembly, including Canada, endorsed to the WHO's "Global Strategy for the Prevention and Control of Sexually Transmitted Infections" (WHO, 2007) and, more recently, supported the 2016–2021 Global Health Sector Strategies for Sexually Transmitted Infections (STIs), Human Immunodeficiency Virus (HIV) and Viral Hepatitis (WHO, 2016). These strategies align with the United Nations' 2030 agenda for sustainable development and universal health coverage (UHC) (WHO, 2018). The UHC goal potentially contributes to a significant reduction in new STIs, and related deaths (including stillbirths and cervical cancer), thereby improving individual health and overall sexual health within society (WHO, 2016).

1.1 Sexually Transmitted Infections: A Global Challenge – A Canadian Reality

Globally, approximately 376 million new infections of the four curable STIs – chlamydia, gonorrhoea, syphilis, and trichomonas occurred in 2016 (WHO, 2018). Sexually transmitted infections (STIs) are infections spread by sexual contact, often linked to risky sexual behaviours (Amare et al., 2019; Chandra et al., 2011). Sexually transmitted infections are severe yet preventable infectious diseases (WHO, 2018), which range across the continuum from curable to chronic and even fatal outcomes (Public Health Agency of Canada (PHAC), 2012). A significant number of youth and young adults are at risk due to engagement in risky or unsafe sexual behaviours, including multiple and high-risk sexual partner(s), and low condom use (Amare et al., 2019; Bedassa, 2015), and increased use of alcohol and drugs (Amare et al., 2019; Sychareun et al., 2013). Furthermore, there is evidence of limited health literacy/knowledge amongst youth and young adult regarding STIs, despite trends of earlier engagement in sexual activity (PHAC, 2012; Zoboli et al., 2017).

In Canada, the rates of STIs continue to escalate with chlamydia increasing by 39%, and both gonorrhea and syphilis rising over 100% at 109% and 167% respectively (PHAC, 2017). Generally, there is a substantial increase in STI rates between 2001 and 2016, with youth under 30 being most dramatically affected (PHAC, 2017). In 2015/16, 54.1% of Canadian youth ages 15 to 24 were sexually active. Most individuals perceived monogamous relationships reduced their risk of STIs (Swan & Thompson, 2017) and 60.1% reported using a condom (Statistics Canada, 2015a). For example, the 20 – 29 age groups had the highest prevalence of chlamydia cases (76%), groups, and syphilis in Canada (PHAC, 2017). The increased incidence rates may be related to youth and young adults' participation in risky sexual behaviours, changes in societal norms, more sensitive laboratory tests, and increased screening (Amare et al., 2019).

Most STIs can have serious acute and chronic consequences for the individual(s) affected, although the magnitude of those consequences varies. For example, herpes and infectious syphilis are known to escalate the risk for HIV (Looker et al., 2015). Cervical cancer incidence and mortality are directly related to Human Papilloma Virus infections (Bray, et al., 2018). Gonorrhoea and chlamydia, if left untreated, may lead to pelvic inflammatory disease and increase infertility rates in women. Of note, mother-to-child transmission of STIs contribute to

adverse birth outcomes such as neonatal mortality and morbidities (e.g., pneumonia, sepsis), and congenital deformities (Korenromp, et al., 2019). So, although there is no a continuum for STIs, it is evident that each STI brings a potential risk for immediate and/or lifelong health impacts.

Similarly, one must recognize that there are various behaviours which may be considered high risk. According to BCHealth Link, the riskiest behaviours are unprotected intercourse, early initiation of sexual activity, multiple sex partners, high-risk partners (e.g., injection drug users), and sex trade workers. The site also suggests that participation in these behaviours is often related to lack of understanding of STI transmission, protection, and symptoms, inability to access or afford treatments, and reduced inhibitions due to use of alcohol or drugs (BCHealth Link).

1.2 Immigrant and Newcomer Populations: An Emerging Canadian Profile

The Canadian population has seen an increase in minority or 'newcomer' populations (Government of Canada, 2020). Every year Canada receives newcomers from across the globe. Over 341,000 permanent residents arrived in Canada in 2019, including 30,000 resettled refugees with more than 402,000 individuals being issued study permits and another 404,000 receiving temporary work permits. (Government of Canada). In addition, Immigration, Refugees and Citizenship Canada (IRCC) (2020) reported that “in 2016, immigration originating from Africa surpassed European immigration, and this trend continued in 2019" (p. 8). Immigrants are important for Canadian economic growth, with international recruitment of skilled and mobile workers, especially young people being vital to the Canadian workforce (IRCC, 2019).

The Canadian government does not have a specific definition of 'newcomers'; however, the term generally includes those who have arrived as immigrants and are within the first five years since arrival (PHAC, 2014). Immigrants are individuals born outside Canada but reside in Canada (excluding temporary foreign workers), Canadian citizens born outside Canada, and those with a student or working visas (Citizenship and Immigration Canada (CIC), 2013a). Such persons have been granted the right to live in Canada permanently by immigration authorities. Immigrants who have obtained Canadian citizenship by naturalization are included in this category (CIC, 2013b). 'Refugees' are defined as individuals forced to flee from their homes

because of unimaginable hardships and are located outside their home country (Government of Canada, 2015).

Saskatchewan has experienced an increase in the newcomer population, receiving 112,490 newcomers in 2016 representing a significant growth with the 2006 level of 48,160 (Statistics Canada, 2017). In 2016, 12,255 non-permanent residents (including those who held work or study permits, refugees, and family members living with them in Canada) in Saskatchewan compared with 4,610 non-permanent residents in 2006 (Statistics Canada, 2017a). According to Statistics Canada (2017a), 11.65% of the Saskatchewan population in 2016 were immigrants and non-permanent residents. Regina, Saskatchewan's capital city, is home to 10,290 newcomers arriving from Africa.

1.3 Youth and Young Adults: Considering the Future

The African Youth Charter of 2006 referred to youth as "every individual between the ages 15 and 35" (African Union [AU] Commission, 2006, p. 8). Since 1985, which was the International Year of the Youth, the United Nations referred to people of ages between 13 and 19 as teenagers and between 20 and 24 years as young adults; with the term youth being reserved for those between 15 and 24 years of age (Joint United Nations Programme on HIV and AIDS [UNAIDS], 2004).

Statistics Canada (2017a) reported that, among the entire newcomer population in Saskatchewan in 2016, the number of youths was 6,550 aged 15-24 years old, and 42,340 were between 24-64 years old. However, the report does not provide disaggregated data reflecting the number of African youth and young adult newcomers (Statistic Canada, 2017a).

This study uses the term 'newcomer' to refer to an immigrant or refugee who came to Regina, Saskatchewan, from outside Canada or another Canadian province after 13 years of age (Newcomer Welcome Centre [NWC], 2015). Furthermore, this study focuses primarily on youth newcomers' perceptions predominantly resided in Saskatchewan (from age 15 and upwards). Based on the context and the target population, this study adopts the African Youth Charter as it reflects and respects the context from which these youth and young adults have come. In addition, my personal experience, as an African newcomer, resonates with the 15-35 age group

as it recognizes certain behaviours such as a tendency for males to be nearing mid-twenties (26.8 median age) at time of marriage (Hertrich, 2017).

1.4 Statement of Purpose

This study will identify, describe, and explore the perceptions of a select group of African youth and young adult newcomers living in Regina, Saskatchewan, respecting STIs. In addition, this study reveals how the target population understands and perceives STIs.

This study explores knowledge and accessibility of adequate resources information about STIs perceived by African newcomer youth. In addition to knowledge, the study examines other vital components that may impact a newcomer's perceptions of STIs. This exploration of African youth and young adult newcomers' perceptions of STIs potentially highlights critical gaps and challenges, thereby enabling healthcare providers to strategically plan, implement, and evaluate STI-related programs and services for newcomers. The current study's interpretive dimension may create an opportunity for a future study or mixed methods research project to review or challenge existing programs, policies, and health professional curricula.

1.5 Problem Statement

Due to the intimate nature of STIs, the actual burden of these infections is likely underrepresented in any given population at any given time (Chandra et al., 2011). When applying for a Canadian visa, all applicants for permanent residence, temporary residence (for more than six consecutive months), or refugee status require an immigration medical examination (IME). The IME follows strict guidelines for testing for STIs for individuals, 15 years of age and older (Citizenship and Immigration Canada [CIC], 2013a; PHAC, 2016). The IME does not focus on treatment, health education, preventive resources, or clinical services but merely identifies diseases that could put the Canadian population at risk or place an excess burden on the health care system (Pottie et al., 2007). The growth rate of youth and young adult newcomers' populations ages 15 and 34 in Saskatchewan has shown a rapid increase in the last few years (Saskatchewan Ministry of Economy, 2013; Statistic Canada, 2017). This growing sector of the population requires specific attention, including exploring the existing knowledge among newcomer youths on sexual health and STIs' potential risks.

Although preventable, the prevalence of STIs has increased in Canada and Saskatchewan over the past 15 years (Saskatchewan Ministry of Health [MOH], 2014; Public Health Agency of Canada [PHAC], 2019, October). Available national data indicated that Saskatchewan's rate for chlamydia remains higher than the national average (Government of Canada, 2017; PHAC, 2019). The rate for gonorrhoea is well over twice the national rate (MOH, 2014).

The Saskatchewan Health Authority (SHA) provides sexual health services through an STI clinic in Regina (SHA, 2017). This clinic offers services that help manage and promote the prevention of spreading STIs (SHA). However, there are no services that specifically address newcomers' sexual health care needs. There are also provincial programs, such as the Saskatchewan Prevention Institute, which provides information about sexual and reproductive health through a 'Keep It Safe, Saskatchewan' (KIS -SK) phone application, brochures, and booklets (Saskatchewan Prevention Institute, 2020). Despite the SHA's outstanding effort towards providing healthy sexual services, the African youth and young adult newcomers are at risk due to transitional challenges and life experiences.

A study was done in Regina on barriers on Newcomer Adaptation and Settlement, which found various challenges in accessing health care services as well as educational and employment opportunities (Kikulwe, et al., n.d). The immigrant and newcomer youth and young adult population is identifiable as a population at risk, especially in light of the lack of sexual health programs uniquely targeting them. Despite the high youth and young adult numbers, very little is known about the perceptions, knowledge, attitudes, and behaviour of select youth and young African newcomers living in Regina, Saskatchewan.

The findings of this exploratory study will help to understand the perceptions of African newcomer youth respecting STIs, with the findings potentially informing future research and healthcare programs. In addition, the study results will be shared with appropriate stakeholders, including, but not limited to, the study participants and SHA, as well as practitioners and academics through presentations and peer-reviewed journals.

2 LITERATURE REVIEW

2.1 Awareness and basic knowledge about STIs

Although most young people have a general knowledge about the existence of STIs, the rates of infection in this group remain high (Morris & Rushwan, 2015). However, knowledge about STIs does not significantly motivate people to consistently avoid risky behaviours (Napper et al., 2012), nor does knowledge necessarily translate into safer sexual practices or reduce risk behaviour among African-born immigrants (Akinsulure-Smith, 2014). According to Akinsulure-Smith, HIV risk behaviours are primarily related to unprotected heterosexual activities. Although most participants are knowledgeable about HIV transmission and risk factors, almost fifty percent of youth reported not using protection during sexual activities in the previous six-months (Akinsulure-Smith). Although immigrant women are significantly more impacted by STIs, they tend to be more knowledgeable about HIV transmission than their male counterparts (Akinsulure-Smith). Since knowledge does not consistently translate to action, the study suggested that when providing information on education, prevention, and treatment to newcomers, foundation or basic information is most important and then one can evolve from there (Akinsulure-Smith).

A systematic review of newcomer youth ages 10 -25 years explored STIs/HIV/AIDS knowledge and attitudes (Upreti et al., 2009). The findings from seven of the studies revealed that most youths had general knowledge about these infections; however, the knowledge levels varied according to education level, gender, and place of residence (Upreti et al., 2009). In addition, individual knowledge levels about the modes of STI transmission differed by sex with males' knowledge levels on the transmission of infection being higher than the females' (Upreti et al., 2009; Zoboli et al., 2017). Findings from a study by Drummond et al. (2011) indicated that a group of West African female refugees in Western Australia had knowledge deficits about safer sex practices and held negative attitudes toward condom use. In addition, the women participants had misperceptions about HIV transmission and prevention, with the findings

highlighting the importance of health promotion within this population (Drummond et al.). Such misperceptions can have a significant adverse impact on STI amongst African youth and young adult newcomer populations.

There are various avenues for the provision of sexual health education for youth. Adolescents are interested in online sexual health topics, such as STIs and pregnancy (Simon & Daneback, 2013). Their study suggested that "online sex education plays a role in adolescents' lives, though their process of applying online information offline is generally unknown" (p. 314). Although Simon & Daneback (2013) acknowledged that although some online resources contain misinformation, credible internet-based interventions and resources can increase adolescents' sexual health knowledge.

2.2 Condom use and gender inequality in sexual practices

Since knowledge, attitudes, and behaviours on STIs differ, youth must be encouraged and motivated to control and prevent the spread of STIs through practices such as use of condoms (WHO, 2014). Creating supportive environments is necessary for safe sexual behaviours to prevent the spread of STIs and support the importance of gender equality (Wellings et al., 2006).

A qualitative study of couples in western Kenya (Harrington et al., 2016) and a study conducted with Eritrean and Ethiopian immigrants in the United Kingdom (Barrett & Mulegueta, 2010) found women tend to avoid carrying condoms to avoid negative reputations such as being labelled as sex seekers or promiscuous. Some youth in the Greater Accra Region of Ghana believed a condom should be used only when his/her partner is STI-positive, while others decided not to use a condom due to ignorance or peer pressure (Baku, 2012). Some youths were belittled, jeered, and accused by their friends of being stupid for using condoms (Baku). Others reported never using condoms because they felt embarrassed to buy contraceptives from pharmacies (Baku). In a study with African immigrants in Calgary, a participant responded that an African girl could never summon the courage to request condom use (Worthington et al., 2013).

Efforts to prevent and manage STIs are embedded in many cultural, religious, and social beliefs. Like many other religious leaders in African culture, Malawi's religious leaders discourage contraceptive use (Willms et al., 2011). In addition, it is believed to encourage

infidelity and adultery and create an unnatural reproductive barrier in Malawi (Williams et al., 2011). Thus, African cultural beliefs and customary social practices influence how people perceive the use of condoms. According to Kohler et al. (2014), many studies conducted in Africa related to sexuality revealed that sexually active youth have been reluctant to use condoms due to cultural norms and religious beliefs.

Many women worldwide, regardless of cultural background, age, ethnicity, socio-economic status, marital status, sexual orientation, or religion, may submit to men's sexual demands for unprotected sex because of fear of being beaten, subordinate position, and lack of alternatives (Callands et al., 2013). In these instances, women engage in unprotected sex despite knowing the risks of unintended pregnancy or contracting STIs (Callands et al., 2013; Speizer, 2012). According to Callands et al., several studies on sexual violence report that women find themselves in abusive relationships where failure to comply with sexual demands potentially prompts the male partner to become violent.

The literature on adolescent sexuality in developed countries highlights the contradiction between traditional norms of female sexuality and young women's sexual feelings, whereby young women may place their sexual health in danger to adhere to traditional norms (Adam et al., 2011; Sethi, 2013). For example, using condoms is seen as an obstacle to expressing love and trust, as some believe when people are in a committed relationship, there should not be a need for condoms (Drummond et al., 2011). In Sub-Saharan Africa, condom use is limited because of the desire for large families and gender-specific roles in decision-making on contraception and sexual intercourse (Kabagenyi et al., 2014). Women who are married, even adolescent brides, are expected to have children immediately (Hindin & Fatusi, 2009). Such practices may increase vulnerability to STIs, especially if a married couple is not using protection (Napper et al., 2012; Watt et al., 2009; WHO, 2014).

Many African women struggle with power imbalances, including elements related to female sexuality (Callands et al., 2013; Worthington et al., 2013). Differential power prevents some African women from negotiating safe sexual encounters and contraceptives, which increases their vulnerability to STIs (Callands et al., 2013). Some young women revealed that negotiating 'safe' sex, especially with older, wealthier sex partners, is challenging (Goldenberg et

al., 2007). These young women often assume that their partners would take necessary precautions because their sex partners were older and more experienced (i.e., testing for STIs) (Goldenberg et al.).

Gender inequalities among African people have been well documented; entrenched gender norms, as well as religious and cultural practices, have contributed to males engaging in unprotected sex with multiple and concurrent sexual relationships (Callands et al., 2013; Drummond et al., 2011, Larsman et al., 2012; Napper et al., 2012; WHO, 2014). Men engaging in multiple concurrent sexual relationships place their own and their partners' sexual health at risk (Callands et al.; Drummond et al.; Larsman et al.; Napper et al.; WHO, 2014; Worthington et al., 2013).

There is evidence that gender roles are evolving amongst African populations. African men and women may experience gender ambiguity due to conflicts between traditional gender norms and shifting gender power, although many modern men support women's equality (Tao et al., 2015). Such shifting gender power may create a hospitable environment for using female-initiated prevention methods (i.e., increase in condom use), resulting in promoting gender equity in relationships. The renegotiation of gender norms promotes more equitable sexual decision-making and condom negotiation within sexual partnerships (Tao et al.).

Globally, there is an increase in gender-based violence among adolescents, with the prevalence of exposure to gender-based violence higher among adolescent girls (Michau et al., 2015; WHO, 2013). Tragically, many adolescents, especially girls, are exposed to gender-based violence early in their lives. These girls and young women usually face a lifelong trajectory of violence, (Lundgren, & Amin, 2015) and are at risk of STIs.

Many youths are subjected to unprotected sex-related intimate partner violence (IPV) (WHO, 2013). Studies indicate that lifetime prevalence of "IPV occurs primarily from adolescence, and early adulthood onward, most often in the context of marriage or cohabitation, and usually involves physical, sexual, and emotional abuse, and controlling behaviours" (Lundgren, & Amin, 2015, p.543). According to Lundgren and Amin, sexual violence is severe can be experienced from a very young age to adulthood and is most often committed by a family member [e.g., "parents, family members, teachers, peers, acquaintances, and strangers, as well as

intimate partners" (p. 543)]. In addition, these adolescents and young women remain within ongoing sexually violent relationships; therefore, they are at increased risk of being exposed to HIV, STIs, sexual coercion, exploitation, and ongoing sexual violence (Lundgren, & Amin).

Given the above discussions, it is possible to surmise that women are more at risk for STIs, or perhaps for being infected by their partner(s). It is difficult to assess whether women actually have higher likelihood of being infected with an STI or if it is more likely that a woman will be tested (perhaps due to reproductive health issues) than her male counterpart. Both sexes are at risk for the negative effects of STIs, but women may disproportionately be limited in their access to the resources necessary to access and afford the treatments, especially in contexts where men control household finances. I recognize that women who are pregnant are tested for a range of STIs, which would again potentially shift the prevalence numbers towards women; however, this is a situational rather than a holistic consideration. Furthermore, power plays a significant role in the transmission of STIs, which in many cultures and contexts places women at greater risk of exposure.

2.3 Accessibility to healthcare

Effective delivery of health care is limited by various political, economic, and sociocultural factors and services worldwide (Health Canada, 2011; Morris & Rushwan, 2015). Recent concerns about long waits to access healthcare services in Canada have highlighted the need for improved access (Saskatchewan MOH, 2014) and focused on health policy discussions occurring throughout Canada (Health Canada, 2011; Patel et al., 2019).

In Canada, recent newcomers are twice as likely to have difficulty accessing health care than Canadian-born individuals and are more likely to go without a family physician or delay seeking primary care than either established newcomers or the Canadian-born population (Patel et al., 2019). The lack of healthcare accessibility combined with a fear of sexual health disclosure may hinder the newcomer youths' likelihood of seeking health care services (Mahat & Pradhan, 2012).

Newcomers experience discrimination and racism in the healthcare system (Edge & Newbold, 2013). They may feel they cannot exercise their personal beliefs the way they were used to in their home countries and may feel forced to adapt to certain aspects of a Canadian

lifestyle (Edge & Newbold, 2013). In addition, they see the Canadian health system as challenging to understand, finding it significantly different from what they were accustomed to prior to arriving in Canada (Edge & Newbold; Saskatchewan MOH, 2014). For example, immigrants have difficulty accessing the healthcare system due to 1) long waiting times; 2) lack of direct access to specialists; 3) lack of laboratory or other diagnostic reporting; or 4) difficulty sharing hospital rooms (Saskatchewan MOH). There can also be an overall lack of healthcare programming for immigrants (Saskatchewan MOH).

A literature review by Ahmed et al. (2016) conducted on barriers to accessing primary healthcare by newcomer populations in Canada found 14 studies focused on newcomer women's barriers alone, and another 13 included both men and women. Most of the selected studies involved mixed ethnicity or religion (Ahmed et al., 2016), such as Chinese, Indian, Muslim, Vietnamese, Somalian, and Iranian immigrants. The review found the primary barriers included cultural and communication challenges, barriers in accessing healthcare services, socio-economic status, healthcare system structure, and knowledge (Ahmed et al., 2016).

Cultural barriers result from the ways people think and act when it comes to their health. Culture influences the way people take care of their health and make health-related decisions (Ahmed et al., 2016). Patel et al. (2019) reported inadequate cultural competency and respect for alternative health values and practices among healthcare providers are commonly cited barriers to healthcare amongst minority groups in Canada. Consequently, calls for culturally competent care have been on the rise. The intent is to assist health and social services professionals in reflecting upon their own and others' cultural beliefs, behaviour, and communication strategies to enable practical skills that promote quality, non-discriminatory care (Ahmed et al., 2016; Patel et al., 2019).

Language is the most cited reason for accessing care and other services among many newcomers, whether recent arrivals or established (Affiliation of Multicultural Societies and Service Agencies (AMSSA), 2020). Newcomers who came to Canada from countries where English or French are not a dominant language face challenges due to a lack of fluency in English or French. They find it harder working with interpreters or people who are not immigrants from their cultural communities (AMSSA). A significant number of these

newcomers have difficulties conversing with physicians or other healthcare providers in Canada (Ahmed et al., 2016). Physicians are often frustrated at their inability to understanding their clients' needs and are not always comfortable with translator-mediated communication. Language barrier impacts the ability for individuals to integrate in four essential dimensions of integration (i.e., economic, social, civic/democratic participation, and health).

According to Ahmed et al. (2016), another newcomer barrier to accessing healthcare services was financial status. Moving to a new country usually affects newcomers' financial situation, which may resolve over time spent in Canada (Ahmed et al.). As suggested by Ahmed et al., securing gainful employment is a significant challenge leading to many newcomers holding low-paying jobs or undertaking multiple positions to achieve adequate income.

Lacking knowledge about the Canadian healthcare system is among the barriers newcomers face and health system structure barriers to access primary healthcare. For example, patients do not get direct access to lab reports (although improving with e-health services) or specialists with Canada's primary care system. In addition, newcomers complain about the healthcare system being culturally insensitive. Muslim patients are concerned about sharing a room with other patients, or female patients are worried about being cared for by male nurses or doctors. Emerging literature documented barriers associated with gender identities, which may cause newcomer youth to avoid healthcare services. For instance, enacted masculinity can be a barrier to effective communication with healthcare professionals (Ahmed et al., 2016).

Researchers suggested adequate interpretation services, proper training for health care providers, and increased health and legal literacy for newcomers to Canada may pave the way for improved access to context-sensitive care (Patel et al., 2019).

2.4 Stigmatization of sexual health

Stigma is an amalgamation of prejudice (which includes negative attitudes) and potentially discrimination (which manifests in negative behaviours) towards people based on some attribute or condition. According to Goffman as cited in Stuber et al. (2008), stigma is “an attribute linking a person to an undesirable stereotype” (p. 11) whereas prejudice is a negative or “hostile attitude towards a person …simply because he belongs to a group (with) objectionable qualities ascribed to the group” (Allport as cited in Stuber et al., p. 7). Discrimination is unfair

treatment or non-treatment (exclusion) due to features such as race, colour, ethnicity, sex/gender, age, or disability (Canadian Human Rights Commission, n.d.).

In the arena of STI-related health, culture, and stigma, numerous conceptual frameworks were found in the literature (Earnshaw & Chaudoir, 2009; Holzemer, et al., 2007). The Health Stigma and Discrimination Framework is a particularly interesting culturally relevant model which considers how stigma related to "race, gender, and (other individual attributes) intersects with health-related stigmas" (Stangl et al., 2019). In the case of STIs and newcomers/ immigrants, this model uses a socio-ecological model which would identify barriers and drivers (i.e., shame, social judgement) and intersecting stigmas (i.e., health and 'attributes' such as religion or gender of the youth) while identifying how the stigma is experienced by those affected (i.e., outcomes such as not seeking care) and identifying the health care and social impacts (i.e., social exclusion; mortality/morbidity)(Stangl et al.).

Stigmatization has a significant impact on the sexual health of many newcomers. The disapproval is often demonstrated by stigmatizing sexual health concerns or cases, particularly STIs (Morris & Rushwan, 2015). Shame may mediate the relation between potential stigmatization and internalization of symptoms in African youth and young adults. African youth and young adults are prone to social rejection, leading to increased feelings of shame and social isolation (Williams et al., 2017). They are at increased risk for future depressive symptoms and are at risk to experience a much higher level of stigma due to a 'layered stigma' effect stigma's (Morris et al., 2014; Williams et al., 2017). Health care-seeking behaviour by youth may be restricted because of the fear of stigma, embarrassment, judgment, and shame, especially for sexually active girls and women that are not married (Morris & Rushwan, 2015). Stigma, fear of isolation, immigration challenges, complex family situations, cultural norms, religious beliefs, and gender expectations contribute to African-born immigrants' attitudes and risk behaviour (De Jesus et al., 2016).

Faith communities often avoid HIV and AIDS conversations due to stigma (Morris et al., 2014), which has interfered with global efforts to respond to the HIV/AIDS crisis. People affected by HIV/AIDS often keep it secret and claim to have cancer or other terminal illnesses (Morris et al., 2014). However, some faith communities in Malawi have started making efforts to

develop a suitable response to HIV/AIDS working together to develop a response consistent with their religious values (Willms et al., 2011).

Researchers suggest an association between higher levels of STI-related stigma and shame and failure to test for STIs among males and females (Morris et al., 2014), equating to individuals being more concerned about STI-related stigma than their well-being (Malta et al., 2007). In addition, in some countries, including Great Britain, the Netherlands, Vietnam, and Kenya, individuals may delay seeking care due to STI-related stigma (Malta et al.).

2.5 Influences by norms, cultural values, and beliefs

African youth and young adults' health-seeking behaviours may be influenced by families, cultural values, and beliefs. Many Africans believe that it is taboo to discuss sexuality and intergenerational teaching regarding reproductive health issues (Bastien et al., 2008), which, in turn, leaves adolescents poorly prepared to protect themselves against STIs (Speizer, 2012). Cultural values and beliefs can create a deeply embedded sense of disapproval of adolescent sexual activity, especially before marriage (Morris & Rushwan, 2015).

Due to cultural beliefs, a prohibitive environment for discussing sexually related matters potentially hinders adolescents from seeking sexual and reproductive health (Edge & Newbold, 2013). There is a lack of culturally competent providers and inadequate communication regarding newcomers' sexual health care services (Health Canada; 2011; Kohler et al., 2014; McKeary & Newbold, 2010). Males tend to avoid talking about their health issues with healthcare providers; they fear lack of anonymity, marginalization, and subordination (Shoveller et al., 2010).

Religious beliefs strongly influence how Africans (e.g., Tanzanians, Ghanaians, Mozambique, etc.) perceive HIV/AIDS and self-disclosure about their HIV/AIDS status (Zou et al., 2009). Many Africans believe that HIV-infected individuals who have HIV have not been following the Word of God. They believe that HIV is God's punishment, and, if the individuals pray, they will be cured (Zou et al., 2009). Most of the participants from the current study were either Christian or Muslim; although none of them were actively practicing traditional religions, although many of them still had embedded traditional norms in their beliefs.

De Jesus et al. (2016) found that East African newcomer women strongly adhered to their cultural and religious beliefs. Although many of these women are aware of the Western public health message that everyone should be tested for HIV, their behaviours were not consistent with that message due to their cultural and religious beliefs. HIV testing implied immoral behaviour and disgraced individuals and families (De Jesus).

2.6 Use of traditional healing

African patients are more likely than Canadian patients to attribute their illness to a spiritual cause or superstition (Dastjerdi, 2012; Kohler et al., 2014). Traditional medicine (TM) has been common in many African countries to treat and manage all health issues while delaying seeking Western medical professional care (Gyasi et al., 2011). For example, the healers use mostly herbal preparations in the form of roots or powders for treatments. The herbal preparation is administered orally to induce diarrhea, vomiting, and diuresis (Gyasi et al., 2011; Ndulo, Faxelid, & Krantz, 2001). Some traditional healers combine traditional and biomedical therapies in the management of patients, such as history taking and examination of patients before diagnosis, prescription, and advice (Ndulo, Faxelid, & Krantz, 2001). Other healers use (Zulu) or diviner, usually a woman who operates within a traditional religious supernatural context and acts as a medium with the ancestral shades, and the faith healer who integrates Christian ritual and traditional practices (Mngqundaniso & Peltzer, 2008). They tend to adopt a more holistic approach to health promotion and disease management. A holistic approach to living with HIV and AIDS is known to be a key factor for success in living a longer, healthy life with the syndrome (Mngqundaniso & Peltzer, 2008).

There is great faith in the effectiveness of TMs for numerous medical conditions, such as malaria, STIs, typhoid fever, arthritis, jaundice, impotence, infertility, stroke, fractures, boils, hemorrhoids, HIV/AIDS, and mental illness (Gyasi et al., 2011). There are no safety standards and regulations that guide TMs' use (WHO, 2011). However, TMs are readily available and affordable, fulfilling a significant role in reducing life-threatening ailments and providing a more holistic approach to disease management (Mngqundaniso & Peltzer, 2008; Gyasi et al., 2011; WHO, 2011).

A study found most women in rural areas in northern Maputaland-KwaZulu, South Africa, prefer to use TM to allopathic medicine to treat STIs. The reasons were that TM medicines are seen as cheap, easily accessible, more effective, having no side effects, and consistent with cultural aspects. Various medicinal plants used to treat STIs have been shown to be effective and can add value to the treatment regime thereby augmenting rural people's primary health care in northern Maputaland (De Wet et al., 2012). Other TMs have antibacterial and antioxidant effects and are used as complementary medicines (Nazer et al., 2019).

2. 7 Summary

In conclusion, perceptions of STIs in the youth and young adult African newcomer populations have not been thoroughly investigated. It is critical to explore a potential gap in knowledge and access to adequate resources/information about STIs for youth and young adult newcomers. From the literature, the most common barriers to reducing the risk for STIs identified for this target population were knowledge deficit, inconsistent or low rate of condom use, inability to negotiate sex, and poor accessibility and underutilization of healthcare services. The evidence also spoke to stigmatization of sexual health, cultural norms, values, beliefs, and delays in seeking professional Western medical care while favouring TM. There is a need to explore youth and young adult newcomers' perceptions of STIs and access/affordability of health services in order to strategically plan, implement, and evaluate culturally- and gender-appropriate STI programs and services for this target population.

2.8 Research Question

The guiding research question was:

What are the perceptions regarding STIs of select members of African

newcomer youth and the young adult population living in Regina,

Saskatchewan?

The study sought to find out if the participants have a good understanding of STIs by asking:

- What is the knowledge level regarding STIs of select members of the African newcomer youth and the young adult population?

- What is the belief about the role of men in the sexual encounter (i.e, should take control, lead, or guide the sexual encounter)?
- Can the individual ask her/his sexual partner to use or not to use condoms?
- What will happen if you suggest to your partner to use a condom?
- Are individuals able to seek or access health care services?
- What are the individual beliefs on TM?
- How do cultural and religious beliefs influence people's decisions regarding sexual matters?

2.9 Relevance and Significance of the Study in Nursing

This study of newcomer African youth and young adults is vital as health providers, including nurses, and health policy makers in Saskatchewan increasingly encounter ethnic diversity (Kumaran & Salt, 2010). In addition, newcomers face many barriers that may delay or deter healthcare access; hence, healthcare providers and other healthcare professionals must assess their effectiveness in responding to newcomers' unique needs (Haase & Silbereisen, 2011).

Nurses should focus on STI-related health promotion programs at the individual, community, school, and public health levels (Gibson, 2008; Santa Maria et al., 2017). According to Gibson, when working with client groups on sensitive issues, such as STIs, nurses must exhibit a breadth of knowledge and a capacity to engage with a range of populations. Nurses must have substantial knowledge and understanding of adolescent development, sexual and non-sexual relationships in which individuals may be involved, STIs, contraception, as well as cultural and youth-centred friendly approaches (California Adolescent Sexual Health Work Group, 2008).

Studies on newcomers' health suggest that many newcomers undergo a shared experience in dealing with unexpected obstacles that may hinder access to healthcare, including poverty, unemployment, discrimination, acculturation, and separation from extended families and friends (Cohen & Arieli, 2011; Worthington et al., 2013). Nurses and other healthcare providers (HPs)

must recognize newcomer-specific barriers in accessing health care services and advocate for culturally and linguistically appropriate healthcare services (Patel et al., 2019). The ineffectiveness may be due to healthcare providers exhibiting cultural insensitivity or cultural incompetence (Vaughn et al., 2009). HPs often lack appropriate knowledge about cultural services and other barriers which newcomers are experiencing. (Vaughn et al.,). Nursing practitioners must acknowledge and respect diverse cultural and religious beliefs. Efforts related to health awareness and literacy of youth and young adult newcomer lifestyles regarding STIs require culturally appropriate approaches such as inclusion of traditional practices, inter-generational knowledge sharing, and awareness of initiation or transitional rituals.

Nurses and other HPs have opportunities to educate youth and their parents about sexual and reproductive health in communities, schools, public health clinics, and acute care settings. Nurses can use their knowledge and influence on positively and meaningful impact youths' sexual and reproductive knowledge (Santa Maria et al., 2017). If youth receive initial preventive sexual education or reproductive health counselling before their first sexual experience, they can achieve better sexual and reproductive health outcomes (Santa Maria et al.). Nurses need to ensure African youth and young adult newcomers feel comfortable and confident enough to share stories about their sexuality. Healthcare providers need to be unbiased when assessing, intervening, and advocating with this potentially vulnerable population. Building trust and respectful relationships with these youth and young adult African newcomer populations are vital.

Public health nurses are often a critical resource for providing information on how to access and coordinate care. It is essential for a nurse to create an environment that enables clients to share information about their supports, perspectives, coping, health needs, and preferred outcomes. The nurses can integrate sexual and reproductive health screening and counselling during nurse-patient interactions. Each interaction provides nurses with an excellent opportunity to offer developmentally appropriate sexual and reproductive health screening and counselling to adolescents and their parents (Santa Maria et al., 2017). Sexual and reproductive behaviour screenings and risk assessments include appropriate testing, discussions about risk reduction, and avoidance strategies. This approach has shown great success in reducing teen pregnancy and improving contraceptive use (Santa Maria et al.).

Canadian registered nurses are increasingly exposed to cultural diversity within their care settings and communities, highlighting the necessity to understand and incorporate other cultural perspectives (Canadian Nurses Association [CNA], 2007). The CNA emphasizes that cultural competence and cultural safety are prerequisites to working effectively in all health settings. The Saskatchewan Registered Nurses' Association's (SRNA) standard practice guidelines require all nurses to practice a holistic client/family-centred approach, ensuring culturally safe client care (SRNA, 2019). The Saskatchewan Union of Nurses (SUN) believes that all members have the right to work in an environment where everyone is respected. It promotes dignity for everyone committed to providing a positive and inclusive environment for all constituents within the membership. The Union supports respect for Indigenous people, people with disabilities, and diversity of race, culture, religion, and sexual orientation (SUN, 2020).

Cultural competence is critical to the nursing profession, with culture being identified as a facilitator (and social determinant of health) of mental, physical, emotional, and spiritual well-being (PHAC, 2010), especially for people living with the risk of STIs. Culturally competent services and programs are provided by professionals who possess and utilize skills, knowledge, and attitudes informed by the cultural aspects of a client's or group's health (Bourque, 2011). Along with its partners, including the ANAC (now known as Canadian Indigenous Nurses Association since 2016), and the CASN, the CNA recognizes, supports, and promotes cultural competency in nursing (Hart-Wasekeesikaw & Gregory, 2009). Cultural competence affects all dimensions of the individuals' perceptions of wellness and illness, including attitudes towards health services and health care, help-seeking behaviours, decision-making about the types of care accessed, and potential use of alternative care or TM (CNA, 2010).

Cultural safety, as a concept, is essential to Canadas' cultural diversity growth. The concept of cultural safety originated from New Zealand to emphasize the fundamental understanding of power differentials inherent in health delivery services and redress these inequities through educational processes (CNA, 2010). Cultural safety embeds cultural awareness, cultural sensitivity, and cultural competence (CNA). While cultural competence may overlook systemic barriers that prohibit addressing health care inequities, cultural safety promotes equity in health and health care (CNA). To promote and deliver cultural safety health services, the Aboriginal Nurses Association of Canada (ANAC) collaborated with the

Association of Faculties of Medicine of Canada (AFMC), Canadian Association of Schools of Nursing (CASN), CNA, and the Indigenous Physicians Association of Canada (IPAC) to generate frameworks for medical and nursing curricula that guide building cultural safety health care (ANAC, 2009). The National Aboriginal Health Organization (NAHO) advocated implementing cultural safety standards of care for healthcare providers, educators, researchers, and policymakers to gain broad support from national accreditation organizations (NAHO, 2008). NAHO refers to cultural safety as an experience or feeling when a healthcare provider communicates with the patient appropriately and respectfully, empowers the patient, includes the patient in decision-making, and builds a health care relationship where the patient and provider work collaboratively to the maximum effectiveness of care (NAHO).

The original description and intended purpose of cultural safety apply to any recipient of care who may differ from the healthcare provider's ability, age, socio-economic status, culture and/or ethnicity and sexual orientation (Ramsden, 1993). Cultural safety is intended to understand the culture and critical discourse on culture beyond a person's values, beliefs, ethnicity, or race. The conventional perspective of culture, inherent in multiculturalism, has effectively drawn attention to the diversity within contemporary Canadian society. Providing appropriate care requires healthcare providers to reflect on newcomers' realities, recognizing the meaning and value given to gender, social status, and culture as factors that contribute to healthy decision-making and credible sources of decision-making (Van Herk et al., 2011). Healthcare providers must actively seek knowledge of culturally diverse approaches to be responsive and effective. The implication of cultural safety in nursing practice emphasizes eliminating power, discrimination, and moral discourse by integrating cultural safety, empowerment, and participation (Gerlach, 2012). From a cultural safety perspective, the nurse's responsibility is to research, understand, adapt, accommodate, and transform healthcare perspectives and approaches to improve individuals' health and wellness (Gerlach, 2012).

Cultural safety is recognizing the social, economic, and political position of certain groups within society. For example, it acknowledges and recognizes health for Indigenous peoples within the context of settler-colonialism. It acknowledges and includes an understanding of residential schools' intergenerational impact on access to health care and relationships between Indigenous and healthcare providers (Gerlach, 2012). Efforts must align culturally congruent

care with Western health practices to heal and restore a client's well-being. For example, gender roles, expected behaviours, attitudes, and stigma surrounding STIs are essential factors to consider in developing and providing health services. A high degree of cultural sensitivity and a non-judgmental approach is required to broach subjects of a sexual nature with a client or study participants. Discussions about STIs are not typical for African heritage people (Omorodion et al., 2007). The event is especially true for young people, who may be uncomfortable talking about sexual matters with their parents or healthcare professionals since sex and sexual relationships are considered private and personal (Omorodion et al.).

Nurses have the opportunity to care for immigrants, refugees, and patients from different cultural backgrounds; the nurse must listen to the patient, assess his or her beliefs and values, and implement care decisions that will ensure avoiding abusive practices (McFarland, & Wehbe-Alamah, 2015). The patient may require special requests outside the expected nursing care spectrum; therefore, communication and accommodation are key. Leininger's Culture Care Theory provides care measures or guidance in harmony with an individual or group's cultural beliefs, practices, and values (Leininger, 1988; McFarland, & Wehbe-Alamah, 2015). The scope of diverse cultural care requires nurses to understand transcultural nursing concepts and principles and be aware of current research findings (McFarland, & Wehbe-Alamah). Culturally competent nursing care for minority/ethnic populations has generally moved to the forefront of social and healthcare arenas worldwide (McCarthy, 2013). Health services must respond to an expanded mandate sensitive to and respectful of cultural needs (Alligood & Marriner-Tomey, 2010; McEwan & Wills, 2011).

Nurses and other HPs must avoid overgeneralizing and stereotyping by ensuring that they understand and must provide appropriate care to individuals or groups of people with diverse cultural patterns, values, and beliefs and respect health behaviours influenced by culture. This work requires nurses and other health professions to provide care, which is non-judgmental, with an exhibited willingness to explore different cultures and examine their own culture and beliefs (Douglas et al., 2011). According to Douglas et al., HPs must acknowledge that newcomers/ refugees are not homogeneous. There are many differences, including origin, journey experiences, culture, refugee status, and health status before and after leaving their countries, that

will have differential impacts on their health status and access to healthcare services (Dudas, 2012).

2.10 STIs Risk Perception

Perception is an important concept, which has not been clearly defined (McDonald, 2012). According to McDonald (2012), "perception is an individuals' view making it a powerful driving force for action" (p. 8). For perception to occur, the following attributes must be present: sensory awareness or cognition of the experience, personal experience, and comprehension that can lead to a response (McDonald). To improve health outcomes, "it is critical to appreciate the uniqueness of an individuals' perceptions and understand how perceptions are formed" (McDonald, p. 3).

Theoretically, risk perceptions are essential in predicting health behaviours and have shown modest evidence predicting risky sexual behaviours (Kalichman & Cain, 2005). For a particular response to occur, the benefits perceived (i.e., potential to decrease disease threat) must outweigh perceived barriers (i.e., cost, discrimination, stigmatization, embarrassment, inconvenience, or discomfort) (Upreti et al., 2009). Although necessary for change, perceived risk alone is insufficient to motivate an attitude or behaviour change (Mullins et al., 2012). According to Kalichman & Cain (2005), when people are informed about their risks for a disease or illness, they may adjust their behaviours and ultimately look at the threat from a different perceptive. Thus, risk perceptions can predict both the suppression of health-compromising responses and the initiation of protective behaviours (Kalichman & Cain). According to Kalichman & Cain, people may reframe their risk perceptions to justify engaging in risky behaviours. For example, young females may use condoms the first time they have sex with their partners. After that, many girls replace condom use with oral contraceptives, as they perceive they are in a monogamous relationship (Bolton et al., 2010).

Individuals' perceptions need to be examined to understand risk factors, how the perceived risks translate into behaviours, and the impact on STIs/HIV infection rates (Napper et al., 2012). In addition, understanding the determinants of the perceived risk of acquiring STIs and the perceptions of acceptable prevention strategies are necessary steps to mitigate STIs' acquisition and spread (Kohler et al., 2007). A combination of approaches to assess risk

perceptions for STIs can include estimating intuitive feelings about risk and the salience of the risk of infection (Napper et al., 2012). Moreover, nurses must be aware of their perceptions to minimize miscommunication and misunderstanding with clients/patients.

2.11 Theoretical Framework: Health Belief Model

This study uses the Health Belief Model (HBM) as the primary theoretical framework. This theory was first described by social psychologists Hochbaum, Rosenstock, and Kegels in the 1950s (Becker et al., 1974; Napper et al., 2012; Rosenstock, 1974). This framework provides guidelines to explore risk perceptions related to beliefs, attitudes, and behaviours that influence STIs prevention and public health communication (Napper et al., 2012). Personal perceptions, which inform health behaviours, are influenced by a broad range of intrapersonal and interpersonal factors, such as gender, socio-economic status, age, ethnicity, knowledge, and sense of control (Hayden, 2009). The researcher looked into two other nursing theories to use for framework before choosing the health model. The theories were looked at they were both nursing theories, one was Dorothea Orem's Self-Care Deficit Theory and the other theory was on transcultural nursing by Madeleine Leininger that was developed in the 1950s. Although both of them had potential transcultural theory focus more on knowledge and practices culturally competent care (Leininger, 1988). The researcher's focus was more on health behaviours and health promotion, neither of these theories fulfilled that requirement. The HBM has been used to predict a broad range of health behaviours among diverse populations (Champion & Skinner, 2008). The framework determines relationships between health beliefs and health behaviours and can inform intervention strategies (Champion & Skinner, 2008). According to McDonald (2012), multiple research studies have used HBM to examine relationships between HBM constructs and risky sexual behaviours in adolescents and young adults.

The HBM predicts that individuals will act to protect or promote their health if they believe they are susceptible to a condition or problem and believe the consequences of the situation are severe (Champion & Skinner, 2008; McDonald, 2012). Zak-Place and Stern (2004) revealed that neither perceived vulnerability (susceptibility) nor the severity of STIs (including HIV) were significant predictors of condom use or intent for STIs testing. According to Hayden (2009), individuals may practice safer sex if they believe they are at risk of getting STI infection. Suppose an individual believes they will benefit from the new behaviour or that the benefits of

safe sex practices outweigh potential costs and barriers. In that case, the individual may be willing to change the behaviour. For example, people will use the condom if they know having sex without using a condom makes them susceptible to acquiring STIs (Baku, 2012).

The HBM addresses five main constructs to explain health behaviour and possible reasons for a person's reluctance to change. These constructs include perceived barriers of action, perceived severity of the disease, perceived benefits of action, perceived susceptibility to infection, and self-efficacy (Hayden, 2009). The HBM focuses on cognitive variables as part of behaviour change and assumes that attitudes, beliefs, and expectations of future events and outcomes are significant determinants of health-related behaviours (Munro et al., 2007). A range of long and short-term health behaviours studies have used HBM to assess the likelihood of health-promoting behaviours related to breast cancer screening and infectious diseases such as STIs and HIV/AIDS (Sychareun et al., 2013). For example, another study that used HBM to determine safer sexual behaviour among African immigrants reported that the constructs were reliable predictors of condom use and monogamous behaviours (Asare et al., 2013).

Table 2.1 considers the concepts related to sexual health education as presented in the HBM Guide for Health Promotion Practice (United States Department of Health and Human Services, National Institutes of Health, and National Cancer Institute, 2005). It presents definitions and applications for each of the six key concepts.

Table 2. 1. Six Key Concepts of HBM Guide for Health Promotion Practice

Concept	**Definition**	**Application**
1. Perceived Susceptibility	Beliefs about the changes of getting a condition	- Define what populations(s) are at risk and their levels of risk. - Tailor risk information is based on an individual's characteristics or behaviours. Help the individual develop an accurate perception of his or her own risk

2. Perceived Severity	Beliefs about the seriousness of a condition and its consequences	- Specify the consequences of a condition and recommended action
3. Perceived Benefits	Beliefs about the effectiveness of taking action to reduce risk or seriousness	- Explain how, where, and when to take action and what the potential positive results will be
4. Perceived Barriers	Beliefs about the material and psychological costs of taking action	- Offer reassurance, incentives, and assistance; correct misinformation
5. Cues to Action	Factors that activate 'readiness to change.'	- Provide how-to information, promote awareness, and employ reminder systems
6. Self-Efficacy	Confidence in one's ability to take action	- Provide training and guidance in performing action. - Use progressive goal setting. - Give verbal reinforcement. - Demonstrate desired behaviours

In conclusion, studies have used specific components of the HBM to assess the relationship of HBM constructs with disease-preventing behaviours. This study uses HBM to guide an assessment of the mode of reasoning and perceptions of STIs among a select African newcomer population. Constructs of HBM are used to assess youth and young adult African newcomer populations' perceptions. There is a need to explore newcomers' perceptions of STIs and access to health services in Saskatchewan.

3 METHODS

3. 1 Research Methodology

This qualitative study is conducted based on an interpretive description strategy and the HBM framework, which guides the process of capturing patterns and themes within subjective perceptions and experiences related to individual participants' perceptions. HBM helps to explain and predict health-related behaviours by focusing on the beliefs and attitudes of individuals (Asare et al., 2013). An interpretive description is an inductive approach influenced by grounded theory, naturalistic inquiry, ethnography, and phenomenology that generates knowledge relevant to understanding clinical phenomena that result in practice implications (Thorne et al., 2004; Thorne, 2008). It develops interpretive descriptions of people's experiences and explores and produces meaningful experiential knowledge explanations. Interpretive description strategy has been used to study phenomena in applied disciplines such as nursing (Thorne et al., 2004). Interpretive description studies often build upon relatively small samples and use data collection approaches, such as interviews, participant observation, and document analysis (Thorne et al., 2004). Interpretive description methodology values practice level experiences as the starting point for research (Hunt, 2009) which aligns with this study's topic of STIs prevention and promotion in youth and young adults.

The researcher completed a series of individual face-to-face semi-structured interviews. The interview guide was based on the concepts of the HBM theoretical framework. Interpretive description was appropriate for this study of select members of the African newcomer youth and young adult population. It allowed probing deep into the influences on individuals' life experiences and decision-making and explored relationships between meanings and actions (Asare et al., 2013). The researcher used a thematic analysis to code and synthesize data extracted from transcribed interviews.

3.1.1 Setting. Regina is the capital city of Saskatchewan. According to Census Metropolitan Area (CMA), with its 17 subdivisions, Regina was the fastest-growing CMA in

Canada, with a population of 237,758 in 2014 (Statistics Canada, 2015b; Bohmann, 2014). The province of Saskatchewan is culturally vibrant, with opportunities for all citizens to celebrate, value, and participate in a rich cultural life. Immigrant population rates in Saskatchewan are higher than the national average, a significant contributing factor to Regina's population growth (Statistics Canada, 2015b). A recent report showed the number of immigrants continues to increase in Saskatchewan. The number reported in the 2016 Census of Population for 'Immigrants' in Saskatchewan includes immigrants who landed in Canada on or before May 10, 2016, was 112,490 (Statistics Canada, 2017a). The total number of immigrants who live in Regina is 36,910, where the recent immigrant number 2011-2016 is 16,195 (Statistics Canada, 2017b).

In Regina, newcomers can receive a variety of information through the Regina Open Door Society (RODS), the Newcomers' Welcome Centre (NWC, 2015), and the Regina Multicultural Council (RMC, 2015), which provide different services to newcomers. RMC supports and encourages the members to participate in their activities and initiatives and their communities. It enables culture to be at the forefront of our city and provides opportunities for Regina residents to be engaged in multicultural activities (RMC, 2015). RODS can provide information "on immigration, housing, employment, education, youth, health, transportation, social Supports, budget and finance" (NWC, 2015). RODS can also refer newcomers to "immigration, Refugees and Citizenship Canada (IRCC), Saskatchewan Immigrant Nominee, Program (SINP), Labour Market Services, Orientation Services for Newcomers (OSN), Provincial Settlement Advisors, Sask Health, SGI, Language Assessment and Referral Centre, and other Immigrant Service Agencies (NWC, 2015). Another organization is Regina Immigrant Women Centre (RIWC). This non-profit organization provides programming for the education, integration, enrichment, and empowerment of immigrant and refugee women and their families. RIWC mandates to provide opportunities, programs, and services for immigrant and refugee women and their families to facilitate and support their smooth integration into our local communities (Regina Immigrant Women Centre (RIWC), accessed April 2021). Catholic Family Services (CFS) is another resource service centre that provides services to all people of all ages, genders, ethnicities, sexual orientations, socioeconomic backgrounds and abilities" (Catholic Family Services (CFS), accessed April 2021). The CFS has Newcomer Career Services that help

permanent residents, refugees, and others protected in Canada. The counsellors at the career services offer newcomers assistance with searching, applying, and securing employment in the Canadian labour market (Catholic Family Services (CFS), accessed April 2021).

Newcomers can visit any of these centers to access information about various topics or challenges, including health, housing, employment, education, culture, recreation, and language assessments (NWC, 2015). The RODS is a non-profit organization assisting newcomers with settlement and integration services to achieve their transition goals in Regina. (NWC, 2015; RMC, 2015). Both NWC and RMC offer different programs and services to newcomers. The NWC provides newcomers support, guidance, assistance with integration, and newcomers' opportunities to participate in the community, providing access to information and resources at no cost (NWC, 2015). Anecdotally, there has been limited use of these centres, attributed, in part, to a lack of understanding about how these services work and a lack of transportation to get to the service centre (personal communication with Health Educator/Facilitator at RODS, June 2015).

3.1.2 Recruitment. This study uses purposive sampling and snowball techniques to recruit youth and young adult African newcomers living in Regina, Saskatchewan. The researcher chose purposive sampling strategies for two reasons. First, the strategies are designed to enhance the understanding of selected individuals' or groups' experiences (Tongco, 2007). According to Tongco, these techniques do not require underlying theories or a set number of participants. Second, the researcher determines the focus of inquiry and sets out to find participants. In this case, the researcher determines a set of qualities that the participants(s) must have included a willingness to provide information from personal knowledge or experience.

The study also uses snowball sampling, in combination with a purposive sampling strategy, to recruit participants. Snowball sampling provides the opportunity to obtain optimal results by asking key participants to refer other people with unique perspectives to participate in the study. By combining snowball sampling and purposive sampling produces a decisive sampling outcome (McClean & Campbell, 2003; Ogilvie et al., 2008). The snowball method was the method of choice because previous study indicated snowball method has successfully been used to study HIV/AIDS positive people (Tabnak & Sun, 2000) and engage youth in gender equity and

community development dialogues (Williams et al., 2014). Although snowball sampling contradicts many assumptions underpinning conventional sampling, it is advantageous and appropriate when seeking unique or disenfranchised populations.

In this study, the researcher initially contacted one individual from the Daughters of Africa Association in Regina. The individual did not participate in the research but offered to recruit participants with unique insights on the topic. The researcher provided the contact person with a one-page informational recruitment letter (Appendix E) about the research study, which the contact person shared with potential African youth or young adult newcomer participants. The letter invited individuals to contact the researcher by email, mail, or phone, as provided in the recruitment documents, with a deadline to respond to the request. This approach helped to establish initial contact and further assisted recruitment through snowballing. As a result, there was no need for recruitment posters, as the researcher recruited sufficient numbers through snowballing. The contact processes yielded ten African newcomers for the study, although two were too young to participate. As a result, there were eight participants. One participant responded via email, while the reminder contacted the researcher by phone. Given that this is a master's program, funding constraints and time constraints were considered in the selection of the method; however, snowballing allows the researcher to continue recruiting until sufficient data is obtained. We decided to recruit six to ten participants to begin with and the researcher would recruit more if need until we obtain sufficient data for the study. Once recruited, the participants were offered a choice of interview dates and times, and every participant was able to attend the interviews on dates mutually selected. The researcher provided each participant with a $25 gift card for participation and refreshments to respect food sharing as culturally appropriate for African participants.

3.1.3 Inclusion/Exclusion Criteria. The criteria eligibility included both men and women who self-identified as English-speaking African newcomers aged 18 to 35, which as mentioned previously was based on the African Youth Charter age inclusion. Participants were required to have lived or spent most of their time in Saskatchewan since the age of 15, as the researcher wanted participants to be in the 15 plus age group which is a time when they were likely to be sexually engaged or starting to become sexually active. The researcher sought people who had spent a significant amount of time in Canada to understand their exposure to sexual

beliefs, knowledge and attitudes in both contexts, but not too long a period to have lost the link to their traditions.

3.1.4 Sample. The researcher interviewed eight participants who self-identified as English-speaking African men or women newcomers. The final sample of participants were between 18 and 35. The researcher recruited both males and females to obtain gender-based insights to reflect diversity in gender and power perceptions related to STIs. Participants were required to speak, read, and write English to understand instructions and provide informed consent.

I acknowledge that this is a limited group. Although the strength of using this approach was to dig deeper into one group's profile, the study limited diversity beyond African youth and young adults (i.e., other newcomer groups; other non-majority cultural groups). It is anticipated that learnings from this study can be potentially expanded in future studies to include other groups or replicate. I also acknowledge that other groups exist which have similar risks of low education and barriers to healthcare regarding STIs and sexual health. These groups include indigenous people, individuals with multiple partners, sexually active gay, bisexual, transgender, commercial sex workers, and individuals from countries with higher rates of STIs, such as South-East Asia, and Latin America/Caribbean. Again, given the limitations of a masters conducted study, time restrictions, and capacities of the researcher, it was decided that the target population was manageable for this particular study.

By using this homogenous group for the purposes of this study, it was likely that the full potential of cultural beliefs and practices were not being explored. In addition, there were missed opportunities for comparative findings within and across other populations, which may have enriched the overall findings.

This study was conducted in Regina at a mutually agreed upon location, with the participants meeting with the researcher at one of the following sites: University of Saskatchewan (College of Nursing -Regina site), University of Regina, Regina Public Library in a private room, Saskatchewan Polytechnic (Saskpoly), or at local coffee shops. The setting for data collection was to provide a naturalistic environment, which is familiar and accessible and selected by participants (Williams et al., 2014).

3.2 Data Collection and Recording

For this study, face-to-face interviews were selected as they provide more privacy for the individual to discuss a highly personal topic. Furthermore, the face-to-face interview allowed for more in-depth probing and seeking clarification on specific points (Bozkurt, 2018; Centre for AIDS Research, n.d.). Online interviews were not considered in lieu of the traditional face-to-face interviews as they are often seen as complementary to face-to-face interviews (Curasi, 2001). This data collection approach was considered preferrable to focus groups, although focus groups would have potentially allowed for more diversity in the sample. Focus groups are often used to explore social norms, but this is highly cultural dependent and may not have been appropriate given the topic of this study (Bozkurt, 2018; Centre for AIDS Research, n.d.). A focus group might be more appropriate at a future point, such as when a specific program or intervention was being developed.

The interview questions were developed based on various readings and literature review and the questions were vetted by the supervisor and members of the student advisory committee. The instrument was developed, and the questions were piloted tested with one newcomer who was not included in the formal research. The outcomes of this one pilot test resulted in no significant changes to the questions. Furthermore, following each interview, the supervisor listened to the interview recording and the research and supervisor discussed whether the questions needed to be changed or prompts were to be added. There were minor adjustments in wording early on in the interviews, but the questions remained fairly stable throughout and it was agreed that prompts were sufficient and spontaneous or situational prompting would be used as appropriate.

At the time of the interview, the participants were greeted, and a cause conversation was initiated. Most of these introductory steps were more about pleasantries (such as how are you today?) and seeking a common link (such as where in Africa are you from?). Once this rapport was established, the conversation shifted to a discussion of their individual immigration experiences. These elements seemed to ease the discussion into the interview process as it led to more eye contact and, at times, some early personal information exchange. It also provides the researcher with the opportunity to establish a more casual approach to the interview. Once there seemed to be an ease in the discussion, the transition to the formal interview was made.

The researcher conducted eight individual interviews for data collection, with one-on-one interviews lasting between 30 and 48 minutes. The researcher collected data between mid-September and mid-November 2016. Participants' demographic characteristics, including country of origin, length of time in Canada, languages, gender, age, education level, employment status, and marital status, were obtained (Appendix H).

The researcher used a series of open-ended questions (Appendix G), beginning with introductory questions and progressing to in-depth questions developed as described above. The participants were asked to explore:

- experiences in decision making and negotiating safer sex
- condom use
- sexual matters
- perceived benefits/challenges of changing risky behaviours for developing STIs
- perceived self-efficacy related to risky behaviours
- healthcare-seeking behaviour
- traditional culturally based prevention practices

The research questions used in this study were derived using the guidance of the Health Belief Model and its five main constructs of perceived barriers of action, perceived severity of the disease, perceived benefits of action, perceived susceptibility to infection, and self-efficacy (Hayden, 2009). In the case of perceived barriers of action, the tool asked about experiences in decision making and negotiating safer sex as well as sexual matters in general, which were rooted potentially rooted in gender and cultural practices. Perceived severity of the disease was capture through questions on healthcare seeking behaviours primarily, whereas perceived benefits of action were probed in the discussion of perceived benefits/challenges of risk behaviours as these relate to contracting STIs. Perceive susceptibility to infection was related to condom use and traditional culturally based prevention practices discussions. Finally, self-efficacy was reflected in the questions and probes related to perceived self-efficacy related to risky behaviours.

The researcher used open-ended questions during individual face-to-face interviews to ensure the process accurately describes participants' life experiences. When the interviews were completed, the researcher asked participants if they were willing to be contacted for any follow-

up questioning to seek clarification. Most participants agreed to follow-up questions, if needed. There were no follow-up questions; hence, the researcher did not contact the participants. The researcher recorded the interviews digitally and subsequently transcribed them for analysis.

The committee supervisor reviewed all interview recordings and all transcripts to address the need for credibility and trustworthiness. This involvement ensured that the data was being collected consistently and adherence to ethical principles outlined in the Research Ethics Board approval for this study. The researcher and supervise felt data obtained from the eight interviews were sufficient, therefore there was no further recruitment was required. This decision reflected the recurrence of ideas, limited or no new information on each question, and a consistency in the responses. These patterns indicated a saturation for each question and the study data collection phase was concluded.

3.2.1 Coding. The initial list of coding and "margin" remarks of this study was completed on a hard copy of interview transcripts. These emerged concepts/themes were reviewed and discussed with the supervisor. After initial theming, the researcher entered the themes into one large spreadsheet for ease of coding. The coding process enabled full consideration of the richness, complexities, and contradictions of this population's perceptions of STIs. The coding process was simultaneously difficult, confusing, and challenging, while being interesting, revealing, and exciting. At the initial phases, the coding was frustrating and overwhelming as it seemed an endless iterative process between read/code/re-read/code…. However, the process allowed the researcher to rethink the discussions with each individual and to compare it in a 'near real time' experience with each of the other interviews. The coding was done manually, and the researcher did not create a formal coding guide, but rather extracted words and phrases from each interview. As these words and phrases were extracted, they were consolidated, and the researcher look for patterns within the contributions. The researcher was able to collapse them into major categories.

After the extracted data was themed and summarized, the findings provided a broad overview of the qualitative data at a descriptive level. Preliminary theming occurred early in the process and was further validated through reflection and consultation with the research team's supervisor and members. The margin notes were used to fit codes together, enabling these codes

to be collapsed into prominent themes to depict the significant findings of the study. The researcher listed the emergent patterns from the data on a sheet of paper, and the researcher looked for connections between them. The themes were then featured in the final thematic analysis.

3.2.2 Data analysis. The researcher explored participants' general and individual perceptions by organizing data into themes and identifying relationships through a cluster of evolving themes. The researcher first analyzed the interview transcripts, capturing and identifying initial significant 'emergent concepts/themes.' Preliminary theming occurred early in the process and was validated through reflection and consultation with members of the research team

3.2.3 Thematic data analysis. This study used thematic analysis, as described by several researchers (Aronson, 1994; Boyatzis 1998; Braun & Clark, 2006; Patton, 2002; Riessman, 2008), as a method to identify, report, and analyze data for the meanings produced by people in particular situations and events. Thematic analysis is a flexible research tool that can provide a rich and detailed data account (Braun & Clarke, 2006; Floersch et al., 2010).

According to Willig (2013), thematic analysis has been widely used in qualitative studies due to its flexibility and ease of use. It is relatively easy to identify patterns and connections, and themes capture what is important to participants concerning the overall research questions (Braun & Clarke, 2006). Thus, the research questions guide data analysis and must be referred to in the theming process. Thematic analysis is flexible, allowing for the determination of themes in several ways and can be used with various theoretical frameworks (Willig, 2013).

The thematic analysis process started with the researcher searching for and discovering patterns of meaning (themes) and potential interest issues during data collection. When conducting thematic analysis, complete detailed data extraction is required (Betker, 2016).

Thematic analysis was used to synthesize data extracted from transcribed interviews. Thematic analysis is "a method for identifying, analyzing, and reporting patterns (themes) within data" (Braun & Clarke, 2006, p.79). It minimally organizes and describes data in great detail to interpret various research topics (Willig, 2013). The thematic analysis enables the researcher to examine events, report experiences, extract meanings and the reality of participants, and explore a range of operating discourses (Willig, 2013). Using thematic analysis, the researcher seeks to

describe patterns across qualitative data. It is a more convenient form of analysis for inexperienced qualitative researchers (Braun & Clarke, 2006).

Analysis of data involved the researcher continually moving back and forth between the entire data set, the coded extracts of data analyzed, and the analysis of the produced data (Braun, & Clarke, 2006). The data was organized, starting with general knowledge about STIs, influences of the knowledge, facilitators of the knowledge, barriers in the knowledge, and other emerging or miscellaneous ideas from the individual participants. Ideas and potential coding schemes were jotted down at the beginning of the analysis and continued through the entire coding/analysis process (Braun & Clarke, 2006). A theme is measured not by whether it is considered key but whether it captures something important in relation to the overall research question (Braun & Clarke, 2005).

The researcher used WordItout™, which is a free-access online program that created word clouds to reflect the frequency of words in the data set and facilitated the theming. WordItout™ is an easy tool to use as it is versatile and creates unique images from words. Essentially, the more prominent (i.e., larger) words in the image reflect more frequently occurring words from within the interview transcripts. To confirm and visualize this data, the data elements (words and phrases) from the interviews were entered into the WordItout™ application, which auto-generates a word picture/cloud based on the frequency of certain words or short phrases. A total of 100 words, representing the 100 most frequently occurring words with at least three occurrences, were filtered from the source, selected, and displayed. The research clustered STI-related words to achieve a more reflective visualization. This tool provides the ability to summarize large documents (www.worditout.com). Preliminary analytic themes developed from this analytical phase formed the basis for identifying and exploring commonalities and differences among individual experiences. The strength in this tool is that it retains the actual words of the participants and clearly presents the frequency by size of the words presented in the visual.

3.3 Data Trustworthiness

Study validity refers to the process of determining the accuracy or fidelity of the findings from the standpoint of the researcher, participants, and the consumers of the research (Lincoln & Guba, 1985; Lincoln & Guba, 2013). Qualitative validity also involves assessing the

trustworthiness of the findings (Creswell, 2009). Several aspects support the trustworthiness of this qualitative research study. The researcher thoroughly reviewed the literature and used appropriate arguments. The study's trustworthiness was supported through the systematic and rigorous data collection and analysis approaches which were consistently applied and considered (Creswell, 2014; Gibbs, 2007; Thorne, 2000). The research method for this study was clearly described, reviewed, and approved by the committee before the research began. Throughout the research process, the researcher remained transparent about the study plan—data collection, study findings, data analysis, credibility, and reporting. To increase trustworthiness in data collection, the researcher sought a diverse sample based on age, gender, country of origin, and background. Consistent documentation of methodological procedures, detailed study protocols, and a database are critical so that others can follow similar procedures (Yin, 2012). The findings that emerged from the purposive sample of youth and young adult newcomers in Regina, Saskatchewan, were derived from individual interviews and were enriched through the inclusion of direct quotes from participants.

From a pragmatic lens the data was felt to be trustworthy on number of levels. First, the participants often used the same/similar words, told similar stories, and provided consistent responses to the questions. Whether it was to speak about the experience of the immigration process, the lack of information shared respecting STIs, or the sources of knowledge in their lives, the participants' comments often echoed each other. These commonalities increased the sense of trust and honesty in responses given by participants. Many participants' comments were found to validate or affirm what had been found in the literature especially with respect to access and cultural issues as these relate to STIs. Finally, the non-verbal cues that occurred during the interviews also were indicating honesty of the respondents as they tended to make eye contact, remained relaxed in the posture, and showed appropriate facial reactions throughout the interviews.

According to Thorne (2016), epistemological integrity, representative credibility, analytic logic, and interpretive authority guide the consideration of a study's credibility. When considering this study, the research process is logical and aligns with the intent of the study. The purposive sampling approach helped to obtain rich information, although the findings are recognized as limited to a specific time and place (Bernhardson, et al., 2007) which limits generalizability of the findings. The use of a reflective research journal throughout the research

captured reasons and rationales for interpretations of the findings and confirmed the inductive process that was adhered to. Interpretive authority was achieved through the researcher's iterative and immersive approach to the data, with a continuous reflection on personal and professional perspectives that might influence the interpretations. Initial impressions, categories, coding, developed themes, interpretations, and analyses were reviewed and confirmed by the research supervisor and other study committee members. Furthermore, the researcher documented personal beliefs and experiences currently held (Grove et al., 2013a) Finally, to remain immersed in the data and enhance its trustworthiness, the researcher conducted, recorded, and transcribed all of the audiotaped interviews verbatim, which was monitored through time spent with the research supervisor.

3.4 Ethical Consideration

The researcher received ethical approval from the University of Saskatchewan Behavioural Research Ethics Board (REB) (see Appendix C for the application and Appendix D for participant information and consent). The REB determined that the research design met the ethical requirements as per the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Article 2.1 (see Appendix I for approval letter).

Participation was voluntary, and all participants signed consent forms (Appendix D). Each participant was given a copy of their consent form and provided contact information of the principal investigator and the ethics office should they have any further questions or concerns. All participants were over 18 years of age, enabling them to sign informed consent [Appendix E]. The researcher did not have a previous relationship with any participants. The researcher did not share any personal information obtained from the participants with anyone other than the supervisory committee members. Participants were reassured and informed about the study's intentions. They were told about the right to withdraw from the research and refuse to answer any questions if they are not comfortable during the investigation.

The report included direct quotes in the study findings; participants' names and other identifiable features were not reported to ensure confidentiality. Once participants completed the interviews, their responses were could no longer be withdrawn. Three participants indicated they would like to receive and review a copy of their transcripts, but none provided any changes to their transcript. All data obtained throughout the study (i.e., transcripts, digital recordings, and

documents) will be stored for five years in a secure, locked cabinet in the researcher supervisor's office at the College of Nursing Regina campus, then they will be irretrievably destroyed. All memos and field notes are electronically secured, and password protected in the locked file cabinet in the office at the College of Nursing Regina campus.

The researcher anticipated some challenges with gathering concise information due to the highly personal nature of the topic. Some participants were skeptical about participating in the study because they thought the study was for the individuals who were or had been STI positive. Predictably, some individuals seemed uncomfortable discussing sex and sexual relationships due to the private and personal nature of the topic within most cultures (Nelson et al., 2006). Once the participant was reminded of the study's nature and received reassurances about confidentiality (i.e., participants' names will not be used on the report), trust was no longer a concern. The researcher conducted face-to-face/one-on-one interviews, ensuring participants were in an environment of the participants' choice and had the privacy to speak. As per the participant's choice, some interviews were conducted at a coffee shop in a sitting area where other people could not overhear the conversation. The researcher ensured the participants understood that they had the right to decide the type of information they were willing and comfortable to disclose and that they could access any support system that might be required due to their participation in the study. The researcher informed the participants that their involvement might not have direct personal benefits; however, the study findings will increase understanding of how African newcomers perceive STIs. It was made clear that this study's findings may help plan the implementation of health promotion programs and improve access to culturally improved STI services in the future.

Using a wide range of study interview questions allowed the researcher to obtain various perspectives, which gives a better and more stable view of reality (Shenton, 2004). If several diverse sources agree, then the conclusion is strengthened (Rutherford et al., 2010). Due to the researcher's preconceptions or judgments related to participants' norms and/or cultural beliefs, biases may occur. Even though it may be difficult to avoid biases and judgment when analyzing data, the researcher used reflective journaling to minimize bias. The reflective journal allowed the researcher to capture ideas, thoughts, and observations during all interactions. See sample Figure 3-1 for an example of a page from the reflective journal.

The researcher prepared a reflexivity diary to express her thoughts, feelings, and perceptions at the research recruitment, data collection, and analysis stages. Reflection on the data collection and analysis process allowed the researcher to re-examine positionality on issues that might affect the research process (Willig, 2013). For example, before beginning recruitment, the researcher assumed participant' recruitment would be straightforward. Some participants had unexpected responses when they received an invitation to participate in the study. For example, when asked if they would be willing to participate in the study, one participant's response was, "I can't participate because I don't have STIs." However, after clarifying the purpose of the study, this individual agreed to participate.

However, some participants seemed hesitant to respond to direct questioning about sexuality. Participants responded to questions more readily when integrated into the discussion. Some participants preferred generalized talks, but others explored situations applied to their specific situations or personal experiences. Some participants were not comfortable discussing questions related to their sexual practice or negotiating sex with their partners.

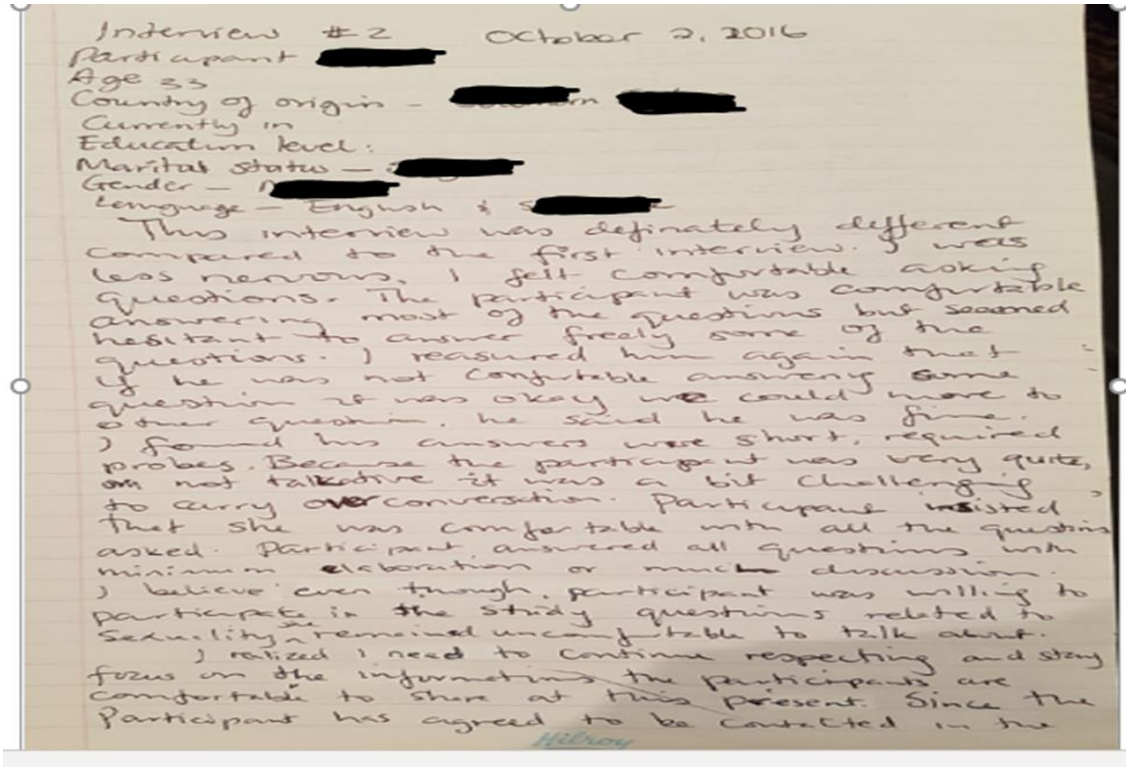
Interview #2 October 2, 2016
Participant [redacted]
Age 33
Country of origin - [redacted]
Currently in
Education level:
Marital status - [redacted]
Gender - [redacted]
Language - English & [redacted]
This interview was definately different compared to the first interview. I was less nervous, I felt comfortable asking questions. The participant was comfortable answering most of the questions but seemed hesitant to answer freely some of the questions. I reassured him again that if he was not comfortable answering some question it was okay we could move to other question. He seemed he was fine. I found his answers were short, required probes. Because the participant was very quite, not talkative it was a bit challenging to carry over conversation. Participant insisted that she was comfortable with all the questions asked. Participant answered all questions with minimum elaboration or much discussion. I believe even though participant was willing to participate in the study questions related to Sexuality remained uncomfortable to talk about. I realized I need to continue respecting and stay focus on the information the participants are comfortable to share at this present. Since the Participant has agreed to be contacted in the

Figure 3. 1 Example of daily self-reflection

In these cases, the researcher was careful to maintain an awareness and respectfulness regarding the participant's willingness to self-disclose. The researcher's focus was on developing rapport while remaining respectful and avoiding bias. The researcher actively listened to the participants' perceptions while setting aside personal knowledge, beliefs, values, and experiences. The researcher used respectful but straightforward/proper language for questioning to allow participants to feel comfortable. The researcher did not mention the names of participants during audio recordings of interviews, nor did names appear on any documents.

This researcher focused on authenticity and integrity, e.g., ensuring all the documents are kept confidential and secure in a safe place. All participants' identities were kept confidential. All participants received information about the study, and each person received information about the right to refuse to participate or withdraw from the project.

3.5 Limitations

There may be a limitation with the accuracy of self-reported data due to participants' perceived lack of confidentiality and comfort with the topic (Beatty et al., 2014). Underreporting sensitive information, such as sexual practices, can be expected (Beatty et al.). Self-reports of sexual intercourse and risky sexual activity can be subjected to biases, as sex is regarded as a private matter (DiClemente et al., 2013). In this study, these limitations were mitigated by conducting interviews in a private environment, providing the researcher's verbal commitment ensuring participants that the information and identities would be kept confidential, and signing of the written consent. The researcher also confirmed everyone was comfortable responding to the questions and remained committed to respecting the participants' wishes and decisions through the course of the interviews.

The researcher acknowledges, that despite a comprehensive literature review, there are potentially outlier papers due to lack of the appropriate keywords, language limitations, or accessibility of all articles.

A number of limitations are noted related to the participants attributes and sampling approach. Age and gender representativeness were another limitation of this study, as there were fewer males (three) than female (five) participants. Future studies need to consider a broader range of age groups and include a gender analysis. It is noted that the participants who did not self-select may exhibit different attributes and have provided different insights and experiences.

They might have been experiencing STIs, have a significant experience they were not willing to share, live outside binary gender roles, or are in a relationship that precludes them from participating (often due to fear or abuse). It is unclear why these individuals did not choose to participate; however, the opportunity for a more inclusive sample might be achieved in the future using a supportive interview situation (with two or three persons known to each other) or an online interview where they may feel in better control of their environment. Another limitation may be using a purposive sampling strategy. The purposive sampling strategy may introduce sampling bias, thus reducing the population's representativeness. However, given the exploratory and qualitative nature of this project, purposive sampling was deemed appropriate.

As this research was an exploratory qualitative study dealing with a sensitive subject, caution was required to avoid biases and maintain cultural respect and sensitivity. The researcher obtained the data that each individual was willing to share without impacting the individual's health beliefs or significantly affecting the individuals' comfort level, which the researcher paid attention to throughout each interaction. This study demonstrated a range of knowledge of STIs and awareness of STI programs by the participants. Immigration experiences and adherence to cultural norms were the main factors influencing perceptions of STIs for most participants.

There are also limitations to interviewing participants as a data collection method, particularly the relationship between subjective and objective knowledge as well as the difficulties of clearly expressing complex human subjective experiences (Thorne, 2008).

Other limitations were related to participants lacking comprehensive knowledge of the research process and related to STIs specifically, affecting participants receiving or understanding the interview questions. To minimize this limitation, interview questions were in plain language. The questions were also reviewed by the supervisory committee members and then by the ethics review board to ensure adherence to ethical guidelines.

Financial limitations for this study reduced the number of participants recruited due to the study budget (Appendix G). Each participant received a $25 gift card for participation, and refreshments were offered to respect the sharing of food as culturally appropriate for African participants.

3.6 Knowledge Transfer Strategies

The researcher plans to share findings with study participants through provided private email addresses. The findings will be made available to non-profit organization stakeholders, policymakers, health care professionals, and other local and provincial agencies (i.e., NWC, RMC). The study findings will be shared with academic channels through written research reports, peer-reviewed journal articles, posters, and oral presentations. The confidentiality of participants will be protected in any research dissemination.

3.7 Budget

The researcher accessed funds for this study from the Department of Foreign Affairs Trade and Development (DFATD)/ the Canadian International Development Agency (CIDA) and the Mama Kwanza non-profit organization. The detailed budget is attached [Appendix C]. Funds were used for incentives, equipment, and participant transportation for interviews.

4 FINDINGS AND DISCUSSION

4.1 Participants

The researcher started interviews by collecting demographic information, including the participants' age, marital status, years of living in Canada, country of origin, and languages spoken. Participants in this study were diverse, both male and female, ranging in age from 18 to 35 years. The participants' demographic profile is reflected in Appendix H. Most participants were females in their twenties and males in their thirties; one participant was single, while others were in relationships. There was fewer male (three) than female (five) research participants.

Ethnically, participants were from East, West, Central, and North Africa. All participants spoke English as well as their national languages. There were no significant variations in participants' education levels. One participant was a college student, four participants were studying or studying at university and working, and three participants had university degrees and worked full time. All participants had lived in Canada for more than five years. Participants' religious affiliations were not identified; however, the study explored whether their spiritual well-being would be affected if they were positive for STIs.

4.2 Initial Impressions

The initial impressions of the responses were generic with an observation that there was minimal variation noted in participants' responses by country of origin. The initial questions explored participants' knowledge about STIs (see Appendix F for the guiding questions and prompts). All participants, except one, appeared comfortable with these questions. The participant who appeared uncomfortable was the youngest, and initially seemed shy to share information, but started to engage and share as the interview proceeded.

As described previously, data collection and analysis occurred iteratively, which allowed the researcher to identify a list of the themes that created am emergent patterns. A tentative

thematic listing emerged by reviewing each transcript and the fieldnotes, grouping and connecting the data.

An initial list of emergent ideas or coded themes is reflected in Table 4.1 in chronological order based on the original transcripts' sequence. For any emerged concept, such as knowledge, the researcher collected all instances relevant to knowledge. The researcher clustered the responses and organized them in the following categories: a) knowledge; b) facilitators (including knowledge seeking behaviours; HPs; self-advocacy/motivation/ empowerment); and c) barriers (lack of awareness; condom use; lack of trust lack of confidentiality; fear of isolation/labels/stigma and discrimination). Some responses appear in all categories, those responses were marked with asterisks.

Table 4. 1. Initial Emerged Themes

Knowledge	*Facilitators*	*Barriers*
knowledge and culture	health professionals	lack of knowledge
right/wrong	knowledge seeking behaviours	lack of trust
knowledge sharing	knowledge	lack of confidentiality
motivating learning	self-advocate	lack of awareness
the condom talk	empowerment	power imbalance
knows	understanding	negative reaction
understanding	reading	male/female sexual encounters
	talking	misconception
	books/dictionary	submission
	information	silence
	sharing	culture
	motivation	discussion about a sexual matter
	testing	knowledge dissonance
	clinics	knowledge exchange (limited knowledge)
	content rights-based	risk reduction
	awareness	limited services
	church	distrust
	information sources	ignorance
	age-related	negotiate
	traditional healers	circumstances
	confidence	situation
	condom use	fear

The researcher reviewed and made connections between the emerging themes through an analytical/theoretical lens. The researcher reflected on the emerged concepts under four categories knowledge, facilitators, barriers, and other subthemes to ensure consistency and reflexivity. For instance, any time the participant displayed a basic understanding of STIs (such as what are STIs, providing accurate information about STIs, how to get STIs, or how to prevent

the spreading of STIs), the researcher placed these related or connected concepts under the theme 'Knowledge.' The researcher re-organized the themes as in Table 4.2.

Table 4. 2. Final Themes

Knowledge	*Facilitators*	*Barriers*	*Other Themes*
- Knowledge	- Health professionals - Self-advocacy/ Motivation/ Empowerment	- Information seeking behaviours - Discussion about Sexual Matters - Lack of awareness - Lack of Condom Use - Lack of Trust and Confidentiality - Fear of isolation/ labels/stigma and discrimination - Religious, cultural, and intergenerational perceptions - Culturally appropriate STIs services - Traditional Healers - Personal perspectives about sexual practice	- Sexual Risks and Risk Reduction

4.3 STI Knowledge

Participants' responses indicated limited knowledge about STIs; the researcher noticed misconceptions or gaps in knowledge respecting STIs. Participants displayed small differences in levels of understanding of what STIs are and how people can contract or spread them.

Adequate knowledge was assessed based on whether the individual could correctly answer 50% or more on each of the following general questions: a) what is an STI; b) what are the types of STIs (at least one of the following such as chlamydia, gonorrhea, syphilis, hepatitis, genital herpes, HIV); c) what are the modes of STI transmission (at least one of the following

such as sexual risky behaviour; unprotected sexual contact; blood transfusion; mother to child during birth; kissing); and d) what are some strategies for preventing STIs (as least one example such as the use of condoms, single partner, regular testing, timely treatment).

Participants reported that youth who live in urban areas had more knowledge about STIs than those living in rural areas. This variation of knowledge may reflect that youth living in urban areas are more exposed to information from different resources (e.g., social media, reading materials at the libraries, advertisement displays, information at the health centres, television). Similar findings were found in a study on young people's knowledge, attitudes, and behaviours on STI/HIV/AIDS in Nepal (Upreti et al., 2009), where knowledge levels about the mode of STIs transmission differed between genders, with males knowing more about how STIs are transmitted than females (Upreti et al.).

Participants talked about various sources of STI knowledge. They stated that they try to educate themselves or seek information through health education classes at school or on the internet. Most participants indicated that school, radio, social media, television, internet, friends, or healthcare workers were the most common information sources.

Six of the eight participants indicated a good understanding of STIs. For example,

"most of the time the occurrence is through sex" (P1-Male)

"generally transmitted through the exchange of bodily fluids". (P4 – Female)

"The first time I actually learned about STIs where I was at church, it was an African church… Because we had some youth that were experimenting sexually, oral sex and all those … so the church thought it would be a good idea to just educate us all on it". (P6 – Female).

Two participants had a poor understanding.

… "*(Newcomers) don't have more knowledge about the disease, how it comes, and how it can be spread. I heard about them in school and stuff" (P2-Male)*

… "but I don't get too much into it" … (P5-Female)

Some participants indicated that they had attempted to seek knowledge about STIs, while others stated that they had not sought STI information because they had not been to a medical clinic since their arrival in Canada. Three participants assumed that many newcomers learned about STIs during medical check-ups as part of the process of preparing to come to Canada, as indicated in the following quotation:

"I know a lot of newcomers and a lot of them knows about STIs because one of the process of coming to Canada… when I was doing my normal (immigration) check-ups, when I was told you (have) chlamydia." (P1-Male)

Despite the youth and young adult African newcomers' knowledge, the current study showed that some choose to engage in risky sexual behaviours. For at least one participant, the knowledge of STIs did not appear to reduce risky sexual behaviour; this finding was consistent with a study done by Norbu et al. (2013). Norbu et al.'s assessment of knowledge on STIs and sexual risk behaviour in two rural districts of Bhutan found that nearly one-third of participants were engaged in risky sexual behaviour. In addition, some participants engaged in sexual relationships with non-regular partners, and others were involved in extramarital sexual contacts. Thus, despite most participants' general knowledge about the most common STIs (such as chlamydia, gonorrhea, syphilis, and HIV), some participants remained at risk of infection. Limited knowledge or knowledge gap was identified in the current study. However, knowledge does not seem to change the risky behaviours; hence, more research needs to be done to find strategies to eliminate the risky behaviours.

One participant admitted that, even though he knows about STIs, he still gets involved in risky behaviours, especially when he is with his peers or under the influence of alcohol. This pattern shows the need for strategies to consistently motivate youth and young adults with knowledge about STIs to avoid risky behaviours. Similarly, Akinsulure-Smith (2014) found half of their participants had good knowledge about the transmission of HIV yet were not using protection when practicing sexual activities. The participants explained that peer pressure, ignorance, alcohol influence, and lack of money to buy condoms are among the factors contributing to unsafe sexual behaviours.

When participants were asked if they think newcomers know where they can access information about STIs, most of them responded that they do not believe that newcomers know about STIs clinics or programs, although they acknowledged some may know to go to medical clinics for such information.

*"Some people talk about it… it's available on the internet" (P*5-Female)

"People can learn using technology, a library, on Facebook, texting" … (P7-Male)

"I just know, it's just general clinics where everybody can walk in walk out and that where I know, I can get information about STIs if needed" (P1-Male)

"Just out of my own interest… first place I learned it was the Oxford Dictionary. You google, I could always trust a dictionary to give me clinical definitions" …. (P4-Female)

The more people hear about the impact STIs have on their lives, their families and society, the more likely they will change their perceptions. Hence, information about the effects of general STIs is needed to reinforce knowledge to all newcomers.

Another source of knowledge is children being exposed to awkward situations due to the lack of space in their homes related to the crowded conditions experienced by many with low socioeconomic status. For example, one participant shared:

"*Back home, you will find a family lives in a single room. So, these kids, while they are growing, these kids are eleven years and twelve years; they are either watching mommy and dad having sex or hearing mommy and daddy having sex. That congestion of a lot of people living in one house, and no space, no privacy that also helps" (P1-Male)*

4.3.1 Facilitators. Some participants' responses were identified as factors that facilitate knowledge or influence individuals to seek information about their sexual health concerns. Various situations or patient characteristics can either enable or hinder the decision to seeking STI or sexual-related healthcare information or services.

4.3.1.1 Healthcare Professionals (HPs). Participants were asked if they have ever felt uncomfortable discussing sexual matters with HPs. If they responded positively, a follow-up question queried who they felt comfortable discussing sexual issues with and why. It seemed many participants in the current study see HPs as sources of accurate information about STIs. The researcher used additional probing questions (i.e., if participants had ever thought they were treated negatively in health care due to being a newcomer). In this current study, many newcomer participants state they feel comfortable talking with HPs and seeking help or healthcare services. However, previous literature indicated that some African youth and young adults feel judged despite believing HPs are reliable sources of information, leaving them feeling uncomfortable in discussing sexual matters with HPs (Omorodion et al., 2007).

Participants indicated:

"I am more probably more comfortable with (HPs) because they know more, they'll tell me the truth, and they will tell me what to do" (P3-Female)

"I know Qu'Appelle Regional Hospital have those clinics whereby you can get condoms that's one I know, and if you need any check-ups, then you can go and talk to them…. for last like ten years, I haven't had difficult time discussing with them, because I have had experience and I have seen people been treated badly, in health centre here in Canada but, I haven't" (P1-Male).

4.3.1.2 Self-advocacy/Motivation/ Empowerment. All participants indicated that they felt confident, empowered, and motivated to take care of their health and had self-efficacy related to safer sex. This finding aligns with a study by Outlaw et al. (2010), which found the participants were self-motivated and showed readiness and willingness to use condoms for STI protection. According to Outlaw et al., the interventions that promote self-efficacy and motivational readiness might help youths understand and conceptualize sexual risk behaviour.

One participant in the current study mentioned people feel self-motivated to search for information and self-advocate. When participants were asked if they felt they were treated differently in a health care setting because they are newcomers, most participants said they did feel they were treated differently. They responded that they would not let a bad experience stop them from getting help and would not let anyone mistreat them. These responses indicated self-advocacy/self-motivation/ empowerment. Resilience and motivation were evident as some participants took the initiative to learn about STIs.

"I will make sure that that person doesn't treat me again if that person is the only person that can treat me there or can attend to be there, then I will look for another centre" (P1-Male)

"I'm the one who should make decisions about" (P8-Female).

4.3.2 Barriers. "Adolescence sexual and reproductive health" is reported to be a global issue, which "is strongly linked to particular social culture and economic movement" (Morris & Rushwan, 2015, p.540). According to Morris & Rushwan, many newcomers delayed seeking healthcare services due to perceived barriers, including information/knowledge gaps regarding STI transmission, detection, and treatment, as well as lack of information regarding available STI programs and services. Participants in the current study indicated facing similar barriers.

4.3.2.1 Information Seeking Behaviours. Most participants were aware of how to access health services for general health concerns. However, only two of the eight participants knew of specific programs or resources for STIs in Regina. Some participants knew that their family physician could provide them STI services; however, not many newcomers go to family physicians. One individual knew about the programs because she researched people's understanding of STIs in north-central Regina. The other knew because he was positive for an STI upon arrival in Canada. This finding indicates more work is needed to ensure newcomers receive information upon arrival in Canada about where to go for general health and wellness clinics and STI-specific services.

The participants revealed that lack of information is a factor related to delay or lack of healthcare-seeking for STIs in the current study.

"I went to a clinic one time, right…. And the stuff they were asking me, … "I felt like that was more directed from being in Africa, you know" …" and "I'll start thinking like okay, debating, well should I want to come back or not." (P5-Female)

Participants shared that talking about sexual matters is still difficult and considered taboo. In general, talking about sex is uncomfortable and is seen as socially/culturally unacceptable. Almost all participants stated their parents provided the least or no information on sexuality or STIs as their parents would not discuss personal/private matters. Research suggests children learn about sex through schools, friends, and social media (Adam et al., 2011; Shoveller & Johnson 2006), which is reflected by comments from the current study.

"In our culture, it's almost a taboo for you to ask your parents to tell me about, you know, the birds and the bees. I don't know why it's bad" (P7-Male)

The schools like since elementary, they are already teaching you what it is about, and they want you to have information (P4-Female).

4.3.2.2 Discussion about Sexual Matters. Many African parents believe introducing sexuality and reproductive health topics to adolescents can potentially cause severe damage rather than help individuals overcome sexual and reproductive health risks that they face in growing up (Adam et al., 2011; Baku et al., 2018). The participants were asked questions such as: 'How do you feel about discussing sexual practice? Can you share your thoughts about how culture plays a role in discussing topics about sexuality? All participants stated that it was not

common in their culture to talk about sex; therefore, they felt less knowledgeable about safe sexual practices although some groups are more likely to receive limited knowledge sharing (especially women). Most participants mentioned that many youths would not seek sexual or reproductive health care because of concerns that their parents, friends, or community members might find out. Almost all participants said their parents provided little to no information about sexuality or STIs as their parents would not discuss personal/private matters.

"My father is very African, so he never would talk about it, but I loved reading, and he is a nurse" (P4-Female)

"(Women) were property… don't have any rights over yourself. … (Refugee women's) knowledge was very much limited to what the men in their families told them" (P4-Female)

However, some participants stated that there had been a change in attitude towards sex and sexuality. People, especially youth and some educated parents, are starting to be more open and realize that it is important to talk about sexual matters. However, with the lack of personal experience, there are challenges in making this shift to a more open dialogue, as suggested in the following quote.

"… my husband, we always talk about this a lot; at what age do you actually talk to your kids about it…Because you don't want to taint their innocence at a young age, and you also know that in today's society they need to be educated on it." (P6-Female)

4.3.2.3 Lack of Awareness. The current study also indicates a lack of awareness about STIs among newcomers regarding accessing healthcare services and how to access information. Participants were asked if they were aware of STI programs or services in Regina. One participant who still lived with her parents never discussed sexual matters or STIs. She was a bit familiar and knew a little bit about HIV/AIDS, but she did not know much about other STIs. She was not aware of any STI programs in Regina and did not believe her family or other newcomers knew. Only three participants were aware of the STI programs in Regina. One of the participants knew because the participant tested positive for chlamydia, so the participant was treated for it and given information about STI programs in Regina. Another one learned from school, and the third one knew because they worked on an STI-related project.

"I think a lot of people they don't know about programs" (P8-Female)

"…at school that is where I became know those clinics" (P2-Male)

"I haven't checked, but I would love to just go there and get more information" (P3-Female)

4.3.2.4 Lack of Condom Use. In this current study, participants mentioned that people tend to refuse to use condoms. According to participants, condoms are used mostly as protection from becoming pregnant rather than prevention from STIs. However, the participants believe using condoms is a good idea and the notion that partners should just be trusting each other is harmful because some people "might be positive and just lie" *(P8-Female).*

"When you're in the heat of the moment, all you are thinking about is just having sex …, that's (condom use) like the last thing on your mind … I had one guy tell me I can make a quick withdrawal …. their main focus, pregnancy, not sexually transmitted diseases, which is a big issue." (P1-Male)

"Husband and wife will not accept you to do that (use a condom) because they feel like oh don't you trust me? Ya, a trust issue, those who are educated are more careful than those who are not educated. If you're not married, you have to use condoms, so you protect yourself from getting that disease" (P2-Male)

Some participants' responses indicated different perceptions regarding the use of condoms; some participants believed women should have the power to negotiate condom use. These responses are consistent with findings from a previous qualitative, community-based research study that explored the influence of gender on community perceptions of HIV/AIDS service needs among African immigrant men and women in Calgary, Canada (Worthington et al., 2013). This study reported different views people have regarding condom utilization, with some participants reporting always using condoms, whereas others would never use condoms. Some said they would not use condoms because it is not their style or simply do not want to, while others believe it is inappropriate to use condoms once married (Worthington et al., 2013).

Research shows African girls lack empowerment and would never summon the courage to request their partner use a condom, with many men opposing condoms (Baidoobonso et al., 2013; Worthington et al., 2013). Similarly, married women are unfavorable to condom use as they do not regard themselves as being at risk for infections (Baidoobonso et al.). Other

women refused to use condoms because they feared being rejected by their partners (Baidoobonso et al.).

Although participants of the current study may not have felt they themselves did not experience an inability to negotiate condom use, they certainly discussed women being powerless on sexual matters.

4.3.2.5 Lack of Trust and Confidentiality. Although most participants reported they personally felt comfortable talking with HPs, they indicated some youth lack trust and a sense of confidentiality in HPs, which may create a barrier to seeking healthcare services. Most participants admitted that they knew of many newcomers who have not seen a medical professional because of a lack of trust because: *"Some HPs can't keep the secret" (P1-Male).*

4.3.2.6 Fear of Isolation/ Labels/Stigma and Discrimination. Some participants stated people do not share information about their health status for fear that they may be isolated. The fear is also due to feeling discomfort discussing sexual issues. Similar findings are found in the literature. Omorodion et al. (2007) reported some African youth worry they will be judged by HPs. Mahat & Pradhan (2012) indicated youth experience fear of lack of confidentiality if they disclose sexual health to HPs, fear of being judged by other people who might see them at the clinic, and fear of an unfriendly environment/HPs.

In the current study, the researcher asked participants how culture plays a role in discussing topics about sexuality. Most participants stated that most parents do not believe in discussing sex with their children. Youth are afraid to upset families and other people in the community and fear others' reactions if they knew that the individual was positive for STI. Fear of isolation/labels/stigma are reflected in the following statements:

"As a newcomer, talking about HIV or STD is kind of scary. (People will) isolate you" (P2-Male)

"Maybe people will stigma isolate you from the group. The majority of people don't know (STIs); they will isolate you. Some will be judgmental. Some will not talk to you…, getting angry at you. Friends some will not contact you" (P3-Female)

"So much shame, embarrassed, didn't feel like talking about anything like, you feel rushed. … I want to get everything checked, like STIs, (doctor) was like, no, you're not having sex so, because you're obviously not married, and so you're a good girl (P4-Female).

In addition, discriminatory practices were noted in the following comment:

"Some questions that are just because you're black" (P4-Female)

4.3.2.7 Religious, Cultural, and Intergenerational Perceptions. Previous literature on preventing and managing STIs is embedded in a myriad of cultural, religious, and social beliefs (Kohler et al., 2014). Such beliefs significantly impact most African people's daily behaviours and attitudes (Kohler et al., 2014). Kohler et al. completed a study on community perceptions of barriers to engaging in the prevention of mother-to-child transmission (PMTCT) programs in western Kenya; the findings indicated that women with HIV reported feeling judged, shamed, and blamed by people if they went to access program services. These findings aligned to results in the current study; some participants reported that people with STIs avoid accessing healthcare services, fearing community responses if they are seen going to the clinic or found to be STI positive. In addition, the researcher explored perceptions of the religious members towards individuals who tested positive for STIs by asking the following questions: Can you share how you think your church or mosque members would react if they found out you are STIs positive? How would your religious beliefs be affected if you tested positive for STI or STIs? The findings indicate that religion plays a critical role in shaping people's realities and decisions.

When asked what church or mosque members' reactions to an individual's STI positive status would be, participants stated:

"If they (church members) know, then there will be a lot of reaction… because in the church there are people who believe in everything and there are people who are easy with some of stuff that happens in the society and there are those people who believe that you should not have sex before marriage, and there are those people who believe that if you have sex with somebody else rather than your girlfriend or your wife, then that also is a bad thing. There will be judgements. Speculations about my extracurricular activities, assumptions, probably be questions about my character…" (P1-Male).

"(Church) is like an abomination. It wouldn't be pretty... Isolation. The word will go around; people look at you differently. It wouldn't be a comfortable thing. Nobody will want to talk to you about it, but they will look at you differently. They will talk behind your back." (P6-Female).

Moreover, results indicate a lack of culturally specific services; youth lack a place to go for cultural support and guidance on matters related to sexuality. Cultural and religious factors create a deeply embedded sense of disapproval and an inhibitive environment for discussing adolescent sexual and reproductive health (Bhugra, 2004; Edge & Newbold, 2013).

"In our culture, it's almost taboo for you to ask your parents to tell me about, you know, the birds and the bees, don't feel comfortable. It's a cultural thing, so it makes sense." (P7-Male)

4.3.2.8 Culturally Appropriate STIs Services. Participant responses to questions on the sexual matter in this study were individual perspectives. Baku et al. (2018) argued that despite the importance of sexuality education, such education is inconsistent with the cultural beliefs and norms in many African countries. Participants admitted a lack of awareness of culturally appropriate STI services in Regina while noting that newcomers maintained cultural practices upon arrival in Canada.

"I noticed some of those cultures practices have been coming here too." (P5-Female).

The findings from the current study reinforce the need to address cultural and social beliefs as part of sexual health services. According to Norbu et al., some men engaging in risky sexual behaviours can be attributed to men being away from home and the cultural and social belief that men's extramarital affairs are acceptable norms in these communities. Participants believe there is a need to address structural factors to ensure more culturally appropriate services are designed to specifically target African, Caribbean, and other Black people, and address the unique realities of their lives (Baidoobonso et al., 2013).

4.3.2.9 Traditional Healers. Several study participants revealed that most newcomers believe in traditional healers and TM. The literature also indicates that African patients are more likely than Canadian patients to attribute their illness to a spiritual and superstitious cause and use TM (Dastjerdi, 2012; Kohler et al., 2014; Nam et al., 2010). Most Africans attribute illness to superstitious causes and due to magic and evil spirits. The cause of diseases is related to conflict and tension between good/evil and harmony/disharmony (Vaughn et al., 2009). These individuals might have trouble dealing with their diseases if recommended practices conflict with their beliefs.

Many Africans prefer to see traditional healers who incorporate culture and traditions into the healing process. One participant stated that some families travel back to Africa to see traditional healers.

> *"A lot of older folks, like our parents' age who actually go back to Ghana for traditional healers. Our parents' generation still believes in their medicine and herbs. Will I feel comfortable going back to (country) for it? No"* (P6-Female)
>
> *"Traditional healers, I believe in them, and I don't believe in them. I think sometimes, and I think it works. So traditional healers, I believe in them. Certain diseases that you get that I feel that traditional healers will not work for you. And one of them I believe is having HIV, so back home it is they are very, very popular."* (P3-Female)
>
> *"I know some family members that travelled from Toronto; see a traditional healer even though they were getting medications here."* (P7-Male)

The finding that participants believe in traditional healers is aligned with a qualitative study of traditional healers and nurses in South Africa by Mngqundaniso & Peltzer (2008), who found nurses believe traditional healers have a strong influence on their people. In this current study, the views were more mixed, with a couple of participants thinking the opposite; they do not believe in traditional healers. There is a need to explore collaboration between traditional healers and modern medical professionals and how they could be incorporated into health care services to accommodate the newcomers who believe in TM.

4.3.2.10 Personal Perspectives about Sexual Practice. In this study, participant responses did not indicate that knowledge was the most significant factor in people's sexual health perceptions. Perceptions of sexual practice seemed to be more influenced by previous risky sexual behaviours, cultural and religious influences, stigma, isolation, lack of awareness, and access to STI centres or programs. Other research has found some sub-groups might delay seeking help due to previous social experiences. Morris & Rushwan (2015) found perceived

threats included social stigma, embarrassment, judgment, and shame, especially for sexually active girls and married women.

The participants' responses to this current study show that their culture influences individuals' perceptions. Most female participants in this study talked about how women are compelled to adhere to their cultural norms and feminine roles. One participant spoke about women as victims because it is perceived those females/wives must have sex with their partners regardless of their feelings.

"There's the perception that if you love the person, you should just be able to have sex with them regardless. You don't believe that she may have been violated in the marriage" (P4-Female)

The same participant mentioned she had seen 'ignorance' in both females and males. The ignorance in females arises from a lack of knowledge, making females reluctant to make decisions or practice critical thinking and seek knowledge.

"And then, there comes ignorance; out of ignorance, madness and illnesses are borne. Decision-making process, feel uncomfortable" (P4-Female)

Female participants shared their frustration as they do not understand why most African women tend to honour all these values even though they do not allow them to make choices that pertain to their desires.

"These women carry the family's honour, yet they don't get to say anything. They are okay with their situation, and the wives are submissive to their husbands. Despite the women's weakness, there some educated African women who are influential personalities and independent." (P5-Female)

"In my culture, sex topic is 'no go zone.' It's 'no go zone' for people who are not married or are not partners. It is very rare to find people discussing sexual matters. Even if they discuss sex, they won't discuss it in detail; it is rare to find people talking about sex …, maybe your age mates and maybe you are talking, if its boys, they are talking about a girl that we had sex with." (*P3-Female)*

"No way I can sit and talk to my sister or my uncle or somebody about sex or even prevention. African that came here don't talk about those things; I think it's taboo." (P2-Male)

The participants in this study hope for a change; they would like to see women step up and take responsibility for their health. They expressed their desire to see women start seeking information about sexual health and learning how to protect and promote their health. Although it will take a long time for the changes to happen, some participants hope people will change and become responsible for their sexual health.

Otherwise, most male responses in this study were respectful of male/female relations. In general, there were no significant differences between the responses between male and female participants responses.

"I think women also play a key role in sexual activity-wise. I don't think it's just men; back home, it's not 50/50. Back then, when I was like ten years old, it was for me like male 99, women were 1 percent (decision re sex). But now that they (women) are being educated, they are sort of understanding, the western world is slowly transitioning into the African culture" …" women are also entitled to be in power." (P7-Male)

4.4 Other Subthemes

4.4.1 Sexual Risks and Risk Reduction. Risk reduction emerged from the transcript review as a subtheme. Some participants were aware of strategies for preventing STIs through self-learning, peer-learning, or school-learning in Canada. Canadian provinces and territories support governance on harm reduction services in their jurisdictions. Canada exhibited wide regional variation in policies guiding the planning and organization for harm reduction services. The distribution of condoms in different locations is among the services offered through harm reduction programs (Wild et al., 2017). Some participants in the current study spoke of safe sexual practices with the goal of harm reduction.

"The big things are safe sexual practices, using protection, knowing your partners' history…. Condoms, safe practices" (P4-Female)

… "The school provided condoms at the male and girls washrooms preventing the students from getting STDs or STIs" (P7-Male)

4.5 Thematic presentation

4.5.1 Facilitators of Knowledge

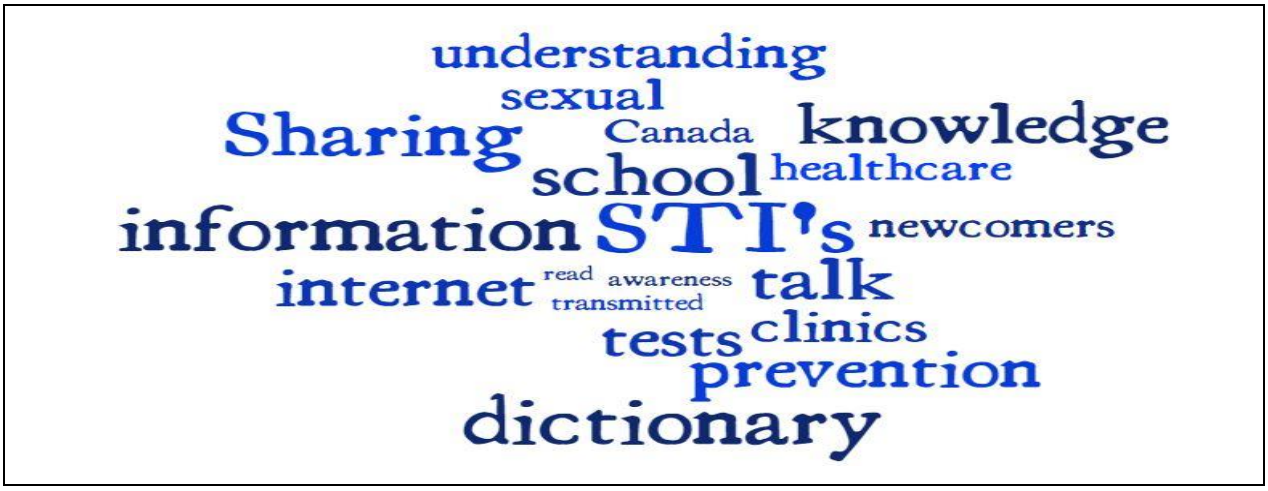

Figure 4. 1. Word Cloud reflecting facilitators of knowledge

Figure 4.1 illustrates 'facilitators' for accessing/gaining knowledge about STIs, including transmission, protection, and overall sexual health. The essence of the theme 'knowledge' is that newcomers seek information to make better decisions.

Participants spoke about learning and seeking information; however, sufficiency or adequacy of the information participants received was unclear. Some participants recognized that their knowledge about STI was limited; therefore, they expressed the need to know more. Participants discussed learning about STIs through information from various resources. Some participants had prior knowledge (before coming to Canada), whereas others learned about STIs during the STI testing when applying for immigration permits. A few participants indicated that they learned more about STIs after arriving in Canada through school, sharing, and talking to peers.

The change in perceptions may be influenced by exposure to different information resources (i.e., social media, peers, school, television, posters, radios, health centres, etc.). These

participants may be at risk of receiving inaccurate information from specific resources (e.g., peers, mass media, and the internet). The individuals would perceive high risk of getting sexual infections (Larson, 2012).

According to Hayden (2009), even though a person perceives personal susceptibility to a serious health condition (perceived threat), changes in behaviour will depend on that person's beliefs regarding the perceived benefits of available actions for reducing the perceived threat. The adolescent's risk perception, knowledge, perceived control (response- and self-efficacy), benefits, and cost of health behaviour can be modified and improved Resource Center for Adolescent Pregnancy Prevention (ReCAPP) (ReCAPP, 2007). The current study findings indicate risk perceptions are generally high, and their perceived health risk behaviours are inconsistent. The majority of this present study's participants demonstrated a good understanding of the most common STIs (i.e., HIV/AIDS, chlamydia, and gonorrhea). They knew how individuals could get, prevent, or spread STIs and displayed positive attitudes toward condom use. Despite the knowledge these youth have on STIs, one participant revealed that many youth newcomers are still involved in reckless/risky behaviours. There is a need to conduct more research to explore strategies to spread awareness about all STIs and the importance of prevention and control of spread.

4.5.2 Barriers of Knowledge

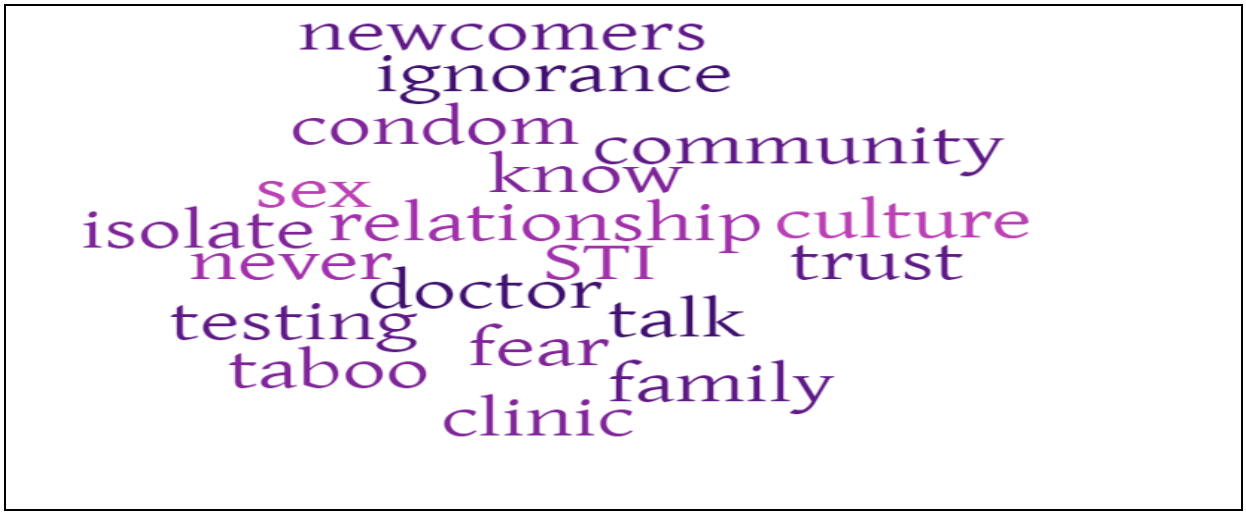

Figure 4. 2. Word cloud for reflecting barriers of knowledge

Figure 4.2 visualizes that newcomers' barriers of knowledge/awareness about STIs may be through talking with peers, families, and various sources. Most participants revealed that their knowledge was affected by fear and the taboo/shame of talking about sexual matters, isolation, ignorance, embarrassment, misconception, lack of trust, lack of confidentiality, discrimination, and social stigma. These findings were supported by other research, such as Asanin & Wilson (2008) who reported that newcomers experience challenges and frustrations accessing health care services. Their expectations of the health care system have not been entirely met. For example, patient-provider poor communication due to language barriers; lack of professional interpreters; lack of culturally appropriate care by HPs; physicians rushing or are not taking time to listen or empathize with their patients' health concerns; newcomers feel neglected to be offered or referred to specialized care or resources; newcomer differences expectations, lack/limited of social support and economic difficulties (Hayden, 2009; Larsman et al., 2012; Woodgate et al., 2017).

4.5.3 Dissonance of knowledge

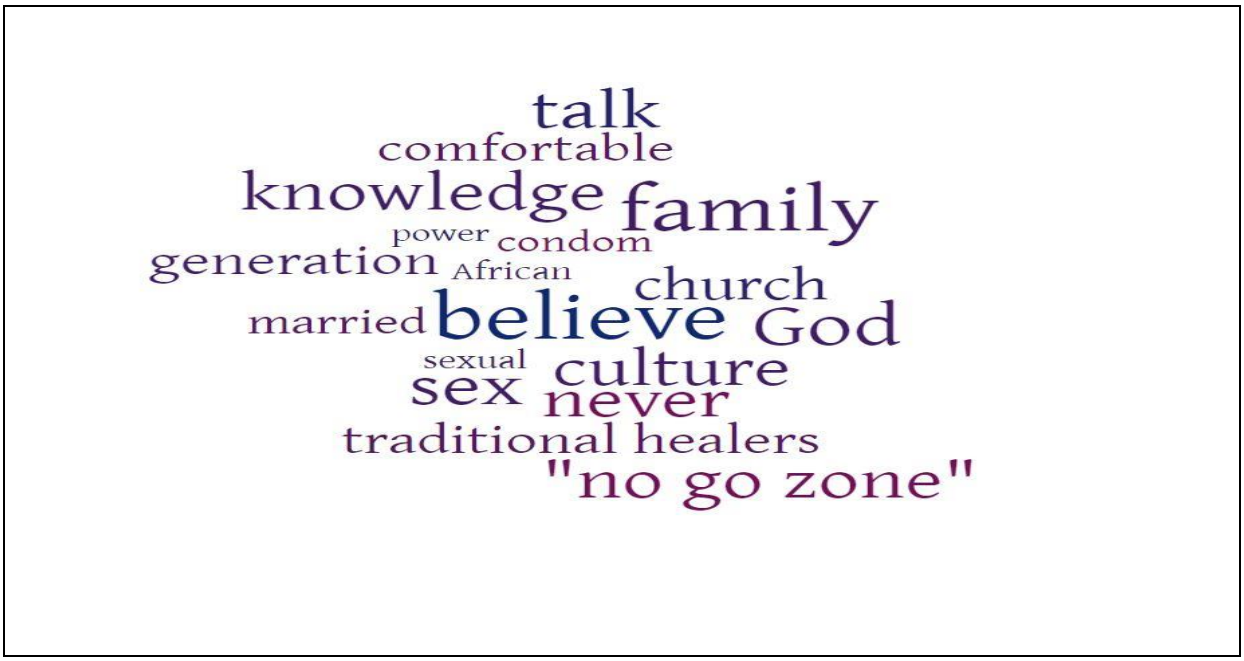

Figure 4. 3. Word cloud for reflecting dissonance of knowledge

Figure 4.3 depicts the influence of culture and religion. Participants expressed discomfort in talking about sex and discussed the issue of sexual topics as being taboo in many African cultures. As described by some participants, talking about sex is a “no-go zone.” The diagram shows how an African cultural background may play a significant role in how youth feel about talking/not talking about sex. The inability to discuss sex persists with these young adults even after living in Canada for some time. According to the participants, this sentiment extended to no discussion about sex between husband and wife or between parents and their children, making it both an intra- and inter-generational issue. There is a gap noted in parent-to-child learning in this study, which means a lost opportunity for the parents to incorporate culture and religious content to help children learn from this lens, adopt potential strategies, and incorporate their cultural values.

Participants shared that they know many youths who face challenges due to their lack of information and awareness about the healthcare system, which, in turn, influences their risk

behaviours and risk perceptions. Exposure to various negative experiences (i.e., perceived control/ power and knowledge, lack of awareness, inability to talk about sex, inability to negotiate condom use, cultural and traditional roles and responsibilities, religion, influences of traditional healers and challenges in accessing healthcare services) contribute to perceptions of risk. The study findings indicated mixed results; for example, most participants appeared motivated and willing to take responsibility for their health (self-efficacy and perceived control of risk). A broad range of intra-personal perceptions and inter-personal factors could influence individuals' health behaviours. The factors include socioeconomic status, age, gender, ethnicity, knowledge, stereotyping, misconceptions, and power (Hayden, 2009; Larsman et al., 2012). Further studies are necessary to identify strategies to meet newcomers' needs and develop supportive services.

Self-risk perceptions about contracting HIV and STIs were indicated low for both genders in the current study. Both genders did not seem concerned about contracting STIs, although participants were rather eager to learn more about STIs. Based on the present study findings, perception is influenced by knowledge, culture, religion, and a sense of control. Age has been found to be associated with STIs risk perceptions (Larsman et al., 2012), with those who are young, inexperienced, and lack knowledge about STIs feeling at greater risk of acquiring other STIs and more likely to seek health-related information about (Larsman et al., 2012)

4.6 Implications for Practice

Both male and female participants felt discussions about sexuality are still uncommon and uncomfortable. This study's participants stated that youth find it easier and more comfortable to discuss sexual matters with their peers; however, they are also okay to discuss with HPs. This finding indicates the need for peer STI-training programs where some youth receive training about STIs and educate other youth. Married participants tended to be more comfortable and open to discussing sexual matters and perceived lower risk of contracting STI. It will be beneficial for these youth to receive more organized support to reinforce positive health behaviours and strategies to maintain or adjust their risk perceptions. These youth need to be encouraged to accept and assume responsibility for self-care. Larsman et al. (2012) found that to support the child in assuming responsibility for self-care, the caregivers need comprehensive

knowledge on factors influencing the youths' abilities and motivations to take on such responsibility. Previous experience and health-related risk perceptions may play an essential role in motivating health behaviour change in these youth and young adults. It is important to determine what drives individuals to certain health behaviours and their perceptions as this understanding may help evaluate and meet an individual's needs (Macdonald, 2012).

Based on HBM, "for behaviour change to succeed, people must feel threatened by their current behavioural patterns (perceived susceptibility and severity) and believe that change of a specific kind will result in a valued outcome at an acceptable cost (perceived benefit)" (Redmond, 2015, p. 4). For example, during the interviews, participants mention parents do not discuss sexuality beyond warning their sons or daughters not to have sex to prevent pregnancy. Most participants stated their parents never talked about STIs with their children. Some recommendations by researchers from previous studies on how to deal with the perceived barrier of action include the implementation of programs that aim to educate youth about the prevention of pregnancy, STIs and HIV by increasing condom use. Since most parents of youth newcomers are worried about their sons or daughters getting pregnant, there should be programs specifically for the parents to provide them with information and education about STIs. Participants believe if they start conversations about sexuality with their children at a certain age, it will allow their children to receive accurate information instead of misinformation from their peers. However, participants were unsure what age was the best to educate children about sexual health. Therefore, for parents to discuss sexual health with their children, they will require this knowledge. Promotion of birth control could be helpful, as less fear of pregnancy could mean more focus on STIs prevention.

There are societal pressures and expectations that once people get married, they should be faithful. Usually, the male refuses to use a condom as reported by most of participants. The male may agree to use a condom if the relationship is new and the couple engaged in sex for the first time (stated by *P1-Male, P2-Male, P3-Female and P6-Female),* or to prevent pregnancy (stated by *P1-Male, P6-Female*) but not necessarily to prevent STIs. Married couples may not negotiate sex or use a condom because they are expected to start a family; therefore, condoms are seen as unnecessary. Most participants believe culture plays a significant role in discussing sexuality and the use of a condom. According to the literature, men are two times more likely than females to

engage in casual sex, but female youth are two times more likely to be diagnosed with an STI. In older age groups, men are more likely to be diagnosed with some STIs. Also, it is thought that fewer male youth go for testing so therefore more women are diagnosed with an STI, but the actual incidence rate may be just as high in males (PHAC, 2019; PHAC, 2020, January 27). These findings may be due to men feeling more comfortable or being seen as responsible for providing condoms (Ross-Bailey et al., 2014). Based on previous literature and the findings of this current study, further research could explore how women could feel more comfortable using condoms while maintaining cultural values. Baku (2012) found some young adults believe that the person uses a condom only when his/her partner is STI-positive, while others do not use condoms due to peer pressure. When comparing the responses between men and women in this study, there were no significant differences in participants' responses regarding condom use. Answers to questions regarding attitudes towards condoms and discussion about sexual matters were consistent across men and women. The majority of participants agreed that discussing sexuality and negotiation over condom use with partners is a significant issue. Both men and women stated it inappropriate to negotiate sex or use a condom when they are in a relationship or marriage. These findings indicate that these youth and other newcomer population members are involved in risky behaviour, which increases their susceptibility to adverse health consequences. This finding suggests an association between higher involvement in risk behaviour and higher risk perceptions. Their responses indicated awareness of how their behaviour influences their vulnerability, but they did not seem to worry and appeared to underestimate the risks. A literature review by Larsom (2012) found a negative association between involvement in risk behaviours and perceptions. Youths who perceive higher risks may be less likely to engage in risky behaviour.

Participants in this study indicated the perceived severity of disease and perceived benefits of action are critical. Even though most of them were married and trusted their partners, they still believed in condom use. Almost all participants agreed that establishing culturally appropriate programs for youth newcomers and their parents is vital. Changing behaviour is a complex task; however, identifying interventions that can reduce risky sexual behaviour remains a focus worldwide. The established programs will have to be promoted and advertised through communication channels such as mass media, immigration programs, schools, newsletters, and

communication with religious/cultural leaders. Both youth and parents should be encouraged to get involved in planning and implementing these programs.

There is more focus on pregnancy prevention than STIs prevention in this community, reflecting power dynamics that consider women more responsible for pregnancy prevention. Men might not see pregnancy as their problem. Thus, a focus on STI prevention may shift health behaviours. Strategies to emphasize that STIs are also a possible adverse consequence of sexual activity are vital. Strategies centred on STI prevention must incorporate cultural elements to accommodate any cultural attitudes or beliefs that come into play. A study by Kemigisha et al. (2019) found significant improvements in knowledge regarding delaying first sexual encounters and reducing sexual partners when implementing sexual and reproductive health education among very young adolescents in Uganda. Healthcare professionals should collaborate and involve both parents and youth to plan strategies. It is essential to implement educational programs that are culturally appropriate for parents and youth to ensure positive outcomes. Although HPs are often viewed as trustworthy sources of information, they need to build and maintain trust by incorporating cultural safety into practice.

Since most youth use the internet (including social media) to communicate, policymakers and education programs should incorporate the internet and social media as a means to provide information, education, and direct communication with youth. HPs can use this opportunity to give youth and young adults credible internet links to search and obtain STI information. A potential focus could be on online resources that will allow youths who are not comfortable or cannot access medical centres. For example, HPs can create a Facebook page for newcomers where HPs can share online resources, and individuals can post questions, and HPs can respond. Another option is to make YouTube videos geared towards newcomers, such as documentary films that highlight essential information accessible to newcomers, HPs, and community members, exploring attitudes, beliefs, and available resources. Such methods would bolster the ways newcomers can access this information independently without necessarily going to an HP office or talking to parents. Engaging with technology may help with the fear of judgment from HPs and the stigma associated with visiting healthcare centres. All the above points open opportunities for implementing future studies.

Moreover, the idea of getting tested for STIs should be a part of regular health check-ups, and people should be encouraged to get tested regardless of marital or health status. The

mandatory medical exams all newcomers must complete before landing in Canada should be collaborated with medical examination officers who perform the medical examination and use the opportunity to provide information regarding STIs to all newcomers.

Practitioners and programmers need to understand the roles of cultural appropriateness and cultural safety in educating this population and similar populations. Cultural appropriate programs often consider adaptations of existing interventions which consider language (translation), cultural norms, family and community attributes (such as structure, decision-making), and other sensitivities (i.e., political, economic). According to Thomas (2002), cultural appropriateness refers to undertaking to deliver programs and services that are "consistent with the communication styles, meaning systems, and social networks" (p. 2). Health literacy, health messaging, and health promotion are efforts which often make the shift towards cultural appropriateness (Tan & Cho, 2019). A culturally appropriate intervention which might be appropriate for this topic and participant group would be translation of existing materials into multi-lingual brochures or teaching materials. In contrast, cultural safety focuses on the power differentials within society and how care delivery is impeded by the power imbalance between clients/ communities and HPs (Laverty, et al., 2017; Papps & Ramsden, 1996). Cultural safety emphasizes social justice and equity (McGough, et al., 2017) requiring HPs and healthcare organizations "to acknowledge and address their own biases, attitudes, assumptions, stereotypes, prejudices, structures and characteristics that may affect the quality of care provided" (Curtis, et al., 2019) in order to addresses ethnic inequities in health care. In order to respond with a culturally safe intervention, it would be necessary to bring together the target population to provide insights into the preferred way(s) forward on education and treatment related to STIs. These sessions would focus on authentic engagement and creating environments that are free of racism and/or discrimination. The intention will be to explore whether a peer delivered program would be considered acceptable and appropriate.

4.7 Knowledge gaps

Knowledge of STIs is a significant problem for many newcomers, as well as taking knowledge to action. People are constrained by culture, religion, language barriers, and lack of awareness of where to obtain information. All participants shared their concerns about knowledge gaps. The current study participants revealed a lack of knowledge about where to

access specialized sexual health care services was a significant issue/barrier. Two participants knew of specific programs and centres for STIs/HIV/AIDS in Regina, and the rest were not aware. Participants also spoke of minimal intergenerational knowledge exchange. Many parents do not educate their children on this topic due to a lack of knowledge about STIs. Young adults desire to learn more about sexual health to enhance their self-care ability and prevent contracting or spreading STIs.

In this current study, participants indicated that there was hope for change. Many youths show a willingness to learn and change and be motivated to take responsibility for their health. One participant shared his experience testing positive for chlamydia and receiving treatment. He stated that he is now more knowledgeable about STIs and goes for regular medical check-ups. Implementing culturally congruent programs to educate parents is very important because there is an opportunity to learn strategies to help them pass sexual health knowledge to their children. HPs, who often lack knowledge about newcomers' needs and cultural aspects of care, need to get training. HPs need to support and learn strategies that incorporate cultural elements that may affect care. The HPs can implement peer support groups where youth who are willing can be trained strategies to prevent spreading of STI. These trained individuals can then train their peers. HPs can encourage stakeholders to purchase electronic devices and implement programs where youths can participate in education using the devices or sponsor cultural appropriate education programs through the use of mass media. Throughout the program offerings to youth and young adults, the HPs should be prepared to subdivide the program into gender specific groups and/or age- appropriate groups depending on the topics and emphasis at particular sessions. These can be further explored and examined through focus group sessions to confirm the topics and educational needs, along with the appropriate mix (or segregation) of the participants. Another strategy is to bring the care and education information to newcomers' communities in places where they normally live, work, and pray.

Participants shared that they know many youths face an abundance of challenges due to a lack of information and being unaware of the health system, especially its programs and how to navigate it. They believe youth risk behaviours and risk perceptions are influenced by the challenges they are facing. Exposure to various negative experiences (i.e., perceived control/ power and knowledge, lack of awareness, inability to talk about sex, inability to negotiate

condom use, cultural and traditional roles and responsibilities, religion, influences of traditional healers, and challenges in accessing healthcare services) are all co-factors of risk perceptions.

5 CONCLUSION

5.1 Conclusion

This exploratory study of perceptions among African youth and young adult newcomers in Regina suggests most participants had adequate knowledge, but they were influenced by the other factors. Knowledge itself was not enough to change risky behaviours. While not seeking the generalizability of the study findings, this study highlighted the existence of a broad spectrum of perceptions, beliefs, and knowledge levels of STI-related information. The study highlighted the exposure of African youth newcomers to a complex social system and various negative life experiences, i.e., perceived control/ power and knowledge, lack of awareness, inability to talk about sex, inability to negotiate condom use, misconception, cultural and traditional roles and responsibilities, religion, influences of traditional healers and challenges in accessing healthcare services. This study suggests the value of implementing culturally appropriate sexual health education programs for these African youth newcomers and their parents. Culturally relevant sexual health programs would provide significant improvements in knowledge, awareness, and risk perception.

The study highlighted African newcomers' strong adherence to traditional African norms and religion significantly influences their lives. Healthcare providers need to support and learn strategies that incorporate cultural and religious elements that may affect care. It is challenging to promote condoms due to the role of African married women since they are expected to bear children soon after getting married; therefore, condoms in married couples are not negotiable. These women should be engaged in developing sexual health programs targeting this specific group. All participants felt females should have the power (self-efficacy) to decide and that women should feel comfortable asking their husbands to use condoms and consent for sex.

The researcher's personal experiences and exposures to African culture would have predicted a significant male-female gradient or difference in the discussion, but that did not

emerge throughout these discussions. The participants' responses were not gender specific. In this study,

men tended to be very inclusive as opposed to what might be expected in traditional African cultures; men or women will say 'for me as a man or her as a woman,' but, in this study, participants were very inclusive of both men and women throughout the interviews. This change of attitude is very positive and can be further investigated.

This study explored STI perceptions in a select African youth and young adult newcomer population living in Regina. The findings are based on shared personal perceptions and experiences. Most of these findings concurred with previous studies on perceptions of sexual health in African youth and young adults.

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Appendix A: Definitions

STIs. STI or sexually transmitted diseases (STDs) are conditions that can affect the general health, well-being and ability to reproduce those infected. Individuals participating in sexual risk behaviours have increased chances of acquiring an STI. There are several types of STIs, including Chlamydia, Genital Herpes, Gonorrhoea, HIV/AIDS, Human Papillomavirus (HPV), Lymph Granuloma Venereum (LGV) and Syphilis (Health Canada, 2006).

Perception. Merriam-Webster. (n.d.(a)) defines Perception as 1a: a result of perceiving: observation b: a mental image: concept 2: *obsolete:* consciousness 3a: awareness of the elements of environment through physical sensation colour perception b: physical sensation interpreted in the light of experience 4a: quick, acute, and intuitive cognition: appreciation b: a capacity for comprehension. Merriam-Webster. (n.d.(b)) defines as 1: the ability to understand inner qualities or relationships 2: the knowledge gained from the process of coming to know or understand something. According to McDonald 2012, Perception is a uniquely individualized experience that one can only draw from what is known to oneself.)

Newcomer. The Canadian government does not have a specific definition of the term newcomer; however, the term newcomers refer to immigrants and refugees who came from outside Canada or from another Canadian province (Newcomer Welcome Centre [NWC], 2015).

Immigrants. Individuals who are born outside Canada but reside in Canada, excluding temporary foreign workers, Canadian citizens born outside Canada and those with student or working visas (Statistic Canada, 2010)

Refugees. Individuals who are forced to flee from their homes because of unimaginable hardships and are located outside of their home country (Government of Canada, 2015). This study will include Newcomer individuals who have lives for one to 5 years and have spent most of their time in Saskatchewan.

Youth. The African Youth Charter of 2006 referred to "youth" as every individual between the ages 15-35 years (Williams et al., 2014). "Youth" and "young adult" are often used interchangeably; they are context and culture-specific. Since 1985 (International Youth year), United Nations referred people of ages between 13 and 19 as teenagers and the ages between 20 and 24 years as young adults; and youth are defined as ages between 15 and 24 years of age (as cited UNAIDS 2004). For this study's purposes, we adopted a definition of youth and young adults being between the ages 12 and 35 years (inclusive).

Appendix B: Timeline

DATES	EVENTS
May 15, 2016	Committee Application for ethical submission
Oct 15, 2016	Plan interviews dates and times Data collections Data entry and cleaning
July 15, 2017 to Dec 30, 2019	Data analyses and interpretation of results Preparation of abstracts, manuscripts and dissemination of results
February 2021	Report to committee
March - July 2021	Final editing
September, 2021	Defending

Appendix C: Research Budget

Prepared by: _Mariam Nganzo_

YEAR 2016 Item	Payment request is anticipated	$ AMOUNT of payment made
Telephone & internet package		$ 100.00
Stationary (paper, USB, portable storage, toner for printer, printing		
Transportation (to and from research sites)		$ 80.00
Gift cards/ refreshments for participants	$25 per participant x 8 participants (One time pay)	$ 200.00
	TOTAL Budget required	$ 380.00

Appendix D: Participant Consent Form

Participant Consent Form

Project Title: Perceptions of Sexually Transmitted Infections (STIs) in Select Youth and Young Adult African Newcomer Population in Regina, Saskatchewan

Researcher(s): Mariam Nganzo

Position: Graduate Student

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Purpose(s) and Objective(s) of the Research

The purpose of this study is to explore the perceptions of sexually transmitted infections (STIs) in select youth and young adult African newcomer populations living in Regina, Saskatchewan.

Research Design/ procedure

a) Research Design

This study will be conducted in the Regina community using one on one interviews. The study will be conducted in English.

b) Population and Sample

Between 6-8 individuals, male and female, will participate in this study. To be a part of the study, you will be:

- Between age 18 and 35 years old,
- Self-identify as an African who immigrated to Canada
- Lived or spent most of your time in Saskatchewan after the age of 15 years old.
- Able to speak, read and write English.

To help us understand this topic better, you may be asked to suggest others who might be willing to be a part of the study.

c) **Setting**

Interviews will be conducted at either the University of Saskatchewan (College of Nursing site in Regina), Newcomers' Welcome Centre (NWC), or Regina Multicultural Council (RMC) in Regina Saskatchewan.

Funded

The researcher has received funding from DFATD/CIDA money as part of the Mama Kwanza Social-economic Health Initiative**.**

Potential Risks

There are risks of opening memories or sadness, and participants will be able to refuse to answer any questions during the study or withdraw without any penalty. Participants will be supported and assisted in accessing any support that may be required.

Potential Benefits

Although you are not likely to have personal benefits, this study will provide an opportunity to find out how African newcomers perceive STIs. Understanding how the newcomer population's perception of STIs may help plan the implementation of health promotion programs and improve access to culturally improved STI services.

Compensation

You will receive a $25 grocery gift certificate as a part of this study as a thank you.

Confidentiality

There will be no way to link your interview information to you, like your name or any identifying information will not be included in any reports or publications. You will be reminded that you should not share those aspects if you are worried about keeping your information private.

Right to Withdraw

Once you complete the survey questions and short information sheet, your answers will not be withdrawn. You will be able to withdraw from the interview component of the study until the end of the interview. Your withdrawal from the diagramming component will not be possible after the completion of the diagramming.

Follow up

You will receive, at your request, a copy of the findings from the study either in a paper or electronic format.

Questions or Concerns;

- Contact the researcher(s) at the email address msn977@mail.usask.ca

Or send by mail at this address: 4400 4th Ave Regina.

- This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics

Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll-free (888) 966-2975.

- The date of approval from the U of S research board July 2015

Consent

Once you have signed this consent, you are providing consent for the interview and personal information sheet.

SIGNED CONSENT

I have read and understood the description provided; I have had an opportunity to ask questions, and my questions have been answered.

I consent to participate in the research project.

I have received a copy of this Consent Form for my records.

Name of Participant	Signature	Date

Researcher's Signature	Date

A copy of this consent will be left with you, and the researcher will take a copy

.

Appendix E: Researcher Introduction letter

Hello, my name is Mariam Nganzo. I am working on a project to evaluate components of the perceptions of sexually transmitted infections (STIs) in the African youth and young adult newcomer population living in Regina, Saskatchewan. Thank you for agreeing to be interviewed as part of this study. During the interview, we are interested in hearing about your knowledge and ideas about the current status of health promotion, prevention and treatments related to STI in Saskatchewan. We are interviewing up to 8 people in this study. Interviews will be audio-recorded, and some notes will be taken. The responses from all the interviews will then be combined and analyzed. Any comments that you make during the interview will not be linked to you, and your name will not be used in any reports. We expect that the interview will take about 30-60 minutes.

Please contact us if you have any questions or concerns.

Contact information:

Researcher(s): Mariam Nganzo,
Position: Graduate Student
Department: College of Nursing at University of Saskatchewan
Email : msn977@mail.usask.ca
Superviser : Dr. Pammla Petrucka
Department: College of Nursing at University of Saskatchewan,
Telephone number: (306) 535-9597; Regina campus (306) 337-3811
Email: pammla.petrucka@usask.ca

Appendix F: Study Questionnaire

Questionnaire for demographic data collection

Gender

How old are you?

Country of origin

Are you currently in school? (Or working), what grade? Or program?

What is the highest level of school you attended?

What is your marital status now?

Possible Interview Questions:

- Can you tell me what STIs are? (Researcher will add probes such as 'what else do you know about STIs? What did you learn from your family or school about STIs? What do you believe is the cause of STIs?)
- What do you do to avoid getting STIs? Can you tell me what a person can do to prevent herself/himself from contracting STIs or spreading them to others?
- Do you think people know enough about STI, prevention and treatment programmes? Yes, or No. what makes you believe people know enough/ or don't know enough?
- How do you feel about discussing sexual practice? Can you share your thoughts about how culture plays a role in discussing topics about sexuality?
- Can you share your belief about the idea of men taking control, lead, or guide the sexual encounter?
- What are your thoughts about females or male asking their sexual partner or husband to use or not to use a condom? Or can you share what will happen if you suggest to your partner to use a condom?
- Have you ever felt uncomfortable discussing sexual matters with a healthcare provider? If yes, who do you feel comfortable discussing sexual matters and why? What services are available for STI patients?
- Do you have a family Dr or visit a health clinic regularly? Where do you most commonly seek health care? How often do you seek health care? Where do you feel most comfortable accessing health care?
- Tell me what you know about traditional healers, traditional medicines, or any traditional beliefs you follow? Have you felt comfortable talking about these with health care providers?

- Have you ever felt that you were treated in a certain way in health care because you are a newcomer? How did that make you or them feel?
- Imagine if you encourage a friend or family member to use a condom to avoid STI; what reaction would they have?
- How do you feel about negotiating sex and condom use with your spouse or sex partner or talk about STI with your spouse or regular sex partner?
- Can you share what you think your church or Mosque members would react to if they find out you are STIs positive?
- How would your religious beliefs be affected if you are tested positive for STI or STIs?
- Have you been treated differently by your family, friend, or community member because of your STIs status? Yes or No

THANK YOU VERY MUCH FOR COMPLETING THE QUESTIONNAIRE AND INTERVIEW

Appendix G: WordItOut guidelines

WordItout online tool was used to show visualized unique images of the analysis.

A total of 100 words were filtered from the original source and only words found at least three times were selected, matched in different criteria and displayed.

Steps:

1) Create a text
2) Copy and paste the text of your document or try an example.

   By default, the more frequently a word is found, the larger it becomes in the word cloud.

3) Choose the filter (e.g. limit of words to be included), make word sizes vary randomly.

   Text is repeated in the word cloud as given. It is not counted, filtered or sorted.
4) Click generate
5) Select the style of the font and colour.

Appendix H: Demographic Data

Participants (8 total)	Total
Length of interviews	30 to 48 minutes
Age 18-30	6
Age 31-35	2
Speaking English language	8
Single	4
Married	4
Male	3
Female	5
Working and Schooling	5
Working	3
Time in Canada 1-5 years	2
Time in Canada 6-10 years	6
Countries of origin; Ghana Kenya Southern Sudan Republican of Congo Rwanda	2 1 2 2 1

Appendix I: Ethical Approval Letter

Ethical Approval

Dear Dr., Petrucka,

Please find attached the electronic scan of the confirmation of study closure for the above-named study.

Please note that we are no longer sending original copies of the following ethics approval documents: Notice of Ethical Review, the initial Certificate of Approval, Certificate of Re-Approval, Certificate of Approval of Study Amendments, confirmation of study closure, all memos acknowledging receipt of documentation and exemption letters. Original copies will now be kept on file in the Research Ethics Office and may be made available upon written request to ethics.office@usask.ca.

Thank you,

Anna Taruc
Administrative Support
Research Services and Ethics Office
223 Thorvaldson 110 Science Place Saskatoon, SK S7N 5C9
Phone: (306) 966-2975 **Fax:** (306) 966-2069
Toll Free: 1-888-966-2975
ethics.office@usask.ca
http://www.usask.ca/research/ethics_review/

UNIVERSITY OF Behavioural Research Ethics Board

SASKATCHEWAN

Certificate of Approval

PRINCIPAL INVESTIGATOR	DEPARTMENT	BEH#
Pammla Petrucka	Nursing	16-230

INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED
University of Saskatchewan - College of Nursing Regina

STUDENT RESEARCHER(S)
Mariam Nganzo

FUNDER(S)
GOVERNMENT OF CANADA - FOREIGN AFFAIRS, TRADE AND DEVELOPMENT
GOVERNMENT OF CANADA - INTERNATIONAL RESEARCH CENTRE

SPONSOR(S)
GOVERNMENT OF CANADA - FOREIGN AFFAIRS, TRADE AND DEVELOPMENT
GOVERNMENT OF CANADA - INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

TITLE
Perceptions of Sexually Transmitted Infections (STIs) in Select Youth and Young Adult African Newcomer Population in Regina,
Saskatchewan

ORIGINAL REVIEW DATE	APPROVAL ON	APPROVAL OF:	EXPIRY DATE
17-Jun-2016	19-Jul-2016	Application for Behavioural Research Ethics Review Consent Form Invitation Letter for Recruitment Questionnaire for Demographic Data Collection	18-Jul-2017

Full Board Meeting Date of Full Board Meeting:

Delegated Review

CERTIFICATION
The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS
In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month prior to the current expiry date each year the study remains open, and upon study completion.
Please refer to the following website for further instructions:
http://research.usask.ca/fgrresearchers/ethics/index.ehp

Please send all correspondence to:
Research Ethics Office
University of Saskatchewan
Box 5000 RPO University, 223-110 Science Place
Saskatoon SK S7N 5C9
Telephone: (306) 966-2975 Fax: (306) 966-2069